The following documentation is an electronically-submitted vendor response to an advertised solicitation from the *West Virginia Purchasing Bulletin* within the Vendor Self-Service portal at ***wvOASIS.gov***. As part of the State of West Virginia's procurement process, and to maintain the transparency of the bid-opening process, this documentation submitted online is publicly posted by the West Virginia Purchasing Division at ***WVPurchasing.gov*** with any other vendor responses to this solicitation submitted to the Purchasing Division in hard copy format.

Header 21

List View

General Information | Contact | Default Values | Discount | Document Information | Clarification Request

Procurement Folder: 1287498
Procurement Type: Central Master Agreement
Vendor ID: VS0000044048
Legal Name: Orion Solutions LLC
Alias/DBA:
Total Bid: $0.00
Response Date: 10/04/2023
Response Time: 10:28
Responded By User ID: eazzarano
First Name: Elaine
Last Name: Azzarano
Email: eazzarano@orionivm.com
Phone: 3345248894

SO Doc Code: CRFQ
SO Dept: 0803
SO Doc ID: DOT2400000018
Published Date: 9/18/23
Close Date: 10/4/23
Close Time: 13:30
Status: Closed
Solicitation Description: Vegetation Management Products - Statewide
Total of Header Attachments: 21
Total of All Attachments: 21

Department of Administration
Purchasing Division
2019 Washington Street East
Post Office Box 50130
Charleston, WV 25305-0130

State of West Virginia
Solicitation Response

Proc Folder:	1287498
Solicitation Description:	Vegetation Management Products - Statewide
Proc Type:	Central Master Agreement

Solicitation Closes	Solicitation Response	Version
2023-10-04 13:30	SR 0803 ESR10042300000001647	1

VENDOR

VS0000044048
Orion Solutions LLC

Solicitation Number: CRFQ 0803 DOT2400000018

Total Bid: 0 **Response Date:** 2023-10-04 **Response Time:** 10:28:42

Comments:

FOR INFORMATION CONTACT THE BUYER
John W Estep
304-558-2566
john.w.estep@wv.gov

Vendor
Signature X **FEIN#** **DATE**

All offers subject to all terms and conditions contained in this solicitation

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
1	Vegetation Management Products, Herbicides and Misc Products	0.00000	EA	1.000000	0.00

Comm Code	Manufacturer	Specification	Model #
10171700			

Commodity Line Comments: Entered 1.00 - see pricing pages for total.
Delivery days will be sooner when applicable.

Extended Description:

SEE ATTACHED PRICING PAGES-ATTACHMENT A, FOR ACTUAL COST

Vegetation Management Products

Pricing Pages, Attachment A (ATT A)

VENDOR NAME: __Orion Solutions LLC_____

VENDOR INSTRUCTIONS: Please read the instructions below for Part I, II, and III carefully, and provide all required information with the bid submission. This is a multiple vendor award contract. Vendors may bid any or all contract items. A contract will be awarded to the low bid Vendor, per contract item bid, meeting all contract specification requirements.

Part I: HERBICIDES - Vendor shall bid either the Product Trade name product listed, or an "equal to" product (reference Section 3.2.4.) "Equal to" products must be listed by brand name in the "Equal To Product Bid." All "equal to" products MUST have the EPA registration number and the WVDA registration number (aka Brand ID) for every herbicide product bid. Failure to list the EPA registiration number and WVDA # will result in the bid being disqualified for the corresponding Contract Item. Bids shall be calculated per the unit of measure indicated for the Contract Item, when distributed in the case/pallet/container size requested within the Description column. **Vendor must supply the product label for all equal to products bid.** Failure to provide product labels for equal to products bid will result in the bid being disqualified for the corresponding Contract Item for which the product label was omitted.

Part II: ADJUVANTS - Vendor shall bid either the Product Trade name product listed, or an "equal to" product (reference Section 3.2.4.) Bids shall be calculated per the unit of measure indicated for the Contract Item, when distributed in the case/pallet/container size requested within the Description column. **Vendor must supply the product label for all equal to products bid.** Failure to provide product labels for equal to Contract Items bid in Part II: Adjuvant Products with the bid submission will result in the bid being disqualified for the corresponding Contract Item for which the product label was omitted.

Part III: MISCELLANEOUS PRODUCTS - Vendor shall bid either the Product Trade name product listed, or an "equal to" product (reference Section 3.2.4.) Bids should be calculated per the unit of measure indicated for the Contract Item. **Vendor should supply the product label and/or the product specifications for every Miscellaneous products bid.**

Part I: HERBICIDE PRODUCTS

Contract Item #	Description	Unit of Measure	Cost Per Unit of Measure	Equal To Product Bid (Provide Product Labels for Equal to Items Bid)
	Product Trade Name: Accord® XRT II or equal A non-selective broad spectrum systemic herbicide for control of annual and perennial weeds and woody plants. Group 9. Active ingredient is 50.2% glyphosate: N-(phosphonomethyl)glycine, dimethylamine salt. Contains 5.07 lb per gallon glyphosate, dimethylamine salt (4 lb per gallon glyphosate acid).			**Product Name:**_____ **EPA REG#**_____ **WVDA#/Brand ID:**_____
1	Case of 2 X 2.5 Gal. containers	Gal.	$58.00	
2	Pallet of 72 x 2.5 Gal. containers	Gal.	$52.00	
3	30 Gal. container, sold individually	Gal.	$55.00	
4	250 Gal. container, sold individually	Gal.	$50.75	
	Product Trade Name: Arsenal® Powerline™ or equal Water-soluble formulation applied as a spray for control of most annual and perennial grasses, broad-leaf and woody plants. Group 2. Active Ingredient: Isopropylamine Salt of Imazapyr 26.7%. Equivalent to 21.8% 2-[4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo-1H-imidazol-2-yl]-3-pyridinecarboxylic acid or 2 pounds acid per gallon.			**Product Name:**_____**Ecomazapyr 2SL**_____ **EPA REG#**_____**81927-22**_____ **WVDA#/Brand ID:**_____**2190.0021**_____
5	Case of 2 X 2.5 Gal. containers	Gal.	$75.00	
6	15 Gal. container, sold individually	Gal.	$72.70	
7	Pallet of 72 X 2.5 Gal. containers	Gal.	$71.49	
8	Pallet of 9 X 15 Gal. containers	Gal.	$72.20	
	Product Trade Name: Diuron 4L or equal A non-selective residual herbicide for the control of a wide range of grasses, broadleaf weeds in land not intended to bear vegetation. Group 7. Active Ingredients: Diuron 40.7%. Contains 4.0 Pounds of Diuron per gallon.			**Product Name:**_____**Diruon 4L**_____ **EPA REG#**_____**81927-44**_____ **WVDA#/Brand ID:**_____**4778**_____
9	Case of 2 X 2.5 Gal. containers	Gal.	$28.50	
10	30 Gal. container, sold individually	Gal.	$27.00	

Vegetation Management Products

Pricing Pages, Attachment A (ATT A)

	Product Trade Name: Escort XP Herbicide® or equal A dispersible granule, post-emergent herbicide that mixes in water for spray application and controls many annual and perennial weeds and woody plants. Group 2. Active Ingredient: Metsulfuron methyl 60% by weight.			**Product Name:**_____ **EPA REG#**_____ **WVDA#/Brand ID:**_____
11	Case of 8 X 8 Oz. containers	Oz.	$4.75	
12	Case of 8 X 16 Oz. containers	Oz.	$4.75	
13	64 Oz. container, sold individually	Oz.	$4.75	
	Product Trade Name: EsplAnade® 200 SC or equal A preemergent herbicide for the control of annual grasses and broadleaf weeds. Group 29. Active Ingredient: Indaziflam 19.05%. Contains 1.67 pounds of indaziflam per gallon.			**Product Name:**_____ **EPA REG#**_____ **WVDA#/Brand ID:**_____
14	Case of 4 X 16 Qt. containers	Qt.	**$395.54**	
15	Case of 2 X 2.5 Gal. containers	Gal.	**$1,437.44**	
	Product Trade Name: EsplAnade® EZ or equal A pre-mixed non-selective control of emerged and pre-emerged grasses and broadleaf weeds. Group 29, 22, and 9. Active Ingredients: Indaziflam 0.089% + Diquat 0.890% + Glyphosate 20.460%, by weight.			**Product Name:___RoundUp QuickPro SC**_____ **EPA REG#_____432-1532**_____ **WVDA#/Brand ID:_____18527**_____
16	Case of 144oz. container	144oz	$105.00	
17	Case of 2 X 2.5 Gal. containers	Gal.	$95.00	
	Product Trade Name: Freelexx™ or equal Selective control of many broadleaf weeds and turfgrass and certain aquatic applications. Group 4. Active Ingredients: 2,4-D Choline 19.6%. 2,4-dichlorophenoxyacetic acid - 38.4% - 3.8 Lb./Gal.			**Product Name:**_____ **EPA REG#**_____ **WVDA#/Brand ID:**_____
18	Case of 2 X 2.5 Gal. containers	Gal.	$30.00	
19	Pallet of 72 X 2.5 Gal. containers	Gal.	$30.00	
	Product Trade Name: Garlon® 3A or equal Liquid amine formulation for foliar and basal bark applications and is effective on actively growing brush by penetrating the bark and entering the cambium layer. Group 4. Active Ingredients: Triclopyr 44.4%. Acid equivalent: triclopyr - 31.8% - 3 Lb./Gal.			**Product Name:**_____ **EPA REG#**_____ **WVDA#/Brand ID:**_____
20	Case of 2 x 2.5 Gal. containers	Gal.	$61.60	
21	Pallet of 9 X 15 Gal. containers	Gal.	$61.49	
22	30 Gal. container, sold individually	Gal.	$61.60	
	Product Trade Name: Garlon® 4 Ultra or equal Liquid ester formulation for foliar and basal bark applications and is effective on actively growing brush by penetrating the bark and entering the cambium layer. Group 4. Active Ingredients: Triclopyr Butoxyethyl ester 61.6%. Acid equivalent: tricopyr - 43.46% - 4 Lb/Gal.			**Product Name:**_____ **EPA REG#**_____ **WVDA#/Brand ID:**_____
23	Case of 2 x 2.5 Gal. containers	Gal.	$70.66	
24	15 Gal. container, sold individually	Gal.	$72.75	
25	30 Gal. container, sold individually	Gal.	$70.66	
26	Pallet of 10 X 15 Gal. containers	Gal.	$70.30	

	Product Trade Name: Krenite® S or equal Herbicide brush control agent is a water-soluble liquid to be diluted with water and applied as a foliar spray for control and/or suppression of many woody species. Group 27. Active Ingredient: Ammonium salt of fosamine 41.5%. Contains 4 pounds of Active Ingredient per gallon.			**Product Name:_____Sumter S_____** **EPA REG#_____91234-209_____**
27	Case of 2 X 2.5 Gal. containers	Gal.	$125.00	**WVDA#/Brand ID:_____17474_____**
28	Case of 6 x 2.5 Gal. containers	Gal.	$122.50	
29	Pallet of 72 X 2.5 Gal. containers	Gal.	$120.00	
	Product Trade Name: Krovar® I DF or equal A dispersible granule to be mixed in water and applied as a spray for selective control of weeds. Group 5, 7. Active Ingredients: Bromacil 40.0% + Diuron 40.0% by weight.			**Product Name:_____Bromacil 40/40_____** **EPA REG#_____81927-3_____**
30	Case of 8 X 6 Lb. containers	Lb.	$13.50	**WVDA#/Brand ID:_____2190.0001_____**
	Product Trade Name: Method® 240SL or equal A soluble liquid that is mixed in water and may be applied by aerial or ground equipment for control of broadleaf weeds and woody species. Group 4. Active Ingredients: Postassium salt of aminocyclopyrachlor 25.0%. Acid Equivalent:6-Amino-5-chloro-2 cyclopropyl-4-pyrimidinecarboxylic acid - 2 pounds acid per gallon or 21.2%.			**Product Name:_____** **EPA REG#_____**
31	Case of 2 x 2.5 Gal. containers	Gal.	$343.04	**WVDA#/Brand ID:_____**
	Product Trade Name: Milestone® or equal A liquid herbicide for use on rangeland and pastures to control noxious and invasive broadleaf species and other problem weeds. Group 4. Active Ingredients: Aminopyralid 40.6%. Acid Equivalent: aminopyralid (2-pyridine carboxylic acid, 4-amino-3,6-dichloro-) - 21.1% - 2 Lb./Gal.			**Product Name:_____** **EPA REG#_____**
32	Case of 12 X 1 Qt. containers	Qt.	$81.25	**WVDA#/Brand ID:_____**
33	Case of 2 X 2.5 Gal. containers	Gal.	$325.00	
	Product Trade Name: Oust® XP or equal A broad-spectrum herbicide that cost-effectively controls tough annual and perennial grasses and broadleaf weeds. Dispersible granules. Group 2. Sulfometuron Methyl 75.0% by weight.			**Product Name:_____** **EPA REG#_____**
34	3 Lb. container, sold individually	Lb.	$38.00	**WVDA#/Brand ID:_____**
35	Case of 8 X 3 Lb. containers	Lb.	$30.00	
	Product Trade Name: Oust® Extra or equal Controls many annual and perennial grasses and broad-leaf weeds. Group 2. Active Ingredients: Sulfometuron Methyl 56.25%, Metsulfuron Methyl 15% by weight.			**Product Name:_____** **EPA REG#_____**
36	4 Lb container, sold individually	Lb.	$36.00	**WVDA#/Brand ID:_____**
37	12 Lb. container, sold individually	Lb.	$33.50	
38	Case of 8 x 4 Lb. containers	Lb.	$30.00	
	Product Trade Name: Outrider® or equal A selective herbicide for the control of certain annual and perennial grasses and broadleaf weeds. Water soluble dry granule. Active Ingredient: Sulfosulfuron 75.0%.			**Product Name:_____Cryder_____** **EPA REG#_____91234-119_____**
39	20 Oz. container, sold individually	Oz.	$16.00	**WVDA#/Brand ID:_____18812_____**
40	Case of 10 X 20 Oz. containers	Oz.	$14.25	
	Product Trade Name: Pathfinder® II or equal No mixing. For the control of woody plants, basal bark and cut-stump treatments. Group 4. Active Ingredients: Triclopyr Butoxyethylester 13.6%. Acid Equivalent: triclopyr – 9.81% – 0.75 Lb./Gal.			**Product Name:_____** **EPA REG#_____**
41	Case of 2 X 2.5 Gal. containers	Gal.	$54.75	**WVDA#/Brand ID:_____**

	Product Trade Name: PENDulum® AquaCap™ or equal Water-based herbicide that provides preemergence control of weeds in turfgrass, landscape, noncropland areas and ornamental production. Pendulum will not control established weeds, rather it stops susceptible weeds from germinating and growing, eventually causing them to die before they ever emerge from the soil. Group 3. Active Ingredient: Pendimethalin 38.7%. 1 Gal contains 3.8 Lbs. of microencapsulated pendimethalin in aqueous carrier.			**Product Name:_____Pin-Dee 3.3 EC_____** **EPA REG#_____19713-688_____** **WVDA#/Brand ID:_____12401_____**
42	Case of 2 X 2.5 Gal. containers	Gal.	$50.00	
43	15 Gal. container, sold individually	Gal.	$50.00	
	Product Trade Name: Plateau® or equal For weed control, native grass establishment and turf growth suppression. Group 2. Active Ingredients: 23.6% Ammonium salt of imazapic. Contains 2 lbs. of Imidazolinone per gallon.			**Product Name:_____Propose_____** **EPA REG#_____83529-169_____** **WVDA#/Brand ID:_____17694_____**
44	Case of 4 X 1 Gal. containers	Gal.	$105.00	
	Product Trade Name: Polaris® SP or equal Multi-Purpose Non-Selective liquid post-emergent herbicide for the management of grasses and broadleaf weeds, undesirable emergent and floating aquatic vegetation, and many brush and vine species in a variety of settings. Group 2. Active Ingredients: Imazapyr 27.7%. Equivalent to 22.6% 2-[4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo-1 H-imidazol-2-yl]-3-pyridinecarboxylic acid or 2 pounds acid per gallon.			**Product Name:_____** **EPA REG#_____** **WVDA#/Brand ID:_____**
45	Case of 2 X 2.5 Gal. containers	Gal.	$72.60	
46	Pallet of 72 X 2.5 Gal. containers	Gal.	$70.40	
	Product Trade Name: Rodeo® or equal Control of annual and perennial weeds and woody plants and for emerged aquatic vegetation control. Group 9. Active Ingredients: Isopropylamine Salt of Glyphosate 53.8%. Contains 5.4 Lb. per gallon glyphosate, isopropylamine salt (4 Lb. per gallon glyphosate acid).			**Product Name:_____Aqua Naat_____** **EPA REG#_____228-365_____** **WVDA#/Brand ID:_____1009.0148_____**
47	Case of 2 X 2.5 Gal. containers	Gal.	$28.50	
48	Pallet of 72 X 2.5 Gal. containers	Gal.	$27.70	
49	30 Gal. container, sold individually	Gal.	$28.05	
	Product Trade Name: Roundup® Pro Concentrate or equal A postemergence herbicide for industrial, turf and ornamental weed control. It gives broad-spectrum control of many annual weeds, perennial weeds, woody brush and trees. Formulated as a water-soluble liquid containing surfactant. Group 9. Active Ingredient: Glyphosate 50.2%. Contains 600 grams per liter or 5 pounds per U.S. gallon of the active ingredient glyphosate, in the form of its isopropylamine salt. Equivalent to 445 grams per liter or 3.7 pounds per gallon of the acid glyphosate.			**Product Name:_____** **EPA REG#_____** **WVDA#/Brand ID:_____**
50	Case of 2 X 2.5 Gal. containers	Gal.	$28.50	
51	Pallet of 72 X 2.5 Gal. containers	Gal.	$27.00	
52	Pallet of 9 X 15 Gal. containers	Gal.	$26.49	
53	30 Gal. container, sold individually	Gal.	$27.00	
54	265 Gal. container, sold individually	Gal.	$24.50	

	Roundup Custom Aquatic Terrestrial Herbicide A non-selective systemic aquatic herbicide effectively control weed, brush and vines by land or water. Active Ingredient: 53.8% Glyphosate, N-(phosphonomethyl) glycine. Contains 648 grams per liter or 5.4 pounds per US gallon of active ingredient in the form of isopropylamine salt. Equivalent to 480 grams per liter or 4 pounds per US gallon of the acid glyphosate.			**Product Name:**_____ **EPA REG#**_____ **WVDA#/Brand ID:**_____
55	Case of 2 X 2.5 Gal. containers	Gal.	$30.00	
56	30 Gal. container, sold individually	Gal.	$29.70	
57	265 Gal. container, sold individually	Gal.	$28.25	
	Product Trade Name: Telar® XP or equal Foliar control and lasting residual to dramatically reduce noxious perennials and troublesome annual weeds. Group 3. Active Ingredient: Chlorsulfuron 75.0%, by weight.			**Product Name:**_____**Chlorsulfuron 75**_____ **EPA REG#**_____**81927-43**_____ **WVDA#/Brand ID:**_____**2190.0037**_____
58	Case of 8 X 8 Oz. containers	Oz.	$16.95	
59	Case of 8 X 16 Oz. containers	Oz.	$16.95	
	Product Trade Name: Vanquish® or equal A liquid post-emergent herbicide for the management of more than 200 broadleaf weeds, brush, and vines. Active Ingredient: Dicamba - 56.8%. By isomer specific method, equivalent to: *3, 6-dichloro-o-anisic acid 38.5%, 4 Lbs./Gal.			**Product Name:**_____**Dicamba 4**_____ **EPA REG#**_____**81927-55**_____ **WVDA#/Brand ID:**_____**9313**_____
60	Case of 2 X 2.5 Gal. containers	Gal.	$35.00	
61	Pallet of 9 X 15 Gal. containers	Gal.	$34.75	
	Product Trade Name: Vastlan™ or equal For the control of woody plant species and annual and perennial broadleaf weeds. Group 4. Active Ingredients: Triclopyr 54.72%. Acid equivalent: triclopyr – 39.02% - 4 Lb./Gal.			**Product Name:**_____ **EPA REG#**_____ **WVDA#/Brand ID:**_____
62	Case of 12 X 1 Qt. containers	Qt.	$26.50	
63	Case of 2 X 2.5 Gal. containers	Gal.	$102.00	
64	Pallet of 72 X 2.5 Gal. containers	Gal.	$102.00	
65	Pallet of 9 x 15 Gal. containers	Gal.	$102.00	
66	30 Gal. container, sold individually	Gal.	$102.00	
	Product Trade Name: Velpar L® Liquid Herbicide or equal Soil-active herbicide controls trees, brush, weeds, and grasses by inhibiting photosynthesis. Water Dispersible Liquid. Group 5. Active Ingredient: Hexazinone 25.0%. Contains 2 pounds of active ingredient per gallon.			**Product Name:**_____**Hexazinone 2SL**_____ **EPA REG#**_____**84229-35**_____ **WVDA#/Brand ID:**_____**12929**_____
67	Case of 2 X 2.5 Gal. containers	Gal.	$90.00	
68	15 Gal. container, sold individually	Gal.	$90.00	

Continue to Part II

Part II - ADJUVANT PRODUCTS

Contract Item #	Description	Unit of Measure	Cost Per Unit of Measure	Equal To Product Bid (Provide Product Labels for Equal to Items Bid)
	Product Trade Name: Aquachem 90 or equal Non-Ionic Surfactant			**Product Name:_____Novita 90_____**
69	Case of 2 X 2.5 Gal. containers	Gal.	$13.00	
	Product Trade Name: Basal Oil or Bark Oil, or equal Diluent with Emulsifiers			**Product Name:_____Novita Basal Oil _____**
70	Supplied in ____15GL_____ containers in lots of ___9_____.	Gal.	$16.50	
	Product Trade Name: Bullseye® or equal Water Soluble Blue Liquid Spray Pattern Indicator			**Product Name:____Novita Super Marking Dye_____**
71	Case of 2 X 2.5 Gal. containers	Gal.	$38.49	
	Product Trade Name: 41 A© Drift Retardant or equal Granular/Flake Drift Control Agent			**Product Name:_____Novita Drift Control_____**
72	Case of 12 X 32 Oz. containers	Oz.	$0.50	
	Product Trade Name: Liberate® or equal Non-Ionic, Low Foam Penetrating Surfactant with Lecithin, Drift Control Agent			**Product Name:_____**
73	Case of 2 X 2.5 Gal. containers	Gal.	$28.75	
	Product Trade Name: MSO® Concentrate or equal Concentrate Spray Adjuvant with Lecitech®, Methylated Seed Oil			**Product Name:_____Novita MSO_____**
74	Case of 2 X 2.5 Gal. containers	Gal.	$15.49	
	Product Trade Name: Nu-Film®-IR or equal Non-Ionic Sticker Spreader			**Product Name:_____**
75	Case of 2 X 2.5 Gal. containers	Gal.	$55.00	
	Product Trade Name: Reign® LC or equal Liquid Drift Control Agent			**Product Name:_____Novita Drift Control_____**
76	Case of 12 X 1 Qt. Containers	Qt.	$16.00	
	Product Trade Name: Spreader 90 or equal Aquatic Surfactant			**Product Name:_____Novita 90_____**
77	Case of 2 X 2.5 Gal. containers	Gal.	$13.00	
	Product Trade Name: Thinvert® RTU or equal Ready-to-Use Formula Containing Paraffinic Oil Emulsifiers			**Product Name:_____**
78	Case of 2 X 2.5 Gal. containers	Gal.	$40.00	
79	15 Gal. Container, sold individually	Gal.	$40.00	
	Product Trade Name: Unfoamer® or equal Miscible-Dispersible Liquid Defoamer (10% Active Ingredient)			**Product Name:_____Novita Foam No More_____**
80	Case of 12 X 1 Qt. Containers	Qt.	$12.00	

Continue to Part III

Part III - MISCELLANEOUS PRODUCTS

Contract Item #	Description	Unit of Measure	Cost Per Unit of Measure	Equal Product Bid
	Product Trade Name: Birchmeier or equal			**Product Name:**_____
81	5-gallon Backpack Sprayer	Ea.	$600	
82	Gasket Set for Sprayer Pump	Set	$50	
83	Valve and Wand Repair Kit	Kit	$175	
	Product Trade Name: Birchmeier BCS or equal			**Product Name:**_____
84	Closed System Backpack Sprayer	Ea.	$600	
85	Gasket Set for Sprayer Pump	Set	$50	
86	Valve and Wand Repair Kit	Kit	$175	
	Product Trade Name: Easy Rinse or equal			**Product Name:**_____
87	Pressure Rinser	Ea.	$99	
88	32 oz. Eye Wash Bottle	Ea.	$21.00	**Product Name:**_____
	Product Trade Name: Launch® or equal	**NA**		**Product Name:**_____**product discontinued**_____
	Biostimulant; Plant nutrient supplement for the establishment and maintenance of turf and ornamentals.			
89	Case of 2 X 2.5 Gal. containers	Gal.		
	Product Trade Name: Tolco® or equal			**Product Name:**_____
90	2-Quart Handheld Pressure Sprayer	Ea.	$45	

Department of Administration
Purchasing Division
2019 Washington Street East
Post Office Box 50130
Charleston, WV 25305-0130

State of West Virginia
Centralized Request for Quote
Chemicals

Proc Folder: 1287498			**Reason for Modification:**
Doc Description: Vegetation Management Products - Statewide			
Proc Type: Central Master Agreement			
Date Issued	**Solicitation Closes**	**Solicitation No**	**Version**
2023-09-18	2023-10-04 13:30	CRFQ 0803 DOT2400000018	1

BID RECEIVING LOCATION

BID CLERK
DEPARTMENT OF ADMINISTRATION
PURCHASING DIVISION
2019 WASHINGTON ST E
CHARLESTON WV 25305
US

VENDOR

Vendor Customer Code: VS0000044048
Vendor Name : ORION SOLUTIONS, LLC
Address : 1035 FRANKLIN ST.
Street : Suite 207
City : ROCKY MOUNT
State : VA **Country :** USA **Zip :** 24151-1280
Principal Contact : ELAINE AZZARANO
Vendor Contact Phone: 334-524-8894 **Extension:**

FOR INFORMATION CONTACT THE BUYER
John W Estep
304-558-2566
john.w.estep@wv.gov

Vendor Signature X Elaine Azzarano **FEIN#** 208362076 **DATE** 10/4/23

All offers subject to all terms and conditions contained in this solicitation

ADDITIONAL INFORMATION

REQUEST FOR QUOTATION:

The West Virginia Purchasing Division is soliciting bids on behalf of the West Virginia Division of Highways to establish an open-end contract for Vegetation Management Products, to include herbicides, adjuvants, and miscellaneous related products for vegetation management statewide. Per the Bid Requirements, Specifications, Terms and Conditions attached to this solicitation.

INVOICE TO	SHIP TO
VARIOUS AGENCY LOCATIONS AS INDICATED BY ORDER No City WV US	VARIOUS AGENCY LOCATIONS AS INDICATED BY ORDER No City WV US

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
1	Vegetation Management Products, Herbicides and Misc Products	0.00000	EA		

Comm Code	Manufacturer	Specification	Model #
10171700			

Extended Description:
SEE ATTACHED PRICING PAGES-ATTACHMENT A, FOR ACTUAL COST

SCHEDULE OF EVENTS

Line	Event	Event Date
1	Tech Questions due by 10:00am	2023-09-26

	Document Phase	Document Description	Page 3
DOT2400000018	Final	Vegetation Management Products - Statewide	

ADDITIONAL TERMS AND CONDITIONS

See attached document(s) for additional Terms and Conditions

8.2 **Vendor Supply:** Vendor must carry sufficient inventory of the Contract Items being offered to fulfill its obligations under this Contract. By signing its bid, Vendor certifies that it can supply the Contract Items contained in its bid response.

8.3 **Reports:** Vendor shall provide the Agency with quarterly reports, annual summaries, and/or monthly reports as requested by the Agency and/or the West Virginia Purchasing Division showing quantities, total dollar value of the Contract Items purchased, ordered, shipped & invoiced with dates in spreadsheet format as defined by the Agency. Failure to supply such reports may be grounds for cancellation of this Contract.

8.4 **Contract Manager:** During its performance of this Contract, Vendor must designate and maintain a primary contract manager responsible for overseeing Vendor's responsibilities under this Contract. The Contract Manager must be available during normal business hours to address any customer service or other issues related to this Contract. Vendor should list its Contract Manager and his or her contact information below.

Contract Manager: ELAINE AZZARANO
Telephone Number: 334-524-8894
Fax Number: 540-301-6403
Email Address: eazzarano@orionlvm.com

Vendor shall inform the Agency in writing of any changes to the information provided above within ten (10) calendar days of such changes. Failure to comply may be grounds for cancellation of this contract.

WEST VIRGINIA DEPARTMENT OF AGRICULTURE
PESTICIDE REGULATORY PROGRAMS
Examination Information Sheet

C03932 — Current WV Commercial/Public/Technician Certification#

10/2/2023 — Today's Date

Raymond H. Bowman Jr. — Your name

Telephone Number 540-588-3646

39 Willow Run Drive — Mailing Street Address - YOUR SCORES WILL BE MAILED HERE

County FRANKLIN

Boones Mill VA 24065 — Your city, state & zipcode

Employed by ORION Solutions LLC

Signature [signature]

Is the address listed above your: ☒ home address ☐ company address

LICENSE APPLYING FOR: (please check below)

_____1. Company (Qualifying person for office or branch)
_____4. Registered Technician
_X_2. Commercial Applicator (Employee or manager)
_____3. Certified Public Applicator (Government entity)

Are you currently a registered technician? NO If so, your #_____
Have you tested within the last 12 months? NO

****PLEASE COMPLETE ALL INFORMATION ABOVE THIS LINE.****

Your examinations will be graded and your scores posted below. If you passed the General Standards exam and an exam for a specific category, an application for the license type marked is enclosed. Your license will be mailed to you upon return of the completed application and other documents and fees applicable to the application form.

Applicants who fail to achieve a passing score on their first attempt at examination are eligible to be reexamined **in the same category** after 28 days from the date of the first examination. Applicants who fail on the second attempt or any subsequent attempt must wait 56 days from the date of the last examination for reexamination.

A score of 70% or greater is required for passing.

LPAB Exam _____% General Standards Exam 82% Registered Technician Exam _____%

1 - Agricultural Plant Pest Control	_____%	8A - General Pest	_____%	11 -Demonstration & Research	_____%
2 -Agricultural Animal Pest Control	_____%	8B - Structural Pest	_____%	12 - Pesticide Storage & Dist.	86%
3 -Forest Pest Control	_____%	8C - Fumigation	_____%	13A -Predator Control	_____%
4A -Ornamental & Turf Outdoors	_____%	8D - Wood Treatment	_____%	13B -Sewer Root Control	_____%
4B -Ornamental Pest Control Indoors	_____%	8E - Urban IPM	_____%	13C -Hardwood Tree Release	_____%
5 -Seed Treatment	_____%	9 - Public Health	_____%	13D -Mosquito Control	_____%
6 -Aquatic Pest Control	_____%	10 - Regulatory	_____%	13E -Black Fly Control	_____%
7 -Right-of-Way/Industrial Weed	92%				

YOU WILL BE ELIGIBLE FOR REEXAMINATION AFTER _____.

COPY DISTRIBUTION: White copy - Office Yellow - Examinee Pink - Examiner

January 2009

ALLIGARE

ECOMAZAPYR 2 SL

SPECIMEN LABEL

For control of undesirable emergent and floating aquatic vegetation in and around standing and flowing water, including estuarine and marine sites.

For control of undesirable vegetation growing in or around surface water in wetland, riparian and terrestrial habitats and can be used for cut stump, cut stem and frill and girdle treatments within aquatic sites.

For basal bark and stem application of brush and trees in noncropland areas.

For control of undesirable vegetation in grass pasture, rangeland and for establishment and maintenance of wildlife openings (except in the state of California). For control of undesirable vegetation in unimproved industrial non-cropland Bermudagrass and Bahiagrass, and industrial non-cropland areas such as railroad, utility, pipeline and highway rights-of-way, utility plant sites, petroleum tank farms, pumping installations, transmission lines, fence rows, storage areas, around commercial and industrial building perimeters, non-irrigation ditchbanks, access roads, airfields, airports, industrial bare ground areas, and under paved surfaces.

For control of undesirable vegetation as a spot treatment of undesirable brush and hardwood vegetation.

In the State of New York, aquatic uses are not allowed.

ACTIVE INGREDIENT:	**% BY WT.**
Isopropylamine salt of Imazapyr (2-[4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo-1*H*-imidazol-2-yl]-3-pyridinecarboxylic acid)*	27.8%
OTHER INGREDIENTS:	72.2%
TOTAL:	100.0%

*Equivalent to 22.6% or 2 pounds acid equivalent per gallon. **Alligare Ecomazapyr 2 SL** is an aqueous solution.

EPA Reg. No. 81927-22

KEEP OUT OF REACH OF CHILDREN

CAUTION/PRECAUCION

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

FIRST AID	
If swallowed:	• Call a poison control center or doctor for further treatment advice. • Have person sip a glass of water if able to swallow. • **DO NOT** induce vomiting unless told to so by a poison control center or doctor. • **DO NOT** give anything to an unconscious person.
If on skin or clothing:	• Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
If in eyes:	• Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
If inhaled:	• Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. • Call a poison control center or doctor for further treatment advice.
HOT LINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor or going for treatment. For medical emergencies involving this product, call 1-800-424-9300.	

Manufactured for:
Alligare, LLC
13 N. 8th Street
Opelika, AL 36801

PRECAUTIONARY STATEMENTS
HAZARD TO HUMANS AND DOMESTIC ANIMALS

CAUTION! Harmful if swallowed or absorbed through skin. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco.

PERSONAL PROTECTIVE EQUIPMENT (PPE):

Mixers, loaders, applicators and other handlers must wear:
- Long-sleeved shirt and long pants
- Waterproof gloves
- Shoes plus socks

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

ENGINEERING CONTROL STATEMENTS

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

User Safety Recommendations

Users should:
- Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. Wash thoroughly and change into clean clothing.
- Remove and wash contaminated clothing before reuse.

ENVIRONMENTAL HAZARDS

This product is toxic to plants and must be used strictly in accordance with the drift precautions on the label. Drift and run-off may be hazardous to plants in water adjacent to treated areas.

Do not apply to water except as specified in this label. Treatment of aquatic weeds may result in oxygen depletion or loss due to decomposition of dead plants. This oxygen loss may cause the suffocation of some aquatic organisms. Do not treat more than one-half the surface area of the water in a single operation and wait at least 10 to 14 days between treatments. Begin treatments along the shore and proceed outward in bands to allow aquatic organisms to move into untreated areas.

Do not contaminate water when disposing of equipment washwaters or rinsate.

PHYSICAL AND CHEMICAL HAZARDS

Spray solutions of **Alligare Ecomazapyr 2 SL** must be mixed, stored and applied only in stainless steel, fiberglass, plastic and plastic-lined steel containers.

DO NOT mix, store or apply **Alligare Ecomazapyr 2 SL** or spray solutions of **Alligare Ecomazapyr 2 SL** in unlined steel (except stainless steel) containers or spray tanks.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Read all label directions before using this product.

DO NOT apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application.

For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

Keep containers closed to avoid spills and contamination.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 48 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:
- Coveralls
- Shoes plus socks
- Chemical-resistant gloves made of any waterproof material
- Protective eyewear

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard (WPS) for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

Non-crop weed control is not within the scope of the Worker Protection Standard. See the **PRODUCT INFORMATION** section of this label for a description of non-crop sites.

Do not enter or allow others to enter treated areas until sprays have dried.

PRODUCT INFORMATION

Alligare Ecomazapyr 2 SL is an aqueous solution intended to be mixed in water and surfactant(s)- and applied as a post-emergent spray for control of most annual and perennial grasses, broadleaf weeds, vines, brambles, hardwood brush, trees for forestry site preparation and release of conifers from woody herbaceous competition. This product may be used for selective woody and herbaceous weed control in natural regeneration of certain conifers (see pine release). This product may also be mixed in water and used for stump and cut-stem treatment for control of unwanted woody vegetation. This product can be applied along forest roads to control undesirable vegetation. This product can be used for the control of undesirable vegetation along non-irrigation ditchbanks and for the establishment and maintenance of wildlife openings. See use directions for stump and cut stem treatments and herbaceous weed control and use directions for spot treatment of undesirable hardwood vegetation.

This product may be applied on forestry sites that contain areas of temporary surface water caused by the collection of water between planting beds, in equipment ruts, or in the depressions created by forest management activities, except in the state of New York. It is permissible to treat drainage ditches, intermittent drainage, intermittently flooded low lying sites, seasonally dry flood plains, and transitional areas between upland and lowland sites when no water is present, except in the state of New York. Only the edge of drainage ditches can be treated for drainage ditches that contain water. It is also permissible to treat marshes, swamps, and bogs after water has receded, as well as seasonally dry flood deltas, except in the state of New York.

When applied postemeregence to weeds, **Alligare Ecomazapyr 2 SL** will control most annual and perennial grasses and broadleaf weeds in addition to many brush and vine species. **Alligare Ecomazapyr 2 SL** will provide residual control of labeled weeds which germinate in the treated areas. Postemergence application with a surfactant is the method of choice in most situations, particularly for perennial weeds. For maximum effect, weeds should be growing vigorously at postemergence application and the spray solution should include a surfactant. **Alligare Ecomazapyr 2 SL** solutions may be broadcast by using ground or aerial equipment, or may be applied as a spot treatment by using low-volume techniques. In addition, **Alligare Ecomazapyr 2 SL** may be used for stump and cut stem treatments.

Alligare Ecomazapyr 2 SL controls vegetation by absorption through foliage and roots, from which it is translocated rapidly throughout the plant, where it accumulates in rapidly-growing meristematic tissue. Treated plants stop growing soon after spray treatment. Chlorosis (yellowing of plant tissue) first appears in the newest leaves and necrosis spreads from this point. In perennials, **Alligare Ecomazapyr 2 SL** is translocated into and kills underground storage tissues to prevent most regrowth. Chlorosis and tissue necrosis may not be apparent in some plant species for several weeks after application and may take months for various woody plants, brush and trees.

PRECAUTIONS FOR AVOIDING INJURY TO NON-TARGET PLANTS

Alligare Ecomazapyr 2 SL can occasionally affect non-target or desirable vegetation by root uptake of the herbicide from treated soil. Injury or loss of non-target plants may result if **Alligare Ecomazapyr 2 SL** is applied onto or near desirable plants, or to areas where their roots extend, or in areas where treated soil may be washed or moved into contact with their root zone or drip line.

When making applications along shorelines where desirable plants may be present, exercise caution to avoid spray contact onto their foliage or spray application to the soil in which they are rooted. Shoreline plants with roots that extend into the waters where **Alligare Ecomazapyr 2 SL** has been applied will generally not be adversely affected.

Untreated trees can occasionally be affected by root uptake of this product through movement into the top soil. Injury or loss of desirable trees or other plants may result if this product is applied on or near desirable trees or other plants, on areas where their roots extend or in locations where the treated soil may be washed or moved into contact with their roots.

RESTRICTIONS

DO NOT apply aerial by fixed winged aircraft for aquatic uses. Aerial applications may ONLY be made by helicopter; applications may NOT be made by airplane for aquatic uses.

DO NOT use on food crops.

DO NOT enter or allow others to enter treated areas until sprays have dried.

DO NOT use the vegetative matter as mulch or compost on or around desirable species if treated vegetation is to be removed from the application site.

DO NOT apply this product within one-half mile upstream of an active potable water intake in flowing water (i.e., river, stream, etc.) or within one-half mile of an active potable water intake in a standing body of water, such as a lake, pond or reservoir.

DO NOT apply to water used for irrigation except as described in **APPLICATION TO WATERS USED FOR IRRIGATION** section of this label.

Keep away from fertilizers, insecticides, fungicides, and seeds.

DO NOT apply or drain or flush equipment on or near desirable plants, or onto areas where their roots may extend, or in locations where the chemical or treated soil may be washed or moved into contact with their roots.

DO NOT use on lawns, walks, driveways, tennis courts or similar areas where roots of desirable vegetation may extend and be exposed to potential injury and/or mortality from root uptake of **Alligare Ecomazapyr 2 SL**.

DO NOT side trim desirable vegetation with this product unless severe injury or plant death is acceptable. Prevent drift of spray to desirable plants.

Do not use on Christmas trees.

Do not use treated waters on irrigated crops within 120 days.

Clean application equipment after using this product by thoroughly flushing with water.

RESISTANCE MANAGEMENT

Alligare Ecomazapyr 2 SL is a Group 2 herbicide based on the mode of action classification system of the Weed Science Society of America and classified as a **B** acetolactate synthase inhibitor (ALS – acetohydroxyacid synthase AHAS) as classified by the Herbicide Resistant Action Committee (HRAC). Any weed population may contain or develop plants naturally resistant to **Alligare Ecomazapyr 2 SL** and other Group 2 herbicides. Weed species with natural or acquired resistance to Group 2 may eventually dominate the weed population if Group 2 herbicides are used repeatedly in the same field or in successive years as the primary method of control for targeted species. Such resistant weed plants may not be effectively managed using Group 2 herbicides but may be effectively managed utilizing another herbicide alone or in mixtures from a different Group and/or by using cultural or mechanical practices. However, the herbicide mode of action classification by itself may not adequately address specific weeds that are resistant to specific herbicides.

To delay herbicide resistance, consider using diversified weed control strategies to minimize selection for weed populations resistant to one or more herbicides:

- Avoid the consecutive use of **Alligare Ecomazapyr 2 SL** or other target site of action Group 2 herbicides that have a similar site of action on the same weed species.
- Using tank-mixtures or premixes with herbicides from different target site of action Groups as long as the involved products are all registered for the same use, have different sites of action, and are both effective at the tank mix or premix rate on the weed(s) of concern.
- Base herbicide use on a comprehensive Integrated Pest Management (IPM) and Integrated Resistance Management (IRM) program.
- Use labeled rate and directions for use to delay selection for resistance.
- Monitor treated weed populations to facilitate the early identification of weeds shifts and/or weed resistance development (also provides direction on future weed management practices).
- Control escaped weeds by implementing measures to avoid allowing weeds to reproduce by seed or to proliferate vegetatively is one of the best ways to contain resistant populations.
- Contact your local extension specialist, certified crop advisor, and/or manufacturer for herbicide resistance management and/or integrated weed management recommendations for specific crops and resistant weed biotypes.

SPRAY DRIFT MANAGEMENT

Avoiding spray drift at the application site is the responsibility of the applicator and the grower. The interaction of many equipment-and weather related factors determines the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions.

Apply only when wind speed is 3-10 mph at the application site.

For ground applications:

- Do not apply with a nozzle height greater than 4 feet above the crop canopy.
- Apply only as a medium or coarser spray (ASABE standard 572.1) or a volume mean diameter of 300 microns or greater for spinning atomizer nozzles.

For aerial applications:

- The distance of the outermost nozzles on the boom must not exceed 3/4 the length of the wingspan or 90% of the rotor blade diameter. Nozzles must always point backward parallel with the air stream and never be pointed downward more than 45°.
- Applicators are required to use a coarse or coarser droplet size (ASABE S572) or, if specifically using a spinning atomizer nozzle, applicators are required to use a volume mean diameter (VMD) of 385 microns or greater for release heights below 10 feet; Applicators are required to use a very coarse or coarser droplet size or, if specifically using a spinning atomizer nozzle, applicators are required to sue a VMD of 475 microns or greater for release heights above 10 feet; Applicators must consider the effects of nozzle orientation and flight speed when determining droplet size.
- Aerial applications are prohibited into temperature inversions.

Where states have more stringent regulations, they must be observed.

The applicator should be familiar with and take into account the information covered in the ***Spray Drift Management*** section.

To avoid spray drift, do not apply under windy conditions. Avoid spray overlap as crop injury may result.

Information on Droplet Size

The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential but will not prevent drift if applications are made improperly or under unfavorable environmental conditions (*see* ***Wind, Temperature and Humidity and Temperature Inversions*** sections).

Controlling Droplet Size

- **Volume -** Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- **Pressure** - Do not exceed the nozzle manufacturer's recommended pressures. For many nozzle types, lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.
- **Number of nozzles** - Use the minimum number of nozzles that provide uniform coverage.
- **Nozzle Orientation** - Orienting nozzles so that the spray is released parallel to the airstream produces larger droplets than other orientations and is the recommended practice. Significant deflection from horizontal will reduce droplet size and increase drift potential.
- **Nozzle Type** - Use a nozzle-type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift.

Boom Length

For some use patterns, reducing the effective boom length to less than 3/4 of the wingspan or rotor length may further reduce drift without reducing swath width.

Application Height

Applications must be made at the lowest height consistent with efficacy and flight safety. Do not make at a height greater than 10 feet above the top of the largest plants unless a greater height is recommended for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

Swath Adjustment

When applications are made with a crosswind, the swath will be displaced downwind. Therefore, on the up and downwind edges of the field, the applicator must compensate for

this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance must increase with increasing drift potential (higher wind, smaller drops, etc.).

Wind
Drift potential is lowest between wind speeds of 2-10 mph. However, many factors including droplet size and equipment type determine drift potential at any given speed. Application must be avoided below 2 mph due to variable wind direction and high inversion potential.

Note: Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

Temperature and Humidity
When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

Temperature Inversions
Applications must not occur during a temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small, suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

Sensitive Areas
The pesticide must only be applied when the potential for drift to adjacent sensitive areas (e.g. residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops) is minimal (e.g. when wind is blowing away from the sensitive areas).

Wind Erosion
Avoid treating powdery dry or light sandy soils when conditions are favorable for wind erosion. Under these conditions, the soil surface should first be settled by rainfall or irrigation.

AERIAL APPLICATIONS

Exercise all precautions to minimize or eliminate spray drift.
Fixed wing aircraft and helicopters can be used to apply **Alligare Ecomazapyr 2 SL**; however, do not apply by fixed wing aircraft or helicopter unless appropriate buffer zones can be maintained to prevent spray drift out of the target area or where damage to desirable vegetation can be tolerated. Aerial equipment designed to minimize spray drift, such as helicopters equipped with a Microfoil™ boom, Thru-Valve™ boom or raindrop nozzles must be used and calibrated. Unless applying with a Microfoil boom, use a drift control agent at the specified label rate. To avoid drift, do not make applications during inversion conditions, when winds are gusty, or during any other conditions that promote spray drift. Do not use side trimming with **Alligare Ecomazapyr 2 SL** unless death of treated vegetation is acceptable.

Thoroughly mix the specified amount of **Alligare Ecomazapyr 2 SL** in 5 to 30 gallons of water per acre and apply uniformly with properly calibrated aerial equipment. Use a nonionic surfactant, methylated seed oil or silicone-based surfactant (see the **ADJUVANTS** section of this label for specific directions). A drift control agent may be used at its specified label rate. An anti-foam agent may be added, if needed. Exercise all precautions to minimize or eliminate spray drift. Avoid applications during windy or gusty conditions. Use of a Microfoil boom, Thru-Valve boom, raindrop nozzles, controlled droplet booms and nozzle configurations is recommended. Maintain adequate buffer zones to minimize potential impacts to desirable vegetation.

Thoroughly clean application equipment, including landing gear, by thoroughly flushing with water immediately after using this product. Prolonged exposure of uncoated/unpainted steel (except stainless steel) surfaces to this product may result in corrosion and failure of the exposed part. Maintaining painted surfaces may prevent corrosion.

Applicators are required to use a Coarse or coarser droplet size (ASABE S572) or, if specifically using a spinning atomizer nozzle, applicators are required to use a volume mean diameter (VMD) of 385 microns or greater for release heights below 10 feet; Applicators are required to use a Very Coarse or coarser droplet size or, if specifically using a spinning atomizer nozzle, applicators are required to sue a VMD of 475 microns or greater for release heights above 10 feet; Applicators must consider the effects of nozzle orientation and flight speed when determining droplet size.

Applicators are required to use upwind swath displacement.

The boom length must not exceed 60% of the wingspan or 90% of the rotor blade diameter to reduce spray drift.

Applications with wind speeds less than 3 mph and with wind speeds greater than 10 mph are prohibited.

Application into temperature inversions are prohibited.

GROUND BOOM APPLICATIONS

Use 5 or more gallons of water per acre. The actual minimum spray volume per acre is determined by the spray equipment used. Use adequate spray volume to provide accurate and uniform distribution of spray particles over the treated area and to avoid spray drift.

Applicators are required to use a nozzle height below 4 feet above the ground or plant canopy and coarse or coarser droplet size (ASABE S572) or, if specifically using a spinning atomizer nozzle, applicators are required to use a volume mean diameter (VMD) of 385 microns or greater.

Applications with wind speeds greater than 10 mph are prohibited.

Applications into temperature inversions are prohibited.

Maintain adequate buffer zones to minimize potential impacts to desirable vegetation.

For best results, apply the spray solution to uniformly cover the foliage of the undesirable vegetation to be controlled.

When making applications to rights-of-ways corridors where roots of desirable vegetation may extend, apply 1 to 3 pints of **Alligare Ecomazapyr 2 SL** per acre in combination with recommended tank-mixes. It is not recommended to use rates higher than 3 pints per acre in such situations as injury or death of desirable vegetation may occur.

Side Trimming: DO NOT side trim with **Alligare Ecomazapyr 2 SL** unless severe injury or death of the treated vegetation is acceptable. **Alligare Ecomazapyr 2 SL** is readily translocated and can result in death of the entire tree.

Low Volume: Use equipment calibrated to deliver 5 to 20 gallons of spray solution per acre. Thoroughly mix 0.5 to 5% (v/v) **Alligare Ecomazapyr 2 SL** in water plus surfactant (see the **ADJUVANTS** section). Use an anti-foam agent at the specified rate, if needed. For difficult to control brush species (see **WEEDS CONTROLLED** section for relative susceptibility of weed species), apply the higher concentrations of herbicide and/or spray volumes but **DO NOT** apply more than 6 pints of **Alligare Ecomazapyr 2 SL** per acre. Do not excessively wet foliage. See the **MIXING GUIDE** for labeled volumes of **Alligare Ecomazapyr 2 SL** and water.

GROUND EQUIPMENT
Thoroughly mix and apply the specified amount of **Alligare Ecomazapyr 2 SL** in 5 to 100 gallons of water per acre. Use a nonionic surfactant to enhance weed control. A drift control agent and an anti-foam agent may also be added at the specified label rates, if needed. If desired, a spray pattern indicator may be used at the specified label rate.

To minimize spray drift, select proper nozzles to avoid spraying a fine mist, use pressures less than 50 psi and **DO NOT** spray under gusty or windy conditions (also refer to **SPRAY DRIFT MANAGEMENT** section). Use an anti-foam agent, if needed, and a spray pattern indicator, if desired. Thoroughly clean application equipment after using this product by thoroughly flushing with water. Prolonged exposure of uncoated/unpainted steel (except stainless steel), surfaces to this product may result in corrosion and failure of the exposed part.

CLEAN MIXING AND APPLICATION EQUIPMENT IMMEDIATELY AFTER USING THIS PRODUCT BY THOROUGHLY FLUSHING WITH WATER.

ADJUVANTS

For optimal postemergence performance of **Alligare Ecomazapyr 2 SL,** the addition of an adjuvant to the spray solution is essential to aid in the deposition and uptake of the herbicide.

For application to aquatic systems, ONLY use spray adjuvants that are approved or appropriate for aquatic use.

When an adjuvant is to be used with this product, Alligare, LLC suggests the use of a Chemical Producers and Distributors Association certified adjuvant.

Nonionic Surfactants: Use a nonionic surfactant at 0.25% v/v or higher (depending on surfactant manufacturer's label) of the spray solution (0.25% v/v is equivalent to 1 quart in 100 gallons) in accordance with the surfactant labeling. For best results, select a nonionic surfactant with HLB (hydrophilic to lipophilic balance) ratio between 12 and 17 with at least 70% surfactant in the formulated product. Alcohols, fatty acids, horticultural spray oils, ethylene glycol or diethylene should not be considered as surfactants to meet these requirements.

Methylated Seed Oils or Vegetable Oil Concentrates: Methylated seed oil or vegetable oil concentrate may be used at 1.5 to 2 pints per acre. When using spray volumes greater than 30 gallons per acre, mix methylated seed oil or vegetable oil concentrate at a rate of 1% of the total spray volume.

Silicone Based Surfactants: Silicone-based surfactants allow greater spreading of the spray droplet on the leaf surface as compared to conventional nonionic surfactants. However, some silicone-based surfactants may dry too quickly and limit herbicide uptake. Refer to the surfactant manufacturer's label for specific directions.

Fertilizer/Surfactant Blends: Nitrogen-based liquid fertilizers such as 28% N, 32% N, 10-34-0 or ammonium sulfate may be used with **Alligare Ecomazapyr 2 SL** at 2 to 3 pints per acre in combination with the recommended rate of nonionic surfactant, methylated seed oil or vegetable oil concentrate. Do not use tank mixes with nitrogen-based fertilizers without a nonionic surfactant, methylated seed oil or vegetable oil concentrate.

Invert emulsions: Alligare Ecomazapyr 2 SL can be applied as an invert emulsion (water-in-oil emulsion) designed to minimize spray drift and spray run-off, thereby delivering more herbicide to the target foliage. The spray emulsion may be formed in a single tank (batch mixing) or injected (in-line mixing). Refer to the invert chemical label for proper mixing directions.

Other: Anti-foam agents, spray pattern indicators or drift reduction agents may also be used if necessary or desired. Refer to the adjuvant manufacturer's label for specific directions.

WEEDS CONTROLLED

Alligare Ecomazapyr 2 SL provides preemergence and postemergence control and some residual control of the following target weed species on terrestrial sites. Annual weeds may be controlled by preemergence or postemergence applications of **Alligare Ecomazapyr 2 SL**. Use postemergence treatments for established biennials and perennial vegetation control.

Consider relative weed sensitivity when preparing low volume spray solutions (see **LOW VOL-**

UME section of **GROUND APPLICATIONS** section), since low volume treatments apply less **Alligare Ecomazapyr 2 SL** per acre than is shown for the broadcast treatments. Refer to the GRASSES and BROADLEAF WEEDS tables for broadcast rates and relative weed sensitivity.

Use **Alligare Ecomazapyr 2 SL** only in accordance with directions on this label.

GRASSES

COMMON NAME	SPECIES	GROWTH HABIT[2]
	Apply 2-3 pints per acre[1]	
Annual bluegrass	*Poa annua*	A
Broadleaf signalgrass	*Brachiaria platyphylla*	A
Canada bluegrass	*Poa compressa*	P
Downy brome	*Bromus tectorum*	A
Fescue	*Festuca* spp.	A/P
Foxtail	*Setaria* spp.	A
Italian ryegrass	*Lolium multiflorum*	A
Johnsongrass	*Sorghum halepense*	P
Kentucky bluegrass	*Poa pratensis*	P
Lovegrass	*Eragrostis* spp.	A/P
*Napier grass	*Pennisetum purpureum*	P
Orchardgrass	*Dactylis glomerata*	P
Paragrass	*Brachiaria mutica*	P
Quackgrass	*Agropyron repens*	P
Sandbur	*Cenchrus* spp.	A
Sand dropseed	*Sporobulus cryptandrus*	P
Smooth brome	*Bromus inermis*	P
Vaseygrass	*Paspalum urvillei*	P
Wild Oats	*Avena fatua*	A
	Apply 3-4 pints per acre[1]	
Barnyardgrass[7]	*Echinochloa crus-gali*	A
Beardgrass	*Andropogon* spp.	P
Bluegrass, Annual[7]	*Poa annua*	A
*Bulrush	*Scirpus validus*	P
Cheat	*Bromus secalinus*	A
Crabgrass	*Digitaria* spp	A
Crowfootgrass[7]	*Dactyloctenium aegyptium*	A
Fall Panicum	*Panicum dichotomiflorum*	A
Giant Reed	*Arundo donax*	A
Goosegrass	*Eleusine indica*	A
Itchgrass[7]	*Rottboellia exaltata*	A
Junglerice[7]	*Echinochloa colonum*	A
Lovegrass[7]	*Eragrostis* spp.	A
*Maidencane	*Panicum hemitomon*	A
Panicum, Browntop[7]	*Panicum fasciculatum*	A
Panicum, Texas[7]	*Panicum texanum*	A
Prairie threeawn	*Aristida oligantha*	P
Reed canarygrass	*Phalaris arundinacea*	P
Sandbur, Field[7]	*Cenchrus incertus*	A
Signalgrass[7]	*Brachiaria platyphylla*	A
Torpedograss	*Panicum repens*	P
Wild barley	*Hordeum* spp.	A
Wooly Cupgrass[7]	*Eriochloa villosa*	A
	Apply 4-6 pints per acre[1]	
Bahiagrass	*Paspalum notatum*	P
Bermudagrass[3]	*Cynodon dactylon*	P
Big bluestem	*Andropogon gerardii*	P
Cattail	*Typha* spp.	P
Cogongrass	*Imperata cylindrical*	P
Dallisgrass	*Paspalum dilatatum*	P
Feathertop	*Pennisetum villosum*	P
Guineagrass	*Panicum maximum*	P
Phragmites	*Phragmites australis*	P
Prairie cordgrass	*Spartina pectinata*	P
Saltgrass[3]	*Distichlis stricta*	P
Sand dropseed	*Sporobolus cryptandrus*	P
Sprangletop	*Leptochloa* spp.	A
Timothy	*Phleum pretense*	P
Wirestem muhly	*Muhlenbergia frondosa*	P

BROADLEAF WEEDS

COMMON NAME	SPECIES	GROWTH HABIT[2]
	Apply 2-3 pints per acre[1]	
Alligartorweed	*Alternanthera philoxeroides*	A/P
Burdock	*Arctium* spp.	B
Carpetweed	*Mollugo verticillata*	A
Carolina geranium	*Geranium carolinianum*	A
Clover	*Trifolium* spp.	A/P
Common chickweed	*Stellaria media*	A
Common ragweed	*Ambrosia artemisiifolia*	A
Dandelion	*Taraxacum officinale*	P
Dog fennel	*Eupatorium capillifolium*	A
Filaree	*Erodium* spp.	A
Fleabane	*Erigeron* spp.	A
Hoary vervain	*Verbena stricta*	P
Horseweed	*Conyza canadensis*	A
Indian mustard	*Brassica juncea*	A
Kochia[7]	*Kochia scoparia*	A
Lambsquarters	*Chenopodium album*	A
*Lespedeza	*Lespedeza* spp.	P
Miners lettuce	*Montia perfoliata*	A
Mullein	*Verbascum* spp.	B
Nettleleaf goosefoot	*Chenopodium murale*	A
Oxeye daisy	*Chrysanthemum leucanthemum*	P
Pepperweed	*Lepidium* spp.	A
Pigweed	*Amaranthus* spp.	A
Plantain	*Plantago* spp.	P
Puncturevine	*Tribulus terrestris*	A
Russian thistle	*Salsola kali*	A
Smartweed	*Polygonum* spp.	A/P
Sorrell	*Rumex* spp.	P
Sunflower	*Helianthus* spp.	A
Sweet clover	*Melilotus* spp.	A/B
Tansymustard	*Descurainia pinnata*	A
Western ragweed	*Ambrosia psilostachya*	P
Wild carrot	*Daucus carota*	B
Wild lettuce	*Lactuca* spp.	A/B
Wild parsnip	*Pastinaca sativa*	B
Wild turnip	*Brassica campestris*	B
Woollyleaf bursage	*Franseria tomentosa*	P
Yellow woodsorrel	*Oxalis stricta*	P
	Apply 3-4 pints per acre[1]	
Broom snakeweed[4]	*Gutierrezia sarothrae*	P
Bull thistle	*Cirsium vulgare*	B
Burclover[8]	*Medicago* spp.	A
Chickweed, Mouseear	*Cerastium vulgatum*	A
Clover, Hop[7]	*Trifolium procumbens*	A
Cocklebur	*Xanthium strumarium*	A
Cudweed	*Gnaphalium* spp.	A
Desert Camelthorn	*Alhagi pseudalhagi*	P
Diffuse knapweed	*Centaurea diffusa*	A
Dock	*Rumex* spp.	P
Fiddleneck[7]	*Amsinckia intermedia*	A
Goldenrod	*Solidago* spp.	P
Henbit[7]	*Lamium aplexicaule*	A
Knotweed, prostrate[7]	*Plygonum aviculare*	A/P
Pokeweed	*Phytolacca americana*	P
Purple loosestrife[4]	*Lythrum salicaria*	P
Purslane	*Portulaca* spp.	A
Pusley, Florida[7]	*Richardia scabra*	A
Rocket, London[7]	*Sisymbrium irio*	A
Rush skeletonweed[4]	*Chondrilla juncea*	B
Saltbush	*Atriplex* spp.	A
Sheperd's-purse[7]	*Capsella bursa-pastoris*	A
Spurge, Annual	*Euphorbia* spp.	A
Stinging nettle[4]	*Urtica dioica*	P
Velvetleaf[7]	*Abutilon theophrasti*	A
Yellow starthistle	*Centaurea solstitialis*	A
	Apply 4-6 pints per acre[1]	
Arrowweed	*Pluchea sericea*	A
Canada thistle	*Cirsium arvense*	P
Giant ragweed	*Ambrosia trifida*	A
Grey rabbitbrush	*Chrysothamus nauseosus*	P
Japanese bamboo/knotweed	*Polygonum cuspidatum*	P
Little mallow	*Malva parviflora*	B
Milkweed	*Asclepias* spp.	P
Primrose	*Oenothera kunthiana*	P
Russian knapweed	*Centaurea repens*	P
Silverleaf nightshade	*Solanum eleagnifolium*	P
Sowthistle	*Sonchus* spp.	A
Texas thistle	*Cirsium texanum*	P

VINES AND BRAMBLES

COMMON NAME	SPECIES	GROWTH HABIT[2]
	Apply 1 pint per acre[1]	
Field bindweed	*Convolvulus arvensis*	P
Hedge bindweed	*Calystegia sequium*	A
	Apply 2-3 pints per acre[1]	
Wild buckwheat	*Polygonum convolvulus*	P
	Apply 3-4 pints per acre[1]	
Greenbriar	*Smilax* spp.	P
Honeysuckle	*Lonicera* spp.	P
Morningglory	*Ipomoea* spp.	A/P
Poison ivy	*Rhus radicans*	P
Redvine	*Brunnichia cirrhosa*	P

COMMON NAME	SPECIES	GROWTH HABIT[2]
	Apply 3-4 pints per acre[1]	
Wild rose	*Rosa* spp.	P
Including:		
Multiflora rose	*Rosa multiflora*	P
McCartney rose	*Rosa bracteata*	P
	Apply 4-6 pints per acre[1]	
*Kudzu[3]	*Pueraria lobata*	P
Trumpetcreeper	*Campsis radicans*	P
Virginia creeper	*Parthenocissus quinquefolia*	P
Wild grape	*Vitis* spp.	P

BRUSH SPECIES

COMMON NAME	SPECIES	GROWTH HABIT[2]
	Apply 4-6 pints per acre[1]	
American beech	*Fagus grandifolia*	P
Ash	*Fraxinius* spp.	P
Bald cypress	*Taxodium distichum*	P
Bigleaf maple	*Acer macrophylum*	P
Black locust[6]	*Robinia pseudoacacia*	P
Black gum	*Nyssa sylvatica*	P
Box elder	*Acer negundo*	P
Brazilian peppertree	*Schinus terebinthifolius*	P
Cherry	*Prunus* spp.	P
Chinaberry	*Melia azadarach*	P
Chinese tallowtree	*Sapium sebiferum*	P
Dogwood	*Cornus* spp.	P
Elm[6]	*Ulmus* spp.	P
Hawthorn	*Crataegus* spp.	P
Hickory	*Carya* spp.	P
Honeylocust[5]	*Gleditsia triacanthos*	P
Maple	*Acer* spp.	P
Melaleuca	*Melaleuca quiquenervia*	P
Mulberry	*Morus* spp.	P
Oak	*Quercus* spp.	P
Persimmon	*Diospyros virginiana*	P
*Pine[5]	*Pinus* spp.	P
Poplar	*Populus* spp.	P
Privet	*Ligustrum vulgare*	P
Red Alder	*Alnus rubra*	P
Red Maple	*Acer rubrum*	P
Russian Olive	*Eleagnus angustifolia*	P
Saltcedar	*Tamarix ramosissima*	P
Sassafras	*Sassafras albidum*	P
Sourwood	*Oxydendrum arboreum*	P
Sumac	*Rhus* spp.	P
Sweetgum	*Liquidambar styraciflua*	P
*Water willow	*Justica americana*	P
Willow	*Salix* spp.	P
Yellow poplar	*Liriodendron tulipifera*	P

*Not approved for use in California.
[1]The higher rates must be used where heavy or well-established infestations occur.
[2]Growth Habit – A = Annual, B = Biennial, P = Perennial
[3]Use a minimum of 75 GPA - Control of established stands may require repeat applications.
[4]For best results early postemergence applications are required.
[5]Tank mix with glyphosate or triclopyr.
[6]Tank-mix with glyphosate.
[7]For preemergence control, tank mix with Pendulum®
[8]For preemergence control, tank mix with Pendulum® or Diuron 4L®

MIXING AND APPLICATION INSTRUCTIONS

MIXING GUIDE		
% Solution	**Alligare Ecomazapyr 2 SL per Gallon of Mix**	**Amount of Alligare Ecomazapyr 2 SL per 4 Gallon Backpack**
0.5%	0.6 fl. oz.	2.6 fl. oz.
1.0%	1.3 fl. oz.	5.1 fl. oz.
2.0%	2.6 fl. oz.	10.2 fl. oz.
3.0%	3.8 fl. oz.	15.4 fl. oz.
5.0%	6.4 fl. oz.	25.6 fl. oz.

MEASURING CHART
128 fl. oz. = 1 gallon
16 fl. oz. = 1 pint
8 pints = 1 gallon
4 quarts = 1 gallon
2 pints = 1 quart

Application Tips
For low volume applications, select appropriate nozzles to avoid over-application. Proper application is critical to ensure desirable results. Optimum results are achieved when the spray covers the crown and approximately 70 percent of the plant. The use of a flat fan nozzle tip with a spray angle of 40 degrees or less will aid in proper deposition.

Recommended nozzle tip sizes include 4004E or 1504E. For a straight stream and cone pattern, use adjustable cone nozzles such as 5500 X3 or 5500 X4. Attaching a roll-over valve onto a Spraying Systems Model 30 gunjet or other similar spray guns allows for the use of both a flat fan and cone tips on the same gun.

Proper Spray Pattern: Moisten, but **DO NOT** drench target vegetation. **DO NOT** spray to run off.

Low Volume with Backpacks: For brush up to 4 feet tall, spray downward to cover approximately 70% of the plant foliage and the crown.

For brush 4 to 8 feet tall, apply a directed spray in a smooth vertical motion from the crown upward on at least two sides of the target vegetation, making sure to cover the crown whenever possible.

For brush over 8 feet tall, apply a directed spray in a smooth zig-zag motion from the crown upward on at least two sides of the target brush.

Low Volume with Hydraulic Handgun Application Equipment: Use same technique as described above for **Low Volume with Backpacks.**

For broadcast applications, simulate a gentle rain near the top of target vegetation, allowing spray to penetrate the target foliage and contact the crown without run-off onto understory vegetation. **DO NOT** spray to run-off. Herbicide spray that contacts understory vegetation may result in severe injury or death of understory plants.

DIRECTED FOLIAR OR SPOT SPRAY EQUIPMENT
For directed or spot spray applications with aerial equipment, ground equipment or low-volume hand operated spray equipment, thoroughly mix **Alligare Ecomazapyr 2 SL** according to the Mixing Guide for **Alligare Ecomazapyr 2 SL** table.

MIXING GUIDE FOR ALLIGARE ECOMAZAPYR 2 SL

Amount of spray solution being prepared	Desired Concentration (fluid volume)				
	0.5%	**0.75%**	**1.0%**	**1.5%**	**5%**
	(amount of **Alligare Ecomazapyr 2 SL** to use)				
1 gallon	0.6 fl oz	0.9 fl oz	1.3 fl oz	1.9 fl oz	6.5 fl oz
3 gallons	1.9 fl oz	2.8 fl oz	3.8 fl oz	5.8 fl oz	1.2 pint
4 gallons	2.5 fl oz	3.8 fl oz	5.1 fl oz	7.7 fl oz	1.6 pint
5 gallons	3.2 fl oz	4.8 fl oz	6.5 fl oz	9.6 fl oz	2 pints
50 gallons	2 pints	3 pints	4 pints	6 pints	10 quarts
100 gallons	4 pints	6 pints	8 pints	6 quarts	5 gallons

2 tablespoons = 1 fluid ounce

For optimum performance and efficacy, apply spray to uniformly cover the target vegetation foliage. Direct spray to avoid contacting desirable conifers. Avoid direct application to desired plant species as injury may occur.

IMPORTANT: **DO NOT** over apply to cause run-off from treated foliage. **DO NOT** exceed specified dosage rate per acre.

High Volumes: For optimum performance when spraying medium to high-density brush, use equipment calibrated to deliver up to 100 gallons of finished spray per acre (GPA). Application volumes exceeding 100 GPA may result in excessive spray run-off, causing injury to desirable ground cover species. Thoroughly mix **Alligare Ecomazapyr 2 SL** at 2 to 6 pints per acre in water and include a surfactant (see **ADJUVANTS** section for recommendations). Use an anti-foam agent according to its label, if needed. For hard-to-control species (see **WEEDS CONTROLLED** section for relative susceptibility of weeds), use the higher concentrations of the herbicide and/or spray volumes, but **DO NOT** apply more than 6 pints of **Alligare Ecomazapyr 2 SL** per acre. Uniformly cover the foliage of the target vegetation but **DO NOT** apply to run-off.

TANK MIXES FOR BRUSH CONTROL:
Alligare Ecomazapyr 2 SL may be tank mixed with other registered products to provide control of species tolerant to this product.

Consult manufacturer's labels for specific rates and weeds controlled. Always follow the more restrictive label when making an application involving tank mixes. Tank mixing with products that contain 2,4-D or products which contain 2,4-D could result in reduced performance of this product when 2,4-D is used at high rates.

TANK-MIXES AND APPLICATION RATES*

Target Vegetation	Rate of Alligare Ecomazapyr 2 SL	Tank Mix
Mixed hardwoods without elm, locust, or pine	1.0 – 1.5% by volume	Surfactant
Mixed hardwoods containing elm, locust, and pine	0.5 – 1.0% by volume	Accord® at 2 – 3% by volume plus surfactant
Mixed hardwoods with locust and pine but no elm	0.5 – 1.0% by volume	Krenite® at 2 – 5% by volume plus surfactant
Mixed hardwoods with locust and elm but no pine	0.5 – 1.0% by volume	MSM 60DF at 2 oz./Acre or 2.3 grams/gal plus surfactant
*Tank mixes with products containing 2,4-D have resulted in reduced efficacy of **Alligare Ecomazapyr 2SL.**		

CUT STUBBLE:

Alligare Ecomazapyr 2 SL can be applied within 2 weeks after mechanical mowing or cutting of brush. To suppress or control resprouting, uniformly apply a spray solution of this product at the rate of 1 to 2 pints per acre to the cut area. **Alligare Ecomazapyr 2 SL** may be tank mixed with Picloram (Picloram 22K) or equivalent labeled product for this use to aid in control or suppression of brush. The addition of 5% (v/v) or more of a penetrating agent (surfactant) can aid herbicide uptake through the bark or exposed roots.

Cut stubble applications are made to the soil and cut brush stumps. This type of application may increase ground cover injury. However, vegetation will recover. Making applications of this product directly to the soil can increase potential root uptake causing injury or death of desirable trees.

Efficacy can be increased and root uptake by desirable vegetation can be decreased if the brush is allowed to regrow and the foliage is treated. See the Brush Control section of this label.

STUMP AND CUT STEM TREATMENTS:

Alligare Ecomazapyr 2 SL controls undesirable woody vegetation on non-cropland by application to the cambium area of freshly-cut stump surfaces or to fresh cuts on the stem of the target woody vegetation. Applications can be made at any time of the year except during periods of heavy sap flow in the spring. Tree injection and cut stem treatments are most effective in late summer and early fall. **DO NOT** over-apply to cause run-off or puddling of spray solution.

Mixing: Mix **Alligare Ecomazapyr 2 SL** as either a concentrate or dilute solution for stump and cut stem treatments. Apply dilute solutions to the surface of the stump or to cuts on the stem of the target woody vegetation. Apply concentrate solutions to cuts on the stem. Use of the concentrate solutions permits application to fewer cuts on the stem, especially for large diameter trees. Follow the application directions below to determine proper application techniques for each type of solution.

To prepare a dilute solution, mix 8 to 12 fluid ounces of **Alligare Ecomazapyr 2 SL** with one gallon of water. Except in the state of California, if temperatures are such that freezing of the spray mixture may occur, antifreeze (ethylene glycol) may be added according to the manufacturer's label to prevent freezing. The use of a surfactant or penetrating agent may improve herbicide uptake through partially callused cambium tissue.

To prepare a concentrated solution, mix 2 quarts of **Alligare Ecomazapyr 2 SL** with no more than 1 quart of water.

APPLICATION WITH DILUTE SOLUTIONS:

For cut stump treatments: Spray or brush the solution onto the cambium area of the freshly cut stump surface. Thoroughly wet the entire cambium area (the wood next to the bark of the stump).

For tree injection treatments: Using standard injection equipment, apply 1 milliliter of solution at each injection site around the tree with no more than one inch intervals between cut edges. Insure that the injector completely penetrates the bark at each injection site.

For frill or girdle treatments: Use a hatchet, machete or similar implement to make cuts through the bark around the tree at intervals no more than two inches between cut edges. Spray or brush **Alligare Ecomazapyr 2 SL** solution into each cut until thoroughly wet.

APPLICATION WITH CONCENTRATED SOLUTIONS:

For tree injection treatments: Using standard injection equipment, apply 1 milliliter of solution at each injection site. Make at least one injection cut for every 3 inches of Diameter at Breast Height (DBH) on the target tree. For example, a 3 inch DBH tree will receive 1 injection cut while a 6 inch DBH tree will receive 2 injection cuts. On trees requiring more than one injection site, place the injection cuts at approximately equal intervals around the tree.

For hack and squirt treatments: Use a hatchet, machete or similar implement to make cuts at a downward angle completely through the bark and cambium at approximately equal intervals around the tree. Make at least one cut for every 3 inches of DBH on the target tree as described above, using a squirt bottle, syringe, or similar device apply 1 milliliter of concentrate solution into each cut, ensuring that the solution does not run out of the cut.

NOTE: Injury may occur to desirable woody plants if the shoots extend from the same root system or their root systems are grafted to those of the treated tree.

TOTAL VEGETATION CONTROL WHERE BAREGROUND IS DESIRED

Alligare Ecomazapyr 2 SL is an effective herbicide for preemergence or postemergence control of many annual and perennial broadleaf and grass weeds where bareground is desired. This product is particularly effective on hard-to-control perennial grasses.

This product at 1.5 to 6 pints per acre can be used alone or in tank mix with Diuron, Simazine, Vanquish®, or other registered herbicides labeled for this use. The degree and duration of control are dependent on the rate of this product used, tank-mix partner, the volume of carrier, soil texture, rainfall and other conditions.

Consult manufacturer's labels for specific rates and weeds controlled. Always follow the more restrictive label when making an application involving tank-mixes. Applications of these products may be made anytime of the year. Use equipment calibrated to deliver desired gallons per acre spray volume and uniformly distribute the spray pattern over the treated area.

Postemergence Applications: Always use a spray adjuvant (See **ADJUVANT** section of this label) when making a postemergence application. For optimum performance on tough to control annual grasses, apply 100 gallons per acre or less. For spot treatments, this product may be used as a follow-up treatment to control escapes or weed encroachment in a bare ground situation. To prepare the spray solution, thoroughly mix in each gallon of water 0.5 to 5% of this product plus an adjuvant.

FOR CONTROL OF UNDESIRABLE WEEDS UNDER PAVED SURFACES

Alligare Ecomazapyr 2 SL can be used under asphalt, pond liners and other paved areas ONLY in industrial sites or where the pavement has a suitable barrier along the perimeter that prevents encroachment of roots of desirable plants.

Alligare Ecomazapyr 2 SL must only be used where the area to be treated has been prepared according to good construction practices. If rhizomes, stolons, tubers or vegetative plant parts are present in the site, they should be removed by scalping with a grader blade to a depth sufficient to ensure their complete removal.

IMPORTANT: Paving should follow **Alligare Ecomazapyr 2 SL** applications as soon as possible. **DO NOT** apply where the chemical may contact the roots of desirable trees or other plants.

This product is not recommended for use under pavement on residential properties such as driveways or parking lots, nor is it recommended for use in recreational areas such as under bike or jogging paths, golf cart paths or tennis courts, or where the landscape plantings could be anticipated.

Injury or death of desirable plants may result if this product is applied where roots are present or where they may extend into the treated area. Roots of trees and shrubs may extend a considerable distance beyond the branch extremities or so called drip line.

APPLICATION DIRECTIONS FOR PAVED SURFACES:

Applications must be made to the soil surface only when final grade is established. Do not move soil following **Alligare Ecomazapyr 2 SL** application.

Apply **Alligare Ecomazapyr 2 SL** in sufficient water (at least 100 gal water per acre) to ensure thorough and uniform wetting of the soil surface, including the shoulder areas. Add this product at a rate of 6 pints per acre (2.2 fluid ounces per 1000 square feet) to clean water in the spray tank during the filling operation. Agitate before spraying.

If the soil is not moist before treatment, incorporation of this product is needed for herbicide activation. This product can be incorporated into the soil to a depth of 4 to 6 inches using a roto-tiller or disc. Rainfall or irrigation of 1 inch will also provide uniform incorporation. Do not allow treated soil to wash or move from treated areas into untreated areas.

FOR CONTROL OF UNDESIRABLE WEEDS IN UNIMPROVED DORMANT BERMUDAGRASS AND BAHIAGRASS

Alligare Ecomazapyr 2 SL may be used on unimproved dormant bermudagrass and bahiagrass turf on roadsides and utility rights-of-way. The application of this product on established common and coastal bermudagrass and bahiagrass provides control of labeled broadleaf and grass weeds. Competition from these weeds is eliminated, releasing the bermudagrass and bahiagrass. Treatment of bermudagrass with this product results in a compacted growth habit and seedhead inhibition.

Uniformly apply **Alligare Ecomazapyr 2 SL** with properly calibrated ground equipment using at least 10 gallons of water per acre and a spray pressure 20 to 50 psi.

IMPORTANT: Temporary yellowing of grass may occur when treatment is made after growth commences. **DO NOT** add surfactant in excess of the specified rate (1 fluid ounce per 25 gallons of spray solution). **DO NOT APPLY** to grass during its first growing season. **DO NOT APPLY** to grass that is under stress from drought, disease, insects or other causes.

DOSAGE RATES AND TIMING:

Bermudagrass: Apply **Alligare Ecomazapyr 2 SL** at 6 to 12 fluid ounces per acre when the Bermudagrass is dormant. Apply **Alligare Ecomazapyr 2 SL** at 6 to 8 fluid ounces per acre after the Bermudagrass has reached full green-up. Applications made during green-up will delay green-up. Include a surfactant in the spray solution (see IMPORTANT statement above).

For additional preemergence control of annual grasses and small seeded broadleaf weeds, add Prodiamine or Pendulum® herbicide at 3.3 to 6.6 pounds per acre. Consult the Prodiamine or Pendulum® label for weeds controlled and for other use directions and precautions.

For control of Johnsongrass in Bermudagrass turf, apply **Alligare Ecomazapyr 2 SL** at 8 fluid ounces per acre plus a registered herbicide with addition of an approved surfactant. For additional control of broadleaves and vines, Triclopyr 3 or Garlon™ 3A herbicide may be added to the above mix at the rate of 1-2 pints per acre. Observe all precautions and restrictions of the labels.

Bahiagrass: Apply **Alligare Ecomazapyr 2 SL** at 4 to 8 fluid ounces per acre when the Bahiagrass is dormant or after the grass has initiated green-up but has not exceeded 25% green-up. Include a surfactant in the spray solution (See **ADJUVANT** section for specific recommendations on surfactants).

WEEDS CONTROLLED:

Bedstraw (*Galium* spp.)
Bishopweed (*Ptilimnium capillaceum*)
Buttercup (*Ranunculus parviflorus*)
Carolina geranium (*Geranium carolinianum*)
Fescue (*Festuca* spp.)
Foxtail (*Setaria* spp.)
Little barley (*Hordeum pusillum*)
Seedling Johnsongrass (*Sorghum halepense*)
Wild carrot (*Daucus carota*)
White clover (*Trifolium repens*)
Yellow woodsorrel (*Oxalis stricta*)

GRASS GROWTH AND SEEDHEAD SUPPRESSION

Alligare Ecomazapyr 2 SL may be used to suppress growth and seedhead development of certain turfgrasses in unimproved areas. When applied to desirable turf, **Alligare Ecomazapyr 2 SL** may result in temporary turf damage, death, and/or discoloration. Effects to the desirable turf may vary with environmental conditions. For optimum performance,

application must be made prior to culm elongation. Applications may be made before or after mowing. If applied prior to mowing, allow at least three days of active growth before mowing. If following a mowing, allow sufficient time for the grasses to recover before applying **Alligare Ecomazapyr 2 SL** or injury may be amplified.

DO NOT APPLY to turf under stress (drought, cold, insect damaged, etc.) or severe injury or death may occur.

Bermudagrass: Apply **Alligare Ecomazapyr 2 SL** at 6 to 8 fluid ounces per acre from early green-up to prior to seed head initiation. **DO NOT** add a surfactant for this application.

Cool Season Unimproved Turf: Apply **Alligare Ecomazapyr 2 SL** at 2 fluid ounces per acre plus 0.25% nonionic surfactant. For increased suppression, this product may be tank-mixed with other products suitable for this use.

Tank mixes may increase injury to desired turf. Consult each product label for recommended turf species, use directions and precautions. Tank mixes with 2,4-D or products containing 2,4-D at higher rates may decrease the effectiveness of **Alligare Ecomazapyr 2 SL**.

FOR SPOT TREATMENT WEED CONTROL IN GRASS PASTURE AND RANGELAND

For the control of undesirable vegetation in grass pasture and rangeland this product may be applied as a spot treatment at a rate of 2 to 48 fluid ounces of product per treated acre using any of the described ground application methods. Spot applications to grass pasture and rangeland may not exceed more than one tenth of the area to be grazed or cut for hay. See appropriate sections of this label for specific use directions for the application method and vegetation control desired. **DO NOT** apply more than 48 fluid ounces per acre per year.

Grazing and haying restrictions: There are no grazing restrictions following application of this product. **DO NOT** cut forage grass for hay for seven days after application of this product.

GUIDELINES FOR RANGELAND USE

This product may be applied to rangeland for the control of undesirable vegetation in order to achieve one or more of the following vegetation management objectives:

1. The control of undesirable (non-native, invasive and noxious) plant species.
2. The control of undesirable vegetation in order to aid in the establishment of desirable rangeland plant species.
3. The control of undesirable vegetation in order to aid in the establishment of desirable rangeland vegetation following a fire.
4. The control of undesirable vegetation for purposes of wildlife fuel reduction.
5. The release of existing desirable rangeland plant communities from the competitive pressure of undesirable plant species.
6. The control of undesirable vegetation for purposes of wildlife habitat improvement.

To ensure the protection of threatened and endangered plants when applying this product to rangeland:

1. Federal agencies must follow NEPA regulations to ensure protection of threatened and endangered plants.
2. State agencies must work with the Fish and Wildlife Service or the Service's designated state conservation agency to ensure protection of threatened and endangered plants.
3. Other organizations or individuals must operate under a Habitat Conservation Plan if threatened or endangered plants are known to be present on the land to be treated.

ROTATIONAL CROP INSTRUCTIONS

Rotational crops may be planted twelve months after applying this product at the specified pasture and rangeland rate. Following twelve months after an application of this product, and before planting any crop, a successful field bioassay must be completed. The field bioassay consists of a test strip of the intended rotational crop planted in the previously treated area in the grass pasture/rangeland and grown to maturity. The test strip should include low areas and knolls, and include variations in soil type and pH within the treated area. If no crop injury is evident in the test strip, the intended rotational crop may be planted the following year.

Use of this product in accordance with label directions is expected to result in normal growth of rotational crops in most situations; however, various environmental and agronomic factors make it possible to eliminate all risks associated with the use of this product and, therefore, rotational crop injury is always possible.

Resistant Biotypes: Naturally occurring biotypes (a plant within a given species that has a slightly different, but distinct, genetic makeup from other plants of the same species) of some weeds listed on this label may not be effectively controlled. If naturally occurring resistant biotypes are present in an area, this product should be tank-mixed or applied sequentially with an appropriate registered herbicide having a different mode of action to ensure control.

BASAL APPLICATION USE INSTRUCTIONS

Thinline Basal and Stem Application

Apply this product as a thinline basal or arcing application to the stems of susceptible species such as big leaf maple (*Acer macrophyllum*), willow (*Salix* spp.), and Eucalyptus (*Eucalyptus* spp.) with stem ground line diameter of 3 inches or less. Mix 24 to 48 ounces of this product in one gallon of basal oil containing at least 15% emulsifier. Maintain uniform mixtures with frequent agitation. Direct a thin line of the spray solution to the stems beginning a few feet from the ground and descending toward the base of the tree making a zig-zag motion. Do not over apply causing puddling.

Low Volume Basal Bark Treatments

Apply this product at the rate of 8 to 12 ounces per gallon for low volume basal bark treatments. **Alligare Ecomazapyr 2 SL** at 3.0 to 5.0% can be tank mixed with Triclopyr 4 or Garlon® 4 or other basal products to broaden the spectrum of control. Consult the herbicide labels for rates and susceptible brush species. Mixing with basal products requires compatibility tests prior to mixing large quantities. Mixing aids such as emulsifiers and ongoing agitation are required to attain a homogenous tank mix.

Basal application must be made to the lower 12" to 18" of the target brush and go to the soil. Care must be taken to not puddle or over treat the stem. Basal application is best suited for low density brush sites, where stems do not exceed 700 stems per acre.

For Basal Application – it is advisory to mix only the intended amount of mixture that is to be sprayed that day. Adequate agitation must be maintained with all emulsion mixtures to prevent phase separation. Prior to tank mixing with other products, herbicides and oils, you must determine the compatibility of the proposed mixture (See **COMPATIBILITY** section).

SPRAY SOLUTION MIXING GUIDE FOR BASAL BARK APPLICATIONS

AMOUNT OF SPRAY SOLUTION BEING PREPARED	ALLIGARE ECOMAZAPYR 2 SL		ALLIGARE ECOMAZAPYR 2 SL WHEN TANK MIXING	ALLIGARE ECOMAZAPYR 2 SL WHEN TANK MIXING	TRICLOPYR 4 or GARLON 4	
	8.0 fl. oz.	12.0 fl. oz.	3.0%	5.0%	15%	20%
1 Gallon	8.0 fl. oz.	12.0 fl. oz.	3.8 fl. oz.	6.4 fl. oz.	1.2 pts.	1.6 pts.
3 Gallons	1.5 pts.	2.25 pts.	11.5 fl. oz.	1.2 pts.	1.8 qts.	2.4 qts.
4 Gallons	1.0 qt.	1.5 qts.	15.4 fl. oz.	1.6 pts.	2.4 qts.	3.2 qts.
5 Gallons	1.25 qts.	1.0 qt. + 28 fl. oz.	1.2 pts.	1.0 qt.	3.0 qts.	1.0 gal.
50 Gallons	3.0 gals. + 1.0 pt.	4.0 gals. + 2.75 qts.	1.5 gals.	2.5 gals.	7.5 gals.	10.0 gals.
100 Gallons	6.0 gals. + 1.0 qt.	9.0 gals. + 1.5 qts.	3.0 gals.	5.0 gals.	15.0 gals.	20.0 gals.

COMPATIBILITY

Before full-scale mixing of this product with other pesticides, emulsifiers, fertilizers, surfactants or oils, you must determine the compatibility of the proposed mixture. Use proportionate quantities of each ingredient and mix in a small container. Always mix one product thoroughly with the diluent before adding another product. If no incompatibility is evident after 30 minutes, the mixture is generally compatible for spraying. To evaluate potential short term effects of applying the mixture, test the tank mix combination on a few plants or a small area before larger-scale treatments. Wait at least 2 to 3 days for problems to become apparent.

USE FOR SPOT TREATMENT OF UNDESIRABLE BRUSH AND HARDWOOD VEGETATION

Apply **Alligare Ecomazapyr 2 SL** as a directed foliar or cut stem application in conifer stands of all ages for the conifer species listed above. Mix and apply as described above for directed foliar or cut stem applications. **DO NOT** exceed the maximum labeled rates listed above. Cut stem applications may be used for spot treatment of undesirable hardwoods in Ponderosa Pine stands using 12 oz. or less of product per acre.

Avoid direct spray contact to desired plant species as injury may occur. Injury may occur to non-target or desirable hardwoods or conifers if they extend from the same root system or their root systems are grafted to those of the treated tree or if their roots extend into the treated zone.

LATE ROTATION VEGETATION CONTROL IN WESTERN CONIFERS

In California, the Pacific Northwest and Inland Northwest, broadcast aerial applications of this product up to 48 fl. oz./A are permissible in conifer stands that are targeted for harvesting the year following treatment. Use minimum spray volume of 15 gallons per acre. Do not use this treatment if conifer injury or mortality cannot be tolerated.

BAG AND SPRAY APPLICATIONS FOR CONIFER RELEASE

In Douglas fir and Ponderosa pine stands, broadcast applications of this product up to 32 fl. oz./A are permissible when the trees are covered by bags prior to the application. The bags must prevent the spray mix from contacting the conifer foliage. On sites with coarse textured soils (e.g., decomposed granite, pumice, sandy or rocky sites) or low levels of soil organic matter (generally 5% or less) significant conifer growth inhibition and mortality is possible. Do not use this treatment on these types of sites if conifer growth inhibition and mortality cannot be tolerated.

AQUATIC USE SECTION

USE PRECAUTIONS AND RESTRICTIONS FOR AQUATICS

In the state of New York, Aquatic Uses are Not Allowed.

Applications may only be made for the control of undesirable emergent and floating aquatic vegetation in and around standing and flowing water, including estuarine and marine sites. Applications may be made to control undesirable wetland, riparian and terrestrial vegetation growing in or around surface water.

Aerial application is restricted to helicopter only.

Application of this product can only be made by federal or state agencies, such as Water Management District personnel, municipal officials and the U.S. Army Corps of Engineers, or those applicators who are licensed or certified as aquatic pest control applicators and are authorized by the state or local government.

Applications to private water: Applications may be made to private waters that are still, such as ponds, lakes and drainage ditches where there is minimal or no outflow to public waters.

Application to public waters: Applications may be made to public waters such as ponds, lakes, reservoirs, marshes, bayous, drainage ditches, canals, streams, rivers, and other slow-moving or quiescent bodies of water for control of aquatic weeds or for control of riparian and wetland weed species.

Consult local state fish and game agency and water control authorities before applying this product to public water. Permits may be required to treat such water.

Recreational Use of Water in Treatment Area: There are no restrictions on the use of water in the treatment area for recreational purposes, including swimming and fishing.

Livestock Use of Water in/from Treatment Area: There are no restrictions on livestock consumption of water from the treatment area.

Precautions for Potable Water Intakes: Do not apply this product directly to water within one-half mile upstream of an active potable water intake in flowing water (i.e., river, stream, etc.) or within one-half mile of an active potable water intake in a standing body of water such as lake, pond or reservoir. To make aquatic applications around and within one-half mile of active potable water intakes, the water intake must be turned off during application and for a minimum of 48 hours after the application. These aquatic applications may be made only in the cases where there are alternative water sources or holding ponds, which would permit the turning off of an active potable water intake for a minimum period of 48 hours after the applications. Note: Existing potable water intakes which are no longer in use, such as those replaced by connections to wells or a municipal water system, are not considered to be active potable water intakes. This restriction does not apply to intermittent, inadvertent overspray of water in terrestrial use sites.

Use Sites: This product is an aqueous solution to be mixed with water and a surfactant and applied as a spray solution to control floating and emergent undesirable vegetation (see **AQUATIC WEEDS CONTROLLED** section) in or near bodies of water which may be flowing, non-flowing, or transient. This product may be applied to specified aquatic sites that include lakes, rivers, streams, ponds, seeps, drainage ditches, canals, reservoirs, swamps, bogs, marshes, estuaries, bays, brackish water, transitional areas between terrestrial and aquatic sites and seasonal wet areas. See **AQUATIC USE** section of this label for precautions, restrictions, and instructions on aquatic uses.

Read and observe the following directions if aquatic sites are present in terrestrial non-crop areas and are part of the intended treatment area:

Herbicidal Activity: This product will control most annual and perennial grasses and broadleaf weeds in addition to many brush and vine species with some residual control of undesirable species that germinate above the waterline. This product is readily absorbed through emergent leaves and stems and is translocated rapidly throughout the plant, with accumulation in the meristematic regions. Treated plants stop growing soon after spray application. Chlorosis appears first in the newest leaves, and necrosis spreads from this point. In perennials, the herbicide is translocated into, and kills, underground or submerged storage organs, which prevents regrowth. Chlorosis and tissue necrosis may not be apparent in some plant species until two or more weeks after application. Complete kill of plants may not occur for several weeks. Performance of this product may be reduced if rainfall occurs within 2 hours of application. **This product does not control plants which are completely submerged or have a majority of their foliage under water.**

ADJUVANTS – AQUATICS

For this purpose, **ONLY** use spray adjuvants that are approved or appropriate for aquatic use.

APPLICATION TO WATERS USED FOR IRRIGATION

The use of treated waters on irrigated crops within 120 days of treatment is prohibited.
Seasonal Irrigation Water: This product may be applied during the off-season to surface waters that are used for irrigation on a seasonable basis, provided that there is a minimum of 120 days between product application and the first use of treated water for irrigation purposes or until product residue levels are determined by laboratory analysis, or other appropriate means of analysis, to be 1.0 ppb or less.

Irrigation Canals/Ditches: Do not apply this product to irrigation canals/ditches unless the 120-day restriction on irrigation water usage can be observed or product residue levels are determined by laboratory analysis, or other appropriate means of analysis, to be 1.0 ppb or less. Do not apply this product to dry irrigation canals/ditches.

Quiescent or Slow Moving Waters: In lakes and reservoirs DO NOT apply this product within one (1) mile of an active irrigation water intake during the irrigation season. Applications less than one (1) mile from an active irrigation water intake may be made during the off-season, provided that the irrigation intake will remain active for a minimum 120 days after application or until product residue levels are determined by laboratory analysis, or other appropriate means of analysis, to be 1.0 ppb or less.

Moving Water: Do not apply within one-half mile downstream of an active irrigation water intake. When making applications upstream from an active irrigation water intake, the intake must be turned off for a period of time sufficient to allow the upstream portion of treated water to completely flow past the irrigation intake before use can resume. Shut off time will be determined by the speed of water flow and the distance and length of water treated upstream from the intake. Consult local, state and/or federal authorities before making any applications upstream from an active irrigation water intake.

Application Methods: This product must be applied to the emergent foliage of the target vegetation and has little to no activity on submerged aquatic vegetation. Product concentrations resulting from direct application to water are not expected to be of sufficient concentration or duration to provide control of target vegetation. Application should be made in such a way as to maximize spray interception by the target vegetation while minimizing the amount of over spray that enters the water. For maximum activity, weeds should be growing vigorously at the time of application and the spray solution should include a surfactant (See ADJUVANTS section for specific recommendations). This product may be selectively applied by using low-volume directed application techniques or may be broadcast-applied by using ground equipment, watercraft or by helicopter. In addition, this product may also be used for cut stump, cut stem and frill and girdle treatments within aquatic sites (see AERIAL APPLICATIONS and GROUND APPLICATIONS sections for additional details).

This product must be applied with surface or helicopter application equipment in a minimum of 5 gallons of water per acre. When applying by helicopter, follow directions under the AERIAL APPLICATIONS section of this label; otherwise refer to section on GROUND APPLICATIONS when using surface equipment.

Applications made to moving bodies of water must be made while travelling upstream to prevent concentration of this herbicide in water. Do not apply to bodies of water or portions of bodies of water where emergent and/or floating weeds do not exist.

When application is to be made to target vegetation that covers a large percentage of the surface area of impounded water, treating the area in strips may avoid oxygen depletion due to decaying vegetation. Oxygen depletion may result in the suffocation of some sensitive aquatic organisms. Do not treat more than one half of the surface area of the water in a single operation and wait at least 10 to 14 days between treatments. Begin treatment along the shore and proceed outward in bands to allow aquatic organisms to move into untreated areas.

Apply this product at 1 to 6 pints per acre depending on species present and weed density. Do not exceed the maximum label rate of 6 pints per acre (1.5 lb. ai/A) per year. Use the higher labeled rates for heavy weed pressure. Consult the AQUATIC WEEDS CONTROLLED section of this label for specific rates. This product may be applied as a draw down treatment in areas described above. Apply this product to weeds after water has been drained and allow 14 days before reintroduction of water.

TANK MIXES

This product may be tank mixed with other aquatic use herbicides for the control of emergent and floating aquatic vegetation provided that the tank mix herbicide label does not prohibit such mixing. Consult manufacturer's labels for specific rates and weeds controlled. Always follow the more restrictive label instructions and restrictions when making an application involving tank mixes.

AQUATIC SPECIES CONTROLLED

This product will control the following target species as specified in the INSTRUCTIONS section of the table. Rates are expressed in terms of product volume for broadcast applications and as a percent solution for directed applications including spot treatments. For percent solution applications, DO NOT apply more than the equivalent of 6 pints of this product per acre.

COMMON NAME	SCIENTIFIC NAME	INSTRUCTIONS
Floating Species		
*Duckweed	*Lemna minor*	2-3 pints/acre (1% solution) in 100 GPA water. Ensure 100% coverage of the actively growing, emergent foliage.
*Duckweed, Giant	*Spirodela polyriza*	2-3 pints/acre (1% solution) in 100 GPA water. Ensure 100% coverage of the actively growing, emergent foliage.
*Frogbit	*Limnobium spongia*	1-2 pints/acre (0.5% solution) in 100 GPA water. Ensure 100% coverage of the actively growing, emergent foliage.
*Spatterdock	*Nuphar luteum*	Apply a tank-mix of 2-4 pints/acre **Alligare Ecomazapyr 2 SL** plus 4-6 pints/acre glyphosate (0.5% **Alligare Ecomazapyr 2 SL** plus1.5% glyphosate) in 100 GPA water for best control. Ensure 100% coverage of the actively growing, emergent foliage.
*Water Hyacinth	*Eichhornia crassipes*	1-2 pints/acre (0.5% solution) in 100 GPA water to actively growing foliage.
*Water Lettuce	*Pistia stratiotes*	1-2 pints/acre (0.5% solution) in 100 GPA water mix. Ensure 100% coverage of all actively-growing emergent foliage.
Emerged Species		
*Alligatorweed	*Alternanthera philoxeroides*	1-4 pints/acre (0.5% solution) in 100 GPA water. Ensure 100% coverage of actively -growing emergent foliage. Tank-mix with glyphosate is NOT recommended, and may reduce alligatorweed control, requiring higher product rates.
*Arrowhead, Duck-potato	*Sagittaria* spp.	1-2 pints/acre (0.5% solution) in 100 GPA water. Ensure 100% coverage of actively-growing, emergent foliage.
*Bacopa, lemon	*Bacopa* spp.	1-2 pints/acre (0.5% solution) in 100 GPA water. Ensure 100% coverage of actively growing, emergent foliage.
*Parrot feather	*Myriophyllum aquaticum*	Apply 2-4 pints to actively growing emergent foliage. Foliage must be above water for sufficient uptake.
*Pennywort	*Hydrocotyle* spp.	1-2 pints/acre (0.5% solution) in 100 GPA water. Ensure 100% coverage of actively growing, emergent foliage.
*Pickerelweed	*Pontederia cordata*	2-3 pints/acre (1% solution) in 100 GPA water. Ensure 100% coverage of actively growing, emergent foliage.
*Taro, wild; Dasheen; Elephant's Ear; Coco Yam	*Colocasia esculentum*	4-6 pints/acre (1.5% solution) in 100 GPA with a high quality 'sticker' adjuvant. Ensure good coverage of actively-growing, emergent foliage.
*Water lily	*Nymphaea odorata*	2-3 pints/acre (1% solution) in 100 GPA water. Ensure 100% coverage of actively growing, emergent foliage.
*Water Primrose	*Ludwigia uruguayensis*	4-6 pints/acre (1.5% solution), ensure 100% coverage of actively growing, emergent foliage. Tank-mix with glyphosate is NOT recommended and may reduce water primrose control.

Terrestrial/Marginal

*Soda Apple, aquatic; Nightshade	*Solanum tampicense*	2 pints/acre applied to foliage.
*Bamboo, Japanese	*Phyllostachys* spp.	3-4 pints/acre applied to the foliage when plant is actively growing. Before setting seed head. More foliage will result in greater herbicide uptake, resulting in greater root kill.
Brazilian Pepper; Christmasberry	*Schinus terebinthifolius*	2-4 pints/acre applied to foliage.
Cattail	*Typha* spp.	2-4 pints (1% solution) applied to actively- growing, green foliage after full leaf elongation. Lower rates will control cattail in the north; higher rates are needed in the south.
Chinese Tallow Tree	*Sapium sebiferum*	1-1.5 pints applied to foliage.
Cogon grass	*Imperata cylindrica*	Burn foliage, till area, then treat in fall at 2 quarts/acre **Alligare Ecomazapyr 2 SL** plus MSO applied to new growth.
Cordgrass, prairie	*Spartina* spp.	4-6 pints applied to actively growing foliage.
*Cutgrass	*Zizaniopsis miliacea*	4-6 pints applied to actively growing foliage.
*Elephant Grass; Napier Grass	*Pennisetum purpureum*	3 pints/acre applied to actively growing foliage.
*Flowering rush	*Butumu typla*	2-3 pints applied to actively growing foliage.
Giant Reed, Wild Cane	*Arundo donax*	4-6 pints/acre applied in spring to actively growing foliage.
*Golden Bamboo	*Phyllostachys aurea*	3-4 pints/acre applied to the foliage when plant is actively growing before plants set seed heads. More foliage will result in greater herbicide uptake, resulting in greater root kill.
Junglerice	*Echinolchloa colonum*	3-4 pints applied to actively growing foliage.
Knapweeds	*Centaurea species*	Russian Knapweed- Apply 2-3 pints plus 1 quart/acre MSO in the fall after senescence begins.
Knotweed, Japanese (see Fallopia japonica)	*Polygonum cuspidatum*	3-4 pints/acre applied postemergence to actively growing foliage.
Melaleuca; Paperbark Tree	*Melaleuca quinquenervia*	For established stands, apply 6 pints/acre **Alligare Ecomazapyr 2 SL** plus 6 pints/acre glyphosate plus spray adjuvant. For best results, use 4 quarts/A methylated seed oil as an adjuvant. For ground foliar application, uniformly apply to ensure 100% coverage. For broadcast foliar control, apply aerially in a minimum of two passes at 10 gallons/acre applied cross treatment. For spot treatment, use a 25% solution of this product + 25% solution of glyphosate + 1.25% MSO in water applied as a frill or stump treatment.
*Nutgrass;Kili'p'opu	*Cyperus rotundus*	2 pints **Alligare Ecomazapyr 2 SL** plus 1 quart/acre MSO applied early postemergence.
*Nutsedge	*Cyperus* spp.	2-3 pints postemergence to foliage or pre-emergence incorporated. Non-incorporated preemergence applications will not provide control.
Phragmites; Common Reed	*Phragmites australis*	4-6 pints/acre applied to actively-growing, green foliage after leaf elongation. Ensure 100% coverage. If stand has a substantial amount of old stem tissue, mow or burn, allow to regrow to approximately 5' tall before treatment. Lower rates will control phragmites in the north; higher rates are needed in the south.
*Poison Hemlock	*Conium maculatum*	2 pints **Alligare Ecomazapyr 2 SL** plus 1 quart/ acre MSO applied preemergence or early postemergence up to rosette stage before flowering.
Purple Loosestrife	*Lythrum salicaria*	1 pint/acre applied to actively growing foliage.
Reed canarygrass	*Phalaris arundinacea*	3-4 pints/acre applied to actively growing foliage.
Rose, swamp	*Rosa palustris*	2-3 pints/ acre applied to actively growing foliage.
Russian-Olive	*Elaeagnus angustifolia*	2-4 pints/acre or 1% solution applied to foliage.
Saltcedar; Tamarisk	*Tamarix species*	Aerially apply 2 quarts **Alligare Ecomazapyr 2 SL** plus 0.25% v/v NIS to actively growing foliage during flowering. For spot spraying, use a 1% solution of **Alligare Ecomazapyr 2 SL** plus 0.25% v/v NIS and spray to wet foliage. After application wait at least two years before disturbing treated saltcedar. Earlier disturbance can reduce overall control.
Smartweed	*Polygonum* spp.	2 pints/acre applied early postemergence.
Sumac	*Rhus* spp.	2-3 pints/acre applied to foliage.
Swamp Morning Glory; Water Spinach; Kangkong	*Ipomoea aquatica*	1-2 pints/acre **Alligare Ecomazapyr 2 SL** plus 1 quart/acre MSO applied at early postemergence.
Torpedo grass	*Panicum repens*	4 pints/acre (1-1.5% solution). Ensure good coverage to actively growing foliage.
*White Top; Hoary Cress	*Cardaria draba*	1-2 pints/acre of this product applied to actively growing foliage, ensure good coverage.
Willow	*Salix* spp.	2-3 pints/acre **Alligare Ecomazapyr 2 SL** applied to actively growing foliage, ensure good coverage

*Not approved for use in California

INVERT EMULSIONS

This product can be applied as an invert emulsion. Consult the invert chemical label for proper mixing directions.

STORAGE AND DISPOSAL

DO NOT contaminate water, food, or feed by storage or disposal.

PESTICIDE STORAGE: Store in a cool, dry place and in such a manner as to prevent cross contamination with other pesticides, fertilizers, food and feed. Store in original container and out of reach of children, preferably in a locked storage area. **DO NOT** store above 100°F for extended periods of time. **DO NOT** store below 10°F.

PESTICIDE DISPOSAL: Open dumping is prohibited. Pesticide wastes are toxic. Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency or the hazardous waste representative at the nearest EPA Regional Office for guidance.

CONTAINER HANDLING:

Rigid, Nonrefillable containers small enough to shake (i.e. with capacities equal to or less than 5 gallons).

Nonrefillable container: Do not reuse or refill this container. Triple rinse or pressure rinse container (or equivalent) promptly after emptying.

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling or reconditioning if available, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or a mix tank or collect rinsate at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip. Once container is rinsed, offer for recycling if available, or puncture and dispose of in a sanitary landfill.

Rigid, Nonrefillable containers that are too large to shake (i.e. with capacities greater than 5 gallons) Nonrefillable container. Do not reuse or refill this container. Triple rinse or pressure rinse container (or equivalent) promptly after emptying.

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling or reconditioning if available, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or a mix tank or collect rinsate at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip. Once container is rinsed, offer for recycling if available, or puncture and dispose of in a sanitary landfill.

Refillable Container

Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller.

Refilling or Returning Containers

If refilling or returning container is planned, end users are not authorized to remove tamper evident cables, one way valves or clean container.

STORAGE AND DISPOSAL (cont.)

Recycle or Disposal of Containers
End users are authorized to remove tamper evident cable as required to remove the product from the container unless the container is equipped with one way valves and refilling or returning is planned. Instructions for container rinsing and either recycling or disposal are as follows.

Bottom Discharge IBC (e.g. Schuetz Caged IBC or Snyder Square Stackable)
Pressure rinsing the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To pressure rinse the container before final disposal, empty the remaining contents from the IBC into application equipment or a mix tank. Raise the bottom of the IBC by 1.5 inches on the side which is opposite of the bottom discharge valve to promote more complete product removal. Completely pump or drain rinsate into application equipment or rinsate collection system while pressure rinsing. Continue pressure rinsing for 2 minutes or until rinsate becomes clear. Replace the lid and close bottom valve.

Top Discharge IBC, Drums, Kegs (e.g. Synder 120 Next Gen, Bonar B120, Drums and Kegs).
Triple rinsing the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To triple rinse the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Rinse all interior surfaces. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

IMPORTANT: Read the entire **DIRECTIONS FOR USE** and the **CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY** before using this product. If terms are not acceptable, return the unopened product container at once.

CONDITION OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

To the extent consistent with applicable law, upon purchase or use of this product, purchaser and user agree to the following terms:

Warranty: Alligare, LLC (the Company) warrants that this product conforms to the chemical description on the label in all material respects and is reasonably fit for the purpose referred to in the directions for use, subject to the exceptions noted below, which are beyond the Company's control. To the extent consistent with applicable law, the Company makes no other representation or warranty, express or implied, concerning the product, including no implied warranty of merchantability or fitness for a particular purpose. No such warranty shall be implied by law, and no agent or representative is authorized to make any such warranty on the Company's behalf.

Terms of Sale: The Company's directions for use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, and the manner of use or application (including failure to adhere to label directions), all of which are beyond the Company's control. To the extent consistent with applicable law, all such risks are assumed by the user.

Limitation of Liability: To the extent consistent with applicable law, the exclusive remedy against the Company for any cause of action relating to the handling or use of this product is a claim for damages, and in no event shall damages or any other recovery of any kind exceed the price of the product which caused the alleged loss, damage, injury or other claim. To the extent consistent with applicable law, under no circumstances shall the Company be liable for any special, indirect, incidental or consequential damages of any kind, including loss of profits or income, and any such claims are hereby waived. Some states do not allow the exclusion or limitation of incidental or consequential damages.

The Company and the seller offer this product, and the purchaser and user accept this product, subject to the foregoing warranty, terms of sale and limitation of liability, which may be varied or modified only by an agreement in writing signed on behalf of the Company by an authorized representative.

EPA 20150903

ALLIGARE

DIURON 4L

LIQUID FLOWABLE HERBICIDE

Specimen Label

FOR CONTROL OF MANY ANNUAL AND PERENNIAL GRASSES AND HERBACEOUS WEEDS

ACTIVE INGREDIENT:	**% BY WT.**
Diuron: 3-(3,4-dichlorophenyl)-1,1-dimethylurea	40.7%
OTHER INGREDIENTS:	59.3%
TOTAL:	100.0%

Contains 4.0 Pounds of Diuron per Gallon

EPA Reg. No. 81927-44 EPA Est. No. 11603-ISR-001

KEEP OUT OF REACH OF CHILDREN

CAUTION

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION: Harmful if swallowed.

FIRST AID	
If swallowed:	• Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by a poison control center or doctor. • Do not give anything by mouth to an unconscious person.
If on skin or clothing:	• Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
If in eyes:	• Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
If inhaled:	• Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. • Call a poison control center or doctor for further treatment advice.
HOT LINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For emergency information concerning this product, call the National Pesticides Information Center (NPIC) at 1-800-858-7378 seven days a week, 6:30 am to 4:30 pm Pacific Time or your poison control center at 1-800-222-1222.	

Manufactured for:
Alligare, LLC
13 N. 8th Street
Opelika, AL 36801

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some of the materials that are chemical resistant to this product are polyethylene and polyvinyl chloride. If you want more options, follow the instructions for Category A on an EPA chemical resistance category selection chart.

All pilots, flaggers, and groundboom applicators must wear:
- Long-sleeved shirt and long pants
- Shoes plus socks

All mixers, loaders, other applicators, and other handlers must wear:
- Long-sleeved shirt and long pants
- Shoes plus socks
- Chemical-resistant gloves made of any waterproof material such as polyethylene or polyvinyl chloride
- A NIOSH approved particulate filtering respirator equipped with N, R, or P class filter media. The respirator should have a NIOSH approval number prefix TC-84A. It is recommended that you require the respirator wearer be fit tested and trained in the use, maintenance, and limitations of the respirator.
- Chemical-resistant apron when mixing, loading, or cleaning equipment or spills

See engineering controls for additional requirements.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

ENGINEERING CONTROLS

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

Pilots must use an enclosed cockpit that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d)(6)].

Flaggers supporting aerial applications must use an enclosed cab that meets the definition in the Worker Protection Standard for Agricultural Pesticides [40 CFR 170.240(d)(5)] for dermal protection. In addition, flaggers must wear long-sleeved shirt, long pants, shoes, and socks.

USER SAFETY RECOMMENDATIONS

Users should:
- Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing / PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

For terrestrial uses, do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters. Apply this product only as specified on this label.

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry intervals. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 12 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated such as plants, soil, or water is:
- Coveralls
- Shoes plus socks
- Chemical-resistant gloves made of any waterproof material

NONAGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are not within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

Noncrop weed control is not within the scope of the Worker Protection Standard. Do not enter or allow others to enter until sprays have dried.

IMPORTANT: Read the entire **DIRECTIONS FOR USE** and the **LIMITATION OF WARRANTY AND LIABILITY** before using this product. If terms are not acceptable, return the unopened product container to the place of purchase at once. Alligare Diuron 4L herbicide must be used only in accordance with directions on this label or in separate published instructions. Alligare, LLC will not be responsible for losses or damages resulting from use of this product in any manner not specified by Alligare, LLC. User assumes all risk associated with non-specified use.

PRODUCT INFORMATION

Use of this product in certain portions of California, Oregon, and Washington is subject to the January 22, 2004 Order for injunctive relief in Washington Toxics Coalition, et.al.v.EP, C01-0132C, (W.D.WA). For further information, please refer to http://www.epa.gov/espp/wtc/.

Alligare Diuron 4L is a liquid flowable to be mixed with water and applied as a spray for selective control of weeds in certain crops and for nonselective weed control on noncropland areas. It is noncorrosive to equipment, nonflammable, and nonvolatile.

Alligare Diuron 4L may be applied to soil prior to emergence of weeds to control susceptible weed seedlings for an extended period of time. The degree of control and duration of effect will vary with the amount of chemical applied, soil texture, rainfall, and other conditions. Soils high in clay or organic matter require higher dosages than soils low in clay or organic matter for equivalent herbicide performance. Moisture is required to activate the herbicide. Best results occur if rainfall (or sprinkler irrigation) occurs within 2 weeks of application.

Alligare Diuron 4L applied before emergence of crop and weeds is an effective procedure because susceptible weeds are controlled in an early, vulnerable seedling stage before they

compete with the crop. With favorable moisture conditions, this product continues to control weeds for some time as the crop becomes better able to compete. Should weed seedlings begin to break through the preemergence treatment in significant numbers, secondary weed control procedures should be implemented; these include cultivation and postemergence herbicide application.

This product may also be used to control emerged weeds. Results vary with rate applied and environmental conditions. Best results are obtained on succulent weeds growing under conditions of high humidity and temperature of 70°F or higher. Addition of a surfactant to the spray (where specified) increases contact effects of Alligare Diuron 4L.

Alligare Diuron 4L may be used as a directed postemergence application. Contact of crop foliage and/or fruit with spray or mist must be avoided on the following crops: artichoke, corn (field), cotton, sorghum (grain), sugarcane, and established plantings of apples, bananas, plantains, blueberries, caneberries, gooseberries, citrus, grapes, macadamia nuts, olives, papayas, peaches, pears, pecans, walnuts, and certain tree plantings as injury may occur.

Under specified conditions (see **USE INSTRUCTIONS**), this product without surfactant may be applied over the top of alfalfa (established, dormant, or semi dormant), asparagus (established), birdsfoot trefoil (established, dormant), grass seed crops (established), oats, red clover (established, dormant), sugarcane, wheat, and pineapple.

Weed species vary in susceptibility to this product and they may be more difficult to control when under stress. Combinations of this product with other herbicides (as registered) increase the number of weed species controlled. Consult labels of the companion product(s) for this and other information. Observe all precautions and limitations on labeling of all products used in mixtures.

Since the effect of Alligare Diuron 4L varies with soils, uniformity of application, and environmental conditions, it is suggested that growers limit their first use to small areas.

IMPORTANT USE PRECAUTIONS:

Injury to or loss of desirable trees or other plants may result from failure to observe the following: Draining or flushing equipment on or near desirable trees or other plants, or on areas where their roots may extend, or in locations where the chemical may be washed or moved into contact with their roots may injure these plants. Do not use on home plantings of trees, shrubs, or herbaceous plants or lawns, walks, driveways, tennis courts, or similar areas. Trees or other desirable plants whose roots extend into a treated crop use area may be injured. Thoroughly clean all traces of this product from application equipment immediately after use. Flush tank, pumps, hoses, and boom with several changes of water after removing nozzle tips and screens (clean parts separately).

RESISTANCE MANAGEMENT

Biotypes of certain weeds listed on this label are resistant to Alligare Diuron 4L and other herbicides with the same mode of action, even at exaggerated application rates. Biotypes are naturally occurring individuals of a species that are identical in appearance but have slightly different genetic compositions; the mode of action of an herbicide is the chemical interaction that interrupts a biological process necessary for plant growth and development.

If weed control is unsatisfactory, it may be necessary to retreat problem areas using a product with a different mode of action.

If resistant weed biotypes are suspected or known to be present, use a combination of tillage, retreatment, tank-mix partners, and/or sequential herbicide applications with Alligare Diuron 4L to help control these biotypes, or use a planned herbicide rotation program where other herbicides having different modes of action are used.

SPRAY DRIFT MANAGEMENT

Requirements for reducing spray drift for diuron ground and aerial applications:

Use best practices to avoid drift to all other crops and nontarget areas. Do not apply when conditions favor drift from target areas. **The interaction of many equipment and weather related factors determine the potential for spray drift**. **Avoiding spray drift at the application site is the responsibility of the applicator**. The applicator must follow the most restrictive precautions to avoid drift, including those found in this labeling as well as applicable state and local regulations and ordinances. A drift control agent may reduce drift, however, it may also decrease weed control.

- Make aerial or ground applications only when the wind speed is less than or equal to 10 miles per hour.
- Do not make aerial or ground applications into temperature inversions.
- Apply with medium or coarser spray (according to ASABE standard S572) for standard nozzles.

- **Additional requirements for ground applications:**
  When applying to crops, apply with nozzle height no more than 2 feet above the ground or crop canopy.
- **Additional requirements for aerial applications:**
  The spray boom should be mounted on the aircraft so as to minimize drift caused by wing tip vortices. The boom length must not exceed 75% of the wingspan or 90% of rotor blade diameter. Use upwind swath displacement. When applying to crops, do not release spray at a height greater than 6 to 10 feet above the ground or crop canopy. Do not apply by air if sensitive nontarget crops are within 100 feet of the application site. Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees.

Importance of Droplet Size

The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential, but will not prevent drift if applications are made improperly, or under unfavorable environmental conditions (see Wind, Temperature and Humidity, and Temperature Inversions).

Controlling Droplet Size (General Techniques)

- Volume-Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- Pressure-Use the lower spray pressures recommended for the nozzle. Higher pressure reduces droplet size and does not improve canopy penetration. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.
- Number of nozzles-Use the minimum number of nozzles that provide uniform coverage.
- Nozzle Orientation-Orienting nozzles so that the spray is released backwards parallel to the airstream will produce larger droplets than other orientations. Significant deflection from the horizontal will reduce droplet size and increase drift potential.
- Nozzle Type-Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce larger droplets than other nozzle types.
- Boom Length-For some use patterns, reducing the effective boom length to less than 3/4 of the wingspan or rotor length may further reduce drift without reducing swath width.
- Application-Applications should not be made at a height greater than 10 feet above the top of the largest plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

Swath Adjustment

When applications are made with a cross-wind, the swath will be displaced downwind. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase, with increasing drift potential (higher wind, smaller drops, etc.).

Wind

Drift potential is lowest between wind speeds of 2-10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given speed. Application should be avoided below 2 mph due to variable wind direction and high inversion potential. NOTE: Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

Temperature and Humidity

When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

Temperature Inversions

Applications should not occur during a temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small, suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a connected cloud (under low wind conditions) indicates an inversion, while smoke that moves upwards and rapidly dissipates indicates good vertical air mixing.

Sensitive Areas

The pesticide should only be applied when the potential for drift to adjacent sensitive areas (e.g. residential areas, bodies of water, known habitat for threatened or endangered species, nontarget crops) is minimal (e.g. when wind is blowing away from the sensitive areas).

CHEMIGATION STATEMENT

Refer to the section of this labeling entitled **APPLICATION THROUGH IRRIGATION SYSTEMS - CHEMIGATION** for use directions for chemigation. Do not apply this product through any irrigation system unless the instructions for chemigation are followed.

APPLICATION THROUGH IRRIGATION SYSTEMS - CHEMIGATION

Apply this product only through sprinkler (including center pivot, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set, or hand move) irrigation systems. Do not apply this product through any other type of irrigation system.

Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from nonuniform distribution of treated water.

If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers, or other experts.

Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place.

A person knowledgeable of the chemigation system and responsible for its operation or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

CHEMIGATION SYSTEMS CONNECTED TO PUBLIC WATER SYSTEMS

If the chemigation system is connected to a public water supply, the following conditions must also be met:

- Public water systems means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.
- Chemigation systems connected to public water systems must contain a functional reduced-pressure zone, backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from a point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.
- The pesticide injection pipeline must contain a functional, normally closed, solenoid-

operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shutdown.
- The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.
- Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
- Upon completion of herbicide application, remove scale, pesticide residues, and other foreign matter from the supply tank and entire injector system. Flush thoroughly with clean water.

SPRINKLER CHEMIGATION

For sprinkler irrigation, meter Alligare Diuron 4L at a continuous uniform rate during the entire irrigation period. Continuous agitation of the pesticide supply tank for the duration of the application period is recommended.

To apply a pesticide using sprinkler chemigation, the chemigation system must meet the following specifications:
- The system must contain a functional check valve, vacuum relief valve, and low-pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.
- The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- The irrigation line or water pump must include a functional pressure switch, which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
- Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
- Do not apply when wind speed favors drift beyond the area intended for treatment.

SELECTIVE USE IN CROPS

PREEMERGENCE USE (Germinating Weeds): Alligare Diuron 4L at specified rates controls annual weeds and grasses such as:

0.6 to 0.8 quart/A
Barnyardgrass (Watergrass)
Crabgrass
Lambsquarters
Pigweed
Purslane
Ragweed

1.2 to 1.6 quarts/A
Annual Bluegrass
Annual Sweet Vernalgrass
Annual Groundcherry
Annual Morningglory
Chickweed
Corn Spurry
Dogfennel
Fiddleneck (Amsinckia)
Foxtail
Gromwell
Knawel
Pennycress
Rattail Fescue
Red Sprangletop
Shepherdspurse
Tansymustard
Velvetgrass
Wild Buckwheat
Wild Lettuce
Wild Mustard

1.6 to 4.8 quarts/A
Ageratum
Annual Lovegrass
Annual Ryegrass
Annual Smartweed
Annual Sowthistle
Corn Speedwell
Dayflower
Flora's Paintbrush
Hawksbeard
Horseweed
Johnsongrass (Seedling)
Kochia
Kyllinger (Kyllinga)
Marigold
Mexican Clover
Orchardgrass
Peppergrass
Pineappleweed
Pokeweed
Rabbit Tobacco
Rice Grass
Sandbur
Spanishneedles
Velvetleaf (Buttonweed)
Wild Radish

Partial Control:
0.8 quart/A
Cocklebur
Morningglory, Annual
Prickly Sida (Teaweed)
Sesbania
Sicklepod

3.2 quarts/A
Horsenettle
Quackgrass

6.4 to 8.0 quarts/A
Guineagrass
Maidencane
Pangolagrass

APPLICATION DIRECTIONS

AERIAL APPLICATION: For alfalfa, barley (winter), cotton (preplant or preemergence only), grass seed crops (PNW only), sugarcane, wheat (winter) and rights-of-way, application may be made by aircraft in a minimum of 3 gallons of water per acre unless otherwise noted. Avoid overlapping of spray swath and avoid application under conditions where excessive drift may occur. Where land is bedded, make application parallel to rows.

GROUND APPLICATION: Use a boom power sprayer properly calibrated to a constant speed and rate of delivery. Openings in screens should be 50 mesh or larger. Continuous agitation in the spray tank is required to keep the material in suspension. Agitate by mechanical or hydraulic means. If by-pass or return line is used, it should terminate at bottom of tank. Avoid overlapping and shut off spray booms while starting, turning, slowing, or stopping or injury to crop may result.

PREEMERGENCE: For preemergence application, use sufficient spray volume and pressure to uniformly distribute the spray solution over treated soil. Preemergence weed control will be reduced on high organic matter soils such as peat or muck.

POSTEMERGENCE: For postemergence application, use sufficient spray volume and pressure for thorough coverage of weed foliage. For selective applications and applications near sensitive crops, use low spray pressure to keep spray drift to a minimum. This product at specified rates controls seedling annual weeds such as annual morningglory, barnyardgrass (watergrass), crabgrass, crowfoot, goosegrass, pigweed, and purslane. Addition of a surfactant to the spray (where specified) increases contact effects of Alligare Diuron 4L. Best results are obtained on succulent weeds growing under conditions of high humidity and temperatures over 70°F or higher.

SPRAY PREPARATION: Mix proper amount of this product into necessary volume of water. Where use of surfactant is specified, dilute with ten parts of water and add as last ingredient to nearly full spray tank.

TANK MIXTURES: This product may be tank mixed with other herbicides and/or adjuvants registered for crop or noncrop use in this label. Refer to the label of the tank mix product(s) for any additional use instructions or restrictions.

REPLANTING: Unless otherwise directed, do not replant treated areas to any crop within 2 years after last application as injury to subsequent crops may result. **Note:** for crops grown in the arid west, reductions in normal irrigation practices for the crop in production or a summer fallow period without supplemental irrigation may require the crop rotation intervals to be extended.

When such conditions occur, a field bioassay should be completed prior to planting any desired crop. A successful bioassay means growing to maturity a test strip of the crops intended for production. The test crops strip should cross the entire field including knolls, low areas, and areas where any berms were located. The results of this bioassay may require the rotation intervals to be extended.

RATES: All rates of Alligare Diuron 4L are expressed as broadcast rates. Where band applications are specified, use proportionately less. For example, use 1/3 of the broadcast rate when treating a 14-inch band where row spacing is 42 inches. Where a range of dosages is given, use the lower rate on coarse-textured soils low in clay or organic matter and the higher rate on the fine-textured soils high in clay or organic matter. For postemergence application, use the lower rate on smaller weeds and the higher rate on the larger weeds.

SOIL LIMITATIONS: Crop injury may result from failure to observe the following: Unless otherwise directed, do not use on sand, loamy sand, gravelly soils, or exposed subsoils; nor on pecans where organic matter is less than 0.5%; nor on alfalfa, apples, artichokes, barley (winter), citrus, cotton, grapes, oats, olives, papayas, peaches, pears, sorghum, sugarcane, walnuts, and winter wheat where organic matter is less than 1%; nor on blueberries, birdsfoot trefoil, caneberries, gooseberries, macadamia nuts, and peppermint where organic matter is less than 2%.

FIELD CROPS (see SOIL LIMITATIONS): A good seedbed must be prepared before premergence use of this product as crop injury may result if application is made to ground which is cloddy or compacted resulting in improperly planted seed. Plant seed to depth specified. Unless otherwise directed, the surface of the soil should not be cultivated or disturbed after application of Alligare Diuron 4L and before emergence of the crop as weed control may be reduced and crop injury may result. However, if moisture is insufficient to activate the herbicide, a shallow cultivation (rotary hoe preferred) should be made after emergence of crops while weeds are small enough to be controlled by mechanical means.

FRUIT AND NUT CROPS: (see SOIL LIMITATIONS) Unless otherwise directed, make a single application per year as a directed spray, avoiding contact of foliage and fruit with spray or drift. Do not graze livestock in treated orchards or groves.

USE INSTRUCTIONS

ALFALFA

Treat only stands established for 1 year or more. Do not apply to seedling alfalfa nor to alfalfa/grass mixtures. Do not apply to alfalfa under stress from disease, insect damage, shallow root penetration (such as on shallow hard pans), alkali spots, nor to flooded fields as crop injury may result. Do not spray on snow-covered or frozen ground. In alfalfa, apply this product only once per year. Do not exceed 2.4 quarts per acre per year.

Arizona, Nevada: Use 1.2 to 2.4 quarts per acre. Apply in fall after alfalfa becomes dormant but no later than January.

California (Dormant and Semi-Dormant Varieties): Use 1.2 to 2.4 quarts per acre. Apply in fall or winter after alfalfa becomes dormant or semi-dormant but before growth begins in the spring. Crop injury may result if application is made to actively growing alfalfa. For best results, apply before weeds have emerged or become established (2 inches in height or diameter). Control of established weeds is improved by applying this product with a suitable contact herbicide registered for such use. Sufficient rainfall for soil activation of Alligare Diuron 4L is unlikely in California after February 1. Treated areas may be replanted to any crop after 1 year from last application if rate does not exceed 1.6 quarts per acre.

Eastern Colorado, Kansas: For control of tansymustard, apply 0.8 quart per acre shortly after emergence of mustard in the fall or winter. Use 1.6 quarts per acre if weeds are 2 to 4 inches in height. Alternatively, if other annual weeds are present, apply 1.6 to 2.4 quarts per acre in February or March.

Idaho, Oregon, Washington: For control of annual weeds, use 1.2 to 2.4 quarts per acre. Apply in fall after alfalfa becomes dormant but no later than mid-December.

Other Areas Where Alfalfa Becomes Winter Dormant: Use 1.2 to 2.4 quarts per acre (1.2 to 1.6 quarts per acre East of Appalachian Mountains). Apply in March or early April but before spring growth begins.

APPLE

Aerial application is prohibited.
Use this product alone or apply as a tank mixture with Sinbar® Herbicide.

Do not apply more than 3.2 quarts per acre per application and no more than 3.2 quarts per acre per year. When using Alligare Diuron 4L in a sequential treatment program, allow a minimum of 90 days between applications. Do not make more than two applications of this product per year.

Alligare Diuron 4L Alone: Use only under trees established in the orchard for at least 1 year. Do not treat varieties grafted on full-dwarf root stocks. Apply 3.2 quarts per acre in the spring from March through May. In the Far West, apply 3.2 quarts per acre to small weeds less than 2 inches in height or diameter under dormant trees. Alternatively, treatments to small weeds may be applied at 1.6 quarts per acre postharvest followed by 1.6 quarts per acre prior to bud break.

Georgia: Apply 1.6 to 2.4 quarts per acre in the spring. Repeat application in the fall but do not use more than 3.2 quarts per acre per year. Add a surfactant to improve control of small, emerged weeds.

Alligare Diuron 4L plus Sinbar: Use only under trees established in the orchard for at least 2 years. Apply either in the spring or after harvest in the fall before weeds emerge or during early seedling stage of weed growth.

RATE PER ACRE

	1 to 2% Organic Matter				More Than 2% Organic Matter		
Soil Texture	Alligare Diuron 4L Qts./Acre		Sinbar Lbs./ Acre		Alligare Diuron 4L Qts./Acre		Sinbar Lbs./ Acre
Sandy Loam	0.8	+	1.0		1.2	+	1.5
Loam, Silt Loam, Silt	1.2	+	1.5		1.6	+	2.0
Clay Loam, Clay	1.6	+	2.0		1.6	+	2.0

Where crop is grown under furrow irrigation or under raised-berm flood irrigation (trees 4 to 6 inches above waterline), apply only as a band treatment. Do not treat trees planted in the bottom of irrigation furrows, nor trees grown under flat flood or basin irrigation, as injury to trees may result. Where complete weed control to harvest is desired, additional weed control measures may be required during the growing season.

ARTICHOKE

Aerial application is prohibited.

California: Apply 1.6 to 3.2 quarts per acre in late fall or early winter after the last cultivation. Apply before weeds germinate or to emerging seedlings. Direct spray to cover the area between the rows and at the base of artichoke plants keeping contact with crop plants at a minimum.

ASPARAGUS

Aerial application is prohibited.

Apply as a band or broadcast treatment. Do not apply to young plants during the first growing season (except as noted below), nor to newly seeded asparagus, nor on plants with exposed roots as severe injury may result. Preemergence weed control will be reduced on soils with greater than 5% organic matter.

Established Plantings: On light soils and other soils low in clay or organic matter, apply 0.8 to 1.6 quarts per acre. On soils high in clay or organic matter, use 1.6 to 3.2 quarts per acre. Two applications may be used. The first application should be made before weeds become established but no earlier than 4 weeks before spear emergence and no later than the early cutting period. If weeds are controlled into the cutting period by cultural practices, application may be delayed until immediately after the last cultivation. A second application may be made immediately following completion of harvest provided rainfall is expected. When two applications are used in one season, do not exceed 2.4 quarts per acre per application. In Washington (irrigated crop), apply a single treatment of 3.2 quarts per acre. If treatment is delayed until late winter or early spring, incorporation of the chemical in the top 1 to 2 inches of soil may substitute for lack of rain to activate the herbicide.

Newly Planted Crowns (San Joaquin Delta, California): Make a single treatment of 1.6 to 3.2 quarts per acre on soils high in clay or organic matter. Use the lower rate on clay loams and the higher rate on peat soils. Do not use on soils containing less than 2% organic matter. Soil must be settled by rainfall or irrigation prior to treatment. Do not treat crowns planted to a depth of less than 2 inches.

BANANA AND PLANTAIN

Aerial application is prohibited.

New Plantings: To control annual weeds, apply 1.2 to 2.4 quarts per acre after planting but before weed or crop emergence. Do not apply to loose soil directly over the planting material.

Established Plantings: For control of annuals and for top-kill of perennials such as bermudagrass, birdseed grass, and guineagrass, apply 2.4 to 4.8 quarts per acre plus surfactant. Avoid contact of banana and plantain plants with spray or drift as injury may result. When tall, dense weed growth is present, remove weed growth before application. If application is made to soil free of weeds, omit surfactant from the spray mixture. Repeat treatment as needed. Apply at 6-week intervals or longer for a maximum of 9.6 quarts of Alligare Diuron 4L per acre (broadcast basis) in 12 months.

Do not replant treated area to any crop within 2 years after last application as injury to subsequent crops may result. Exception; sugarcane or pineapple may be planted after 1 year.

BARLEY (WINTER)

Western Oregon, Western Washington: For drill planted barley, make a single application of 1.2 to 1.6 quarts per acre as soon as possible after planting but before emergence of barley.

Do not replant treated areas to any crop within 1 year after last application as injury to subsequent crops may result.

BERMUDAGRASS PASTURES (Newly-Sprigged)

Aerial application is prohibited.

Apply 0.8 to 2.4 quarts after planting and before emergence of Bermudagrass or weeds. Alternatively, for control of emerged annual weeds up to 4 inches in height, apply 0.4 to 0.8 quart per acre; add a surfactant per 25 gallons of spray. If bermudagrass has emerged at time of treatment, temporary burn of exposed plant parts may occur. Plant sprigs (stolens) 2 inches deep in a well-prepared seedbed. Do not treat areas where sprigs are planted less than 2 inches deep as crop injury may result. Do not graze or feed foliage from treated areas to livestock within 70 days after application.

BIRDSFOOT TREFOIL (LOTUS)

Aerial application is prohibited.

Western Oregon: Treat only stands established for at least 1 year. Do not apply to seedling trefoil as injury may result. Make a single application of 1.6 quarts per acre when trefoil is dormant (October 15 to December 15). Do not replant treated areas to any crop within 1 year after last application as injury to subsequent crops may result.

BLUEBERRY, CANEBERRY, GOOSEBERRY

Aerial application is prohibited.

Use only in fields which have been established for at least 1 year. Do not apply to berries interplanted with fruit trees. Do not apply to plants where roots are exposed as injury may result. Apply as a band treatment at base of canes or bushes. For spring application, apply before germination and growth of annual weeds.

Arkansas, Florida, Georgia, Mississippi, Missouri, New Hampshire, North Carolina, South Carolina-
Blueberry: Apply 1.2 to 1.6 quarts per acre in the spring and repeat treatment after harvest in the fall. Add a surfactant to improve control of small, emerged weeds.

California-Blackberry, Boysenberry, Dewberry, Loganberry, Raspberry: For control of winter annual weeds, apply 1.6 quarts per acre in October or November. Repeat at the same rate in late spring to control summer annuals. A single application of 2.4 quarts per acre in January or February will control annual weeds in some areas, but the separate fall and spring schedule is preferred.

Indiana, Michigan, Ohio-Blueberry: Apply 1.6 to 3.2 quarts per acre in late spring. Alternatively, apply 1.6 quarts per acre in the fall and repeat at the same rate in the spring.

Indiana, Michigan, Ohio-Raspberry: Apply 2.4 quarts per acre in late spring.

Maine, Massachusetts-Blueberry: Apply 1.6 quarts per acre in late spring.

Maryland, New Jersey-Blueberry: For control of winter annual weeds, apply 1.6 quarts per acre from October to December, or make a single application of 2.0 quarts per acre in early to mid-spring.

Western Oregon, Western Washington-Blueberry, Caneberry, Gooseberry: For control of winter annual weeds, apply 1.6 quarts per acre in October or November. Repeat at the same rate in late spring to control summer annual weeds. A single application of 2.4 quarts per acre in January or February will control both winter and summer annual weeds in some areas, but the separate fall and spring schedule is preferred.

CITRUS

Aerial application is prohibited.

Time application as indicated for specific areas. However, application may be made any time of the year where sprinkler or flood irrigation can be timed to activate the herbicide. Established perennial weeds require other special control procedures.

This product may be applied in citrus in combination with registered paraquat and glyphosate formulations. Read and follow specific label instructions, precautions, and restrictions on the label of the tank mix partner when applying this product in combination with other products.

Note: For citrus trees four or less years of age:
- Make a maximum of two applications per year.
- Where this product is used in a sequential treatment program, allow a minimum of 60 days between applications.

For citrus trees four or more years of age:
- Make a maximum of two applications per year.
- When this product is used in a sequential treatment program, allow a minimum of 80 days between applications.

Arizona (except Yuma area), California (except Imperial and Coachella Valleys): Apply 2.4 to 3.2 quarts per acre shortly after grove has been laid up in final form (nontillage program) in late fall or early winter. Alternatively, apply 1.6 quarts per acre in October or November and repeat at the same rate in March or April. Subsequent annual applications of 1.6 to 2.4 quarts per acre will usually give adequate weed control.

Do not use more than 3.2 quarts per treated acre in any one application. Do not apply more than 6.4 quarts per treated acre per year. This amount corresponds to 6.4 pounds of diuron, the active ingredient in Alligare Diuron 4L. The maximum allowable use rate for diuron is 6.4 pounds per treated acre per year inclusive of all diuron formulations used within one year.

Florida: Use only as a band application. Do not use "Trunk to Trunk".

East Coast/Flatwoods Areas-(low permeable soils)

Apply from 1.6 quarts per acre to a maximum of 6.4 quarts per acre for control of annual broadleaf weeds and annual grasses. Addition of an approved surfactant will improve control of emerged weeds.

Do not use more than 6.4 quarts per treated acre in any one application.

Do not apply more than 6.4 quarts per treated acre per year. This amount corresponds to 6.4 pounds of active ingredient.
The maximum allowable use rate for diuron is 6.4 pounds active ingredient per treated acre per year inclusive of all diuron formulations used within one year.

Ridge Areas-except Highland Co. (highly permeable soils)

Apply from 1.6 quarts per acre to a maximum of 3.2 quarts per acre for control of annual broadleaf weeds and annual grasses. Addition of an approved surfactant will improve control of emerged weeds. Do not use more than 3.2 quarts per treated acre in any one application.

Do not apply more than 6.4 quarts per treated acre per year. This amount corresponds to 6.4 pounds of active ingredient.
The maximum allowable use rate for diuron is 6.4 pounds active ingredient per treated acre per year inclusive of all diuron formulations used within one year.

Ridge Areas-Highland Co. (highly permeable soils)

Apply from 1.6 quarts per acre to a maximum of 3.2 quarts per acre for control of annual broadleaf weeds and annual grasses. Addition of an approved surfactant will improve control of emerged weeds. Do not use more than 3.2 quarts per treated acre in any one application.

Do not apply more than 4.8 quarts per treated acre per year. This amount corresponds to 4.8 pounds of active ingredient.
The maximum allowable use rate for diuron is 4.8 pounds active ingredient per treated acre per year inclusive of all diuron formulations used within one year.

Do not use at less than 60-day intervals.

Puerto Rico: Make a single application of 3.2 quarts per acre or apply 2.4 to 3.2 quarts per acre followed by the same rate 4 to 6 months later. On bearing citrus, apply anytime when seasonal rains are expected. On nonbearing trees, apply when winter banks are pulled down.
Do not use more than 3.2 quarts per treated acre in any one application. Do not apply more than 6.4 quarts per treated acre per year. This amount corresponds to 6.4 pounds of diuron, the active ingredient in Alligare Diuron 4L. The maximum allowable use rate for diuron is 6.4 pounds per treated acre per year inclusive of all diuron formulations used within one year.

Texas: Apply 1.6 to 3.2 quarts per acre for annual weeds. Use 3.2 quarts per acre for control of seedling johnsongrass. Spring treatments give best results. Well-established weeds should be eliminated by cultivation prior to treatment.

Do not use more than 3.2 quarts per treated acre in any one application. Do not apply more than 6.4 quarts per treated acre per year. This amount corresponds to 6.4 pounds of diuron, the active ingredient in Alligare Diuron 4L. The maximum allowable use rate for diuron is 6.4 pounds per treated acre per year inclusive of all diuron formulations used within one year.

CORN (FIELD)

Aerial application is prohibited.

Postemergence: Make a single application of 0.6 quart per acre in combination with nonpressure nitrogen solution. If nitrogen solution is not used, apply 0.8 quart per acre with surfactant. Apply as directed spray when corn is at least 20 inches high and weeds are no taller than 3 inches.

DO NOT APPLY OVER TOP OF CORN.
Do not replant to any crop within 1 year after last application as injury to subsequent crops may result. Exception: cotton, corn, and grain sorghum may be planted the spring following treatment.

Preemergence-Arkansas, Louisiana, Mississippi, Tennessee: Make a single application of 0.5 to 0.8 quart per acre as a broadcast or band treatment after planting but before corn emerges. Plant corn at least 1.5 inches deep. Do not replant treated areas to crops other than corn or cotton within 4 months following band treatment and 6 months following broadcast treatment as injury to subsequent crops may result.

Preplant-Louisiana:
Use Precautions: Do not apply to sand or loamy sand soils. Do not use on soils with less than 1% organic matter as crop injury may result. Plant corn at least 1.5 inches deep. Do not spray over the top of corn plants.

This product may be used for burndown of existing annual weeds and residual control of weeds prior to planting field corn. **Do not use on sweet corn.** Complete any planned tillage prior to application. Apply herbicide treatments before weeds germinate or before weed seedlings are more than 2 inches tall. If weeds are emerged prior to application, add a non-ionic surfactant. Tillage following application should be avoided to prevent incorporation of the herbicide into the corn seed germination zone, which may result in crop injury. Dragging treated soil from beds will concentrate the herbicide in middles and reduce residual weed control on beds.

Apply 1.0 to 1.6 pints per acre from 15 to 45 days prior to anticipated planting. Refer to the table below for use rates in preplant applications. Do not exceed suggested use rates for individual soil textures shown in the table below. If less than the maximum rate of application for a soil is applied preplant, subsequent preemergence applications of this product may be made. However, the total combined application rate of this product applied preplant and preemergence may not exceed the maximum suggested use rate for either application method.

Alligare Diuron 4L Alone:

Soil Texture	Rate/Acre
Sandy Loam, Loam, Silt Loam, Silt	1.0 pt.
Sandy Clay Loam, Clay Loam, Silty Clay Loam, Sandy Clay	1.3 pts.
Silty Clay, Clay	1.6 pts.

The risk of injury from preplant applications of this product is reduced where substantial rainfall (greater than 0.5 inches) occurs between application and planting.

Preplant Tank Mixing: When emerged weeds taller than 2 inches or weeds not listed on this label are present, Alligare Diuron 4L may be tank mixed with other products labeled for preplant applications in corn including Glyphosate Original, Gramoxone® Extra, Roundup® Ultra, and Touchdown®. The addition of dry spray grade ammonium sulfate at the rate of 2.0% w/w (17 pounds per 100 gallons finished spray solution) is suggested to enhance performance of Alligare Diuron 4L plus glyphosate tank mixes.

Replanting: Only cotton and corn may be replanted within 6 months of preplant applications of this product. To avoid crop injury following replanting, avoid disturbing the original bed.

COTTON

Use Precautions: During a single crop season, do not exceed the following amount of Alligare Diuron 4L per acre as injury to subsequent crops may result; 0.8 quart on sandy loam, 1.5 quarts on clay loam, and 2.2 quarts on clay. Do not make more than 3 applications of this product per year.

DO NOT SPRAY OVER THE TOP OF COTTON PLANTS.
Do not apply to sand or loamy sand soils except as noted below.
Do not use on soils with less than 1% organic matter as crop injury may result.

Seedling disease may weaken plants and increase the possibility of injury from the use of trifluralin products followed by Alligare Diuron 4L. These treatments should be used only in conjunction with a standard fungicide seed treatment plus a good supplemental soil fungicide program such as captan-PCNB mixture.

Do not use this product in preplant or preemergence applications where soil-applied organophosphate insecticides are used due to potential for severe cotton injury and possible stand loss.

Do not allow livestock to graze treated cotton.

Note: When using this product in a sequential treatment program, allow a minimum of 21 days between applications.

PREPLANT
Arizona, California: Use this product alone or apply as a separate operation following preplant broadcast treatment with trifluralin products (incorporated according to directions on the trifluralin product label). Apply Alligare Diuron 4L as a broadcast spray after beds are formed, pre-irrigated, and final seedbeds prepared. Prior to planting, drag-off the tops of the beds and plant in moist soil not treated with this product. Treated soil is returned to the bed after planting when irrigation furrows are reformed after cotton has emerged. If more than

two furrowing-out operations are performed prior to lay-by, or deep furrows are made early, weed control may be reduced in furrow bottoms.

Alligare Diuron 4L Alone: Apply 0.8 to 1.6 quarts per acre.

Alligare Diuron 4L following trifluralin products:

Soil Texture	RATE/ACRE	
	Trifluralin products	Alligare Diuron 4L
Sandy Loam, Loam, Silt Loam, Silt	1 pint	0.5-0.8 quart
Sandy Clay Loam, Clay Loam, Silty Clay Loam, Sandy Clay, Clay	1.5 pints	0.8-1.0 quart

PREPLANT
Except Arizona, California: Use this product for burndown of existing annual weeds and residual control of weeds prior to planting cotton. Complete any planned tillage prior to application. Apply herbicide treatments before weeds germinate or before weed seedlings are more than 2 inches tall. If weeds are emerged prior to application, use a nonionic surfactant. Tillage following application should be avoided to prevent incorporation of the herbicide into the cotton seed germination zone which may result in crop injury. Dragging treated soil from beds will concentrate the herbicide in middles and reduce residual weed control on the beds.

Apply 0.5 to 1.6 quarts per acre from 15 to 45 days prior to anticipated planting. Refer to the table below for use rates in preplant applications. Do not exceed suggested use rates for individual soil textures shown in the table below. If less than the maximum rate of application for a given soil is applied preplant, subsequent preemergence applications of this product may be made. However, the total combined application rate for Alligare Diuron 4L applied preplant and preemergence may not exceed the maximum suggested use rate for either application method.

Alligare Diuron 4L Alone:

Soil Texture	Rate/Acre
Loamy Sand (Louisiana only)	0.5 quart
Sandy Loam, Loam, Silt Loam, Silt	0.8 quart
Sandy Clay Loam, Clay Loam, Silty Clay Loam, Sandy Clay	1.0 quart
Silty Clay, Clay	1.6 quarts

Preemergence application of herbicides with a similar mode of action to that of diuron following preplant application of this product may result in cotton injury. When preplant applications of this product are followed by preemergence applications of herbicides with a similar mode of action (for example applications of Meturon®, Cotoron®, or other products containing fluometuron), the product containing fluometuron should be used at the minimum rate of application for the soil under consideration in order to reduce potential for crop injury. This is most critical where applications of this product are made less than 30 days preplant, on coarse-textured soils, and on soils low in organic matter. The risk of injury from preplant applications of this product is reduced where substantial rainfall (greater than 0.5 inches) occurs between application and planting. Read and follow any additional precautions on this label when using this product for preplant weed control in cotton.

PREPLANT TANK MIXES: When emerged weeds taller than 2 inches or weeds not listed on this label are present, Alligare Diuron 4L may be tank mixed with other products registered for preplant applications in cotton. The addition of dry spray grade ammonium sulfate at the rate of 2.0% w/w (17 lbs. per 100 gallons finished spray solution) is suggested to enhance performance of Alligare Diuron 4L plus glyphosate tank mixes.

REPLANTING: Only cotton and corn may be planted within 6 months of preplant applications of this product. To avoid crop injury following replanting, avoid disturbing the original bed.

PREEMERGENCE
Except Arizona, California: Use this product alone or apply as a separate operation following preplant treatment with trifluralin products. Apply this product after planting but before cotton emerges.
Do not treat cotton in deep furrows as crop injury may result.
Use only where cotton is planted on flat or raised seedbeds. Shallow incorporation (no deeper than 0.25 inch) with a rotary hoe or similar equipment following planting usually improves results, especially during dry weather. A wide press wheel should be used on the planter to provide a level seedbed for subsequent early season postemergence treatments. If moisture is insufficient to activate this product or if soil becomes crusted before crop emerges, a shallow rotary hoeing (no deeper than 0.25 inch) should be made before weeds become established. This product should not be applied preemergence following application of the maximum rate for a given soil applied preplant. If less than the maximum rate is used preplant, additional Alligare Diuron 4L may be applied preemergence. However, the total amount of this product applied preplant and preemergence must not exceed the maximum suggested use rate for either preplant or preemergence applications.
Alligare Diuron 4L Alone: Make a single application as a broadcast or band spray, using the following broadcast rates. Use proportionately less for band treatment.

Soil Texture	Rate/Acre
Sandy Loam, Loam, Silt Loam, Silt	0.8 quart
Sandy Clay Loam, Clay Loam, Silty Clay Loam, Sandy Clay	1.0 quart
Silty Clay, Clay	1.6 quarts

PREEMERGENCE APPLICATIONS OF ALLIGARE DIURON 4L FOLLOWING TRIFLURALIN PRODUCTS: Apply trifluralin products prior to planting as a broadcast or band treatment. Incorporate according to the directions on the trifluralin labels. As a separate operation, apply this product after planting but before cotton emerges. Use the following broadcast rates. For band treatment, use proportionately less.

Soil Texture	RATE/ACRE	
	Trifluralin products	Alligare Diuron 4L
Sandy Loam, Loam, Silt Loam, Silt	1 pint	0.8 quart
Sandy Clay Loam, Clay Loam, Silty Clay Loam, Sandy Clay, Clay, Silty Clay	1.5 pints	1.0 to 1.6 quarts

POSTEMERGENCE: Apply this product only as a directed spray to cover weed foliage. Adjust nozzles to minimize contact of cotton leaves with spray or drift or crop injury may result. Applications may also be made in hooded/shielded sprayers.

EARLY SEASON: Apply when cotton is at least 6 inches tall and when weeds are not actively growing and do not exceed 2 inches in height. Apply as a band or broadcast treatment at the following rate. Two applications may be made if needed.

Annual Weed Problem (up to 2 inches tall)	Rate Per Acre
Cotton 6 to 8 inches	0.4 quart
Cotton 8 to 12 inches	0.6 quart

For control of seedling perennial grass such as johnsongrass in directed sprays and partial control of nutsedge or when weed growth is under drought stress or over 2 inches in height, add 2.0 to 3.5 pounds active DSMA or 1.65 to 2.0 lbs. active MSMA to above spray mixture. If DSMA or MSMA are used, do not apply after first bloom.

For enhanced weed control in hooded/shielded sprayer applications add MSMA or DSMA as suggested above; or add registered paraquat or glyphosate formulations according to label directions. Consult product labels for specific instructions and precautions for hooded sprayer applications.

LATE SEASON (LAY-BY): Apply 0.8 to 1.2 quarts (0.8 to 1.6 quarts in Arizona and California) per acre when cotton is at least 12 inches high (at least 20 inches for Pima S-2). For control of germinating weed seedlings, apply to soil beneath cotton plants and between rows immediately after last cultivation. In irrigated cotton, best weed control is obtained if the field is irrigated within 3 to 4 days after application to thoroughly wet the surface of the ground over the row to carry the herbicide into the root zone of germinating weeds. Alternatively, for control of emerged annual weeds (4 inches or less in height) at lay-by time, make a single application in combination with surfactant or use 0.4 to 0.6 quart per acre plus surfactant and repeat later if needed.

REPLANTING: If initial seeding fails to produce a stand, cotton may be replanted in soil treated preemergence with this product alone or following preplant application of trifluralin products. Wherever possible, avoid disturbing original bed. If necessary to rework soil before replanting, use shallow cultivation such as discing. Do not relist nor move soil into the original drill area. Plant seed at least 1 inch deep. Do not retreat field with a second preplant or preemergence application of herbicide during the same crop year as injury to crop may result.

SUBSEQUENT CROPS

Alligare Diuron 4L Herbicide Type of Application	That May Follow Treated Cotton
Band pre or postemergence	Any crop 4 months after last application
Band pre plus postemergence or Broadcast preemergence (and preplant) or Broadcast preemergence plus band postemergence	Cotton, soybeans, corn, or grain sorghums (not sorgos or forage sorghums nor grass sorghums) the next spring. Do not replant treated areas to any other crop within 1 year after last application as injury to subsequent crops may result.
Broadcast postemergence (lay-by)	Cotton, corn, grain sorghums (not sorgos or forage sorghums nor grass sorghums) the next spring. Do not replant treated areas to any other crop within 1 year after last application as injury to subsequent crops may result.

For subsequent crops in fields where trifluralin products are used, follow instructions on the trifluralin product label.

FILBERTS

Aerial application is prohibited.

Use Alligare Diuron 4L for control of certain weeds in filbert orchards established for at least 1 year.

Do not apply more than 2.2 quarts per acre per application nor more than 3.2 quarts per acre per year. When using this product in a sequential treatment program, allow a minimum of 150 days between applications. Apply a maximum of two applications per year.

Apply this product as a directed spray avoiding contact on the foliage and fruit with spray or drift. Make an initial treatment of 2.2 quarts per acre in the last fall or early winter after harvest. Repeat annually with 2.2 quarts per acre, or apply 1.6 quarts per acre in October or November after harvest and repeat at the same rate in March or April.

Do not apply when nuts are on the ground.

Do not graze livestock in treated orchards.

Do not use on light sandy soils.

If trees are planted on hillsides, the elimination of weeds and ground cover may cause excessive soil erosion. Under these conditions strip applications of this product (at proportionately lower rates) may be made near the trees or to the tree rows perpendicular to the slope.

GRAPE

Aerial application is prohibited.

Apply only as a band treatment to established vineyards at least 3 years old. On soils low in clay or organic matter (1 to 2%), severe plant injury may result if heavy rainfall or more than 1 inch of irrigation occurs soon after treatment. This risk must be assumed by the user.

Do not apply more than 4 quarts per acre as a single maximum use rate. Do not apply more than 8 quarts per acre per year. When using this product in a sequential treatment program, allow a minimum of 90 days between applications. Avoid direct or indirect spray contact to foliage and green bark (nonbarked vines with the exception of undesirable suckers). Apply a maximum of two applications per year.

New York, Pennsylvania-Perennial Grasses: Use only in established vineyards (at least 4 years old) for spot control of perennial grasses such as orchardgrass, quackgrass, and ryegrass. Apply in the spring as a band treatment to ridged soil (2 to 4 inches high) under trellis at the rate of 6.4 to 8 quarts per acre. Band width should not exceed 30 inches. Do not apply more than once every 4 years. Use only on heavy soil types such as loams, silt loams, clay loams. Do not use in areas where grape roots are shallow or exposed because of high bedrock or poor drainage or erosion as injury to grapevines may result.

East of the Rocky Mountains: On soils low in clay or organic matter (1 to 2%), apply 1.6 to 2.4 quarts per acre. On soils high in clay or organic matter, apply 2.4 to 4.8 quarts per acre. Apply in the spring just prior to germination of annual weeds.

West of the Rocky Mountains: For best results, apply during the winter months when weeds are less than 2 inches in height or diameter. Rainfall or overhead sprinkler irrigation sufficient to wet the soil to a depth of 2 inches is necessary to activate the herbicide. Abnormally heavy rainfall following application just before spring growth may move the herbicide into the root zone of grapes which could result in injury. For initial treatment, apply 2.4 to 3.2 quarts per acre. Subsequent annual applications of 1.6 quarts per acre will usually give adequate weed control. Do not apply to vines with trunks less than 1.5 inches in diameter as injury may result.

GRASS SEED CROPS
(Perennial except where specifically indicated)

Except as noted, apply only to established plantings at least 1 year old.
Note: Apply a single application per year at up to 2.4 quarts per acre. May be applied by aerial application in the Pacific Northwest only. Do not make more than one application per year.

Colorado, Kansas, Missouri, New Mexico, Oklahoma: On sand bluestem, side oats grama, and switchgrass, apply 1.6 to 2.4 quarts per acre during the dormant period shortly before weed seedlings emerge. Do not apply after crop begins growth in the spring as crop injury may result. In fields where ash residues have accumulated from burning straw, use 2.4 quarts per acre. Spread unburned chaff or straw with a harrow or chopper before application.

Eastern Oregon, Eastern Washington: On perennial bluegrass and fescue, apply 0.8 to 2.4 quarts per acre as broadcast in enough diluent to get even distribution. Apply in spring before rapid growth of the crop begins and when the windgrass is still small (1- to 4-leaf). DO NOT use on coarse- (sandy-) textured soils.

Western Oregon, Western Washington: On alta fescue, Astoria bentgrass, Highland bentgrass, Kentucky bluegrass (Merion bluegrass), and orchardgrass, apply 1.6 to 2.4 quarts per acre between October 1 and November 15. In fields where ash residues have accumulated from burning straw, use 2.4 quarts per acre. Spread unburned chaff or straw with a harrow or chopper before application. For best results apply as soon as possible after fall rains start. Established weeds beyond the two- to four-leaf stage should be removed prior to treatment.

Well established vigorous stands of spring planted alta fescue, Kentucky bluegrass, and orchardgrass may be treated the following fall provided the crop is planted before April 1 and treatment is not applied before October 15; apply 1.6 quarts per acre.

Oregon and Washington: Apply in the fall to perennial ryegrass at the rate of 0.8 to 1.6 quarts per acre and to tall fescue at the rate of 1.6 to 3.2 quarts per acre. Use a sufficient volume of water (a minimum of 25 gallons per acre) for thorough coverage of weed foliage. For best results, make applications at the onset of the fall rains and before weeds have become established (typically October 1 through November 15). Established weeds beyond the 2- to 4-leaf stage should be removed prior to treatment.

Apply only to well established vigorous stands. Do not apply to perennial ryegrass stands less than one year old. Use mechanical agitation and avoid overlap of spray patterns. Weed control efficacy may be reduced in fields where ash residues have accumulated from burning straw.

Annual Ryegrass for the Creation of Rows: Apply 0.8 to 1.6 quarts per acre as a directed or shielded spray so the intended crop row area is not treated. These applications should be made where excessive populations of annual ryegrass are anticipated to volunteer from previous crops. Applications can be made as a directed/shielded spray during seeding or after emergence of annual ryegrass. These applications generally will occur between October 1 and January 15. This product is most effective when applied before annual ryegrass volunteer plants have more than 2 leaves. If larger plants are to be treated, addition of a labeled postemergence herbicide will provide more effective control.
Adjust nozzle heights and spacing to allow the establishment of the desired row width (generally about 3 inches) and spacing (generally 9 to 12 inches). Use low pressure nozzles, shielded nozzles, or drop nozzles to reduce spray movement in the intended crop row area.

Fine Fescue Grass Seed Crops (including chewings, creeping red, and hard fescue types): For the suppression of rattail fescue, apply 0.8 to 1.6 quarts per acre on soils having at least 1% organic matter. Do not use on sand, loamy sand, gravelly soils, or exposed subsoils.

Crop Stage and Application Timing: Use this product on healthy vigorous stands of fine fescue. Alligare Diuron 4L can be applied to stands established at least 1 year or to new plantings that have been established for at least 6 months and have a minimum of eight tillers at time of application.

Apply in the fall before grass weeds are beyond the one- to two-leaf stage and before broadleaf weeds are larger than 1- to 2-inches tall or across. Use the high end of the rate range for large weeds or where weed populations are high.

Approximately ½ to 1 inch of rainfall or sprinkler irrigation is needed to move this product into the weed zone before weeds develop an established root system. Weeds larger than the size indicated or those having a well established root system before this product is properly activated by rainfall/irrigation may not be adequately controlled.

Weed control may be reduced by heavy straw residues or ash from field burning.

Tank Mixes: This product can be applied either alone or in a program involving tank mixes with other herbicides and adjuvants. When using a tank mix with other herbicides, use 0.8 to 1.2 quarts per acre unless prior experience indicates it is safe to use higher rates. Tank mixes with other herbicides can increase the risk of crop injury. When using a certain tank mix for the first time, limit use to a small area to determine safety before treating large areas.

Use Precautions:
Do not replant treated areas to any crop within 2 years of last application as injury to subsequent crops may result.

Do not apply to snow covered or frozen ground as injury to the crop or poor weed control may result.

Do not treat stands lacking in vigor due to poor fertility, environmental stress, insect or disease, or damage from other herbicides.

New Plantings-Oregon, Idaho, Washington: For use in newly planted bentgrass, chewings fescue, Kentucky bluegrass, perennial ryegrass, orchardgrass, and tall fescue. During planting operation, spray a suitable brand of activated charcoal as a 1-inch band on soil surface at 15 pounds per acre of crop where row spacing is 20 inches (300 pounds per acre broadcast basis). Mount nozzles to apply directly over seed rows to prevent crop injury. Follow with Alligare Diuron 4L as a single broadcast spray at the rate of 2.0 to 2.4 quarts per acre. Apply as soon as possible after planting but before crops or weeds emerge and before rains or sprinkler irrigation. Fall or spring plantings may be treated. Best results usually occur with early fall plantings. Treatment will not control downy brome or wild oats.

PERENNIAL RYEGRASS, TALL FESCUE, KENTUCKY BLUEGRASS, AND FINE FESCUE (Grown for Seed)
For control of certain broadleaf weeds and annual grasses apply this product only to well-established vigorous stands of grasses as directed below. Use sufficient water (a minimum of 25 gallons per acre) for thorough coverage of weed foliage. For best results, make application at the onset of fall rains and before weeds become established (typically October 1 through November 15). Weeds beyond the 2- to 4-leaf stage will usually not be controlled. Use higher rates within the range listed when treating larger weeds and heavier weed infestation. Weed control may be reduced where straw or ash residues have accumulated on the soil surface. Lack of moisture to activate the herbicide may reduce weed control. Tank mixtures or sequential treatments with other herbicides may reduce crop tolerance and increase risk of crop injury. When using this product in a tank mix or in a sequential treatment with other herbicides, do not use the maximum rates listed below unless compatibility and the potential for phytotoxicity have been evaluated. Crop tolerance may be reduced and the likelihood of crop injury may increase when crop is under stress caused by weather, diseases, and insects.

Perennial Ryegrass (Established)(Oregon Only): Apply 0.8 to 1.6 quarts per acre per season (October 1 through mid-January) to control seedling grasses and broadleaf weeds such as annual bluegrass and others named on this label.

Tall Fescue (Established)(Oregon Only): Apply 1.6 to 2.4 quarts per acre per season (October 1 through mid-January) to control seedling grasses and broadleaf weeds such as rattail fescue and others named on this label.

Kentucky Bluegrass (Established stands east of the Cascade Mountains)(Oregon, Washington Only): Apply 1.2 to 2.4 quarts per acre per season (October 1 through mid-January) for suppression of rattail fescue and certain other seedling grasses and broadleaf weeds named on this label. Downy brome is not controlled. Do not use on *Poa trivialis* grass seed varieties.

Fine Fescue (Illahee, Rainier, Chewings, and related varieties including Hard Fescue)(Established stands west of the Cascade Mountains)(Oregon Only): Apply 0.8 to 1.6 quarts per acre for suppression of rattail fescue and certain other seedling grasses and broadleaf weeds named on this label. Make only 1 application per year. Do not use this product more than two years in succession in the same field.

ESTABLISHED PERENNIAL BLUEGRASS (Grown for Seed)(Washington, Oregon, Idaho)
Broadcast 0.4 to 1 quart per acre in sufficient diluent to provide even distribution of product for weed suppression. Apply in the spring before rapid growth of bluegrass begins and when windgrass is still small (1- to 4-leaf). Do not use on coarse- (sandy-) textured soils.

MACADAMIA NUT

Aerial application is prohibited.

Hawaii: Use only under trees established in the orchard for at least 1 year. Apply 1.6 to 4.8 quarts per acre immediately after harvest, preferably before weeds emerge. If weeds have emerged, add surfactant. Retreat as needed but do not exceed 8.0 quarts per acre per year.

OATS

Aerial application is prohibited.

Do not replant treated areas to any crop within 1 year after last application as injury to subsequent crops may result.

Drill Planted Spring Oats-Idaho, Eastern Oregon, Eastern Washington: Use in areas where average annual rainfall exceeds 16 inches. Make a single application of 0.8 to 1.2 quarts per acre after planting either before or after oats emerge but within 6 weeks of planting. Best results are usually obtained when application is made 3 to 4 weeks after planting. Apply before weeds are 3 to 4 inches in height.

Drill Planted Winter Oats and Mixture with Peas or Vetch-Western Oregon, Western Washington: Make a single application of 1.2 to 1.6 quarts per acre as soon as possible after planting but before crop emergence.

OLIVE

Aerial application is prohibited.

California: Use only under trees established in the grove for at least 1 year. Apply 1.6 quarts per acre after the grove has been laid-up in final form in late October or November. Repeat at same rate in March or April. Remove weed growth prior to treatment.

ORNAMENTALS

Aerial application is prohibited.

Refer to **SOIL LIMITATIONS** section of this label for additional directions, precautions, and restrictions.

Ornamental Bulb Crops (Bulbous Iris, Narcissus)-Western Washington: Make a single application of 3.2 quarts per acre. Apply after planting but no later than 4 weeks prior to bulb emergence (usually late September or October). Do not replant treated areas to any crop within 1 year after last application as injury to subsequent crops may result.

Plumosus Fern-Florida: Hand weed and mow fern, then make a single application of 2.4 quarts per acre within 3 to 5 days. Do not cultivate or disturb soil after application as crop injury may result. Treat only established stands at least 1 year old.

PAPAYA

Aerial application is prohibited.

Use only under trees established in the orchard for at least 1 year. Apply 2.0 to 4.0 quarts per acre, preferably before weeds emerge. If weeds have emerged, add a surfactant.

In Hawaii only, for control of weeds in orchards less than one year old, use as a post-plant treatment between rows. Use only in orchards that are lined with mulch paper in the crop row. Apply preemergent or postemergent in sufficient gallonage for wetting of weeds and soil. Spray up to mulch paper only. Do not apply more than 4.0 quarts per acre per year. Do not allow spray to contact papaya foliage or other desirable vegetation. Do not graze livestock in treated areas.

PEAS (Austrian Field)

Aerial application is prohibited.

Western Oregon: Use this product for selective control of certain weeds in Austrian field peas.

Apply 1.2 to 1.6 quarts of this product per acre as a broadcast spray with air or ground equipment as soon as possible after planting but before crop emerges for control of weeds such as chickweed, sheperdspurse, wild mustard, fiddleneck, lambsquarters, pigweed, and annual bluegrass. Use lower rate on coarse-textured soils and higher rate on fine-textured soils.

Do not use this product on sand, sandy loam, gravelly soils, or exposed subsoils or on soils having less than 1% organic matter as crop injury may result. Do not replant treated area to another crop within 1 year of application. Crop injury may result if severe winter stress or disease or insect damage to the crop follows application.

PEACH

Aerial application is prohibited.

This product may be applied alone or as a tank mix with Sinbar.

Where crop is grown under furrow irrigation or under raised-berm flood irrigation (trees 4 to 6 inches above waterline), apply only as a band treatment. Do not treat trees planted in the bottom of irrigation furrows nor trees grown under flat flood or basin irrigation as injury to trees may result. Where complete weed control to harvest is desired, additional weed control measures may be required during the growing season.

Alligare Diuron 4L Alone: Use only under trees established in the orchard for at least 3 years. Apply 1.6 to 2.2 quarts per acre in the early spring before weeds emerge or during the early seedling stage of weed growth; do not apply more than 2.2 quarts per acre per application in all areas except California. In California, apply 1.6 to 3 quarts per acre; do not apply more than 3 quarts per acre per application. Do not apply within 3 months of harvest. In the Far West, do not apply within 8 months of harvest.

Georgia: On trees established for at least 2 years, apply 1.6 to 2.2 quarts per acre in the spring. Repeat application in the fall but do not exceed 4.0 quarts per acre per year. Add surfactant to improve control of small emerged weeds.

Alligare Diuron 4L plus Sinbar: Use only under trees established in the orchard for at least 2 years. Apply either in the spring or after harvest in the fall before weeds emerge or during early seedling stage of weed growth.

	RATE/ACRE					
	1 to 2% Organic Matter			More Than 2% Organic Matter		
Soil Texture	Alligare Diuron 4L Qts./Acre		Sinbar Lbs./ Acre	Alligare Diuron 4L Qts./Acre		Sinbar Lbs./ Acre
Sandy Loam	0.8	+	1.0	1.2	+	1.5
Loam, Silt Loam, Silt	1.2	+	1.5	1.6	+	2.0
Clay Loam, Clay	1.6	+	2.0	1.6	+	2.0

PEAR

Aerial application is prohibited.

Use only under trees established in the orchard for at least 1 year. Do not treat varieties grafted on full-dwarf root stocks. Apply 3.2 quarts per acre in the spring from March through May. In the Far West, apply 3.2 quarts per acre to weeds less than 2 inches in height or diameter under dormant trees. Alternatively, apply to small weeds at 1.6 quarts per acre postharvest followed by 1.6 quarts per acre prior to budbreak.

PECAN

Aerial application is prohibited.

Use this product alone or as a tank mix with Sinbar. Make a single band or broadcast application as a directed spray using a minimum of 30 gallons of water per acre. Apply in the spring before weeds emerge or during the early seedling stage of growth.

	RATE/ACRE				
Soil Texture	Alligare Diuron 4L Alone*	OR	Tank Mix** Alligare Diuron 4L	+	Sinbar
Sandy Loam	1.6 quarts		1.2 quarts	+	1.5 pounds
Loam, Silt Loam, Silt	2.4 quarts		1.4 quarts	+	1.75 pounds
Clay Loam, Clay	3.2 quarts		1.6 quarts	+	2.0 pounds

*Use only under trees established in the grove for at least 3 years, and on soils with at least 0.5% organic matter.

** Use only under trees established in the grove for at least 1 year, and on soils with at least 1% organic matter.

Note: Do not use on eroded areas where subsoil or roots are exposed, nor on trees that are diseased or lacking in vigor, nor on trees planted in irrigation furrows as injury may occur.

PEPPERMINT

Aerial application is prohibited.

Washington, Oregon, Idaho: Apply 0.6 to 0.8 quart per acre on soils having 1 to 2% organic matter. Apply 0.8 to 1.6 quarts per acre on soils having 2.1 to 3.0% organic matter. Apply 1.6 to 2.4 quarts per acre on soils having more than 3.0% organic matter.

Use Precautions: Do not apply to stands of mint suffering from stress due to low fertility, drought, winter injury, insects, disease, or damage from other herbicides or other causes.

Do not apply to snow covered or frozen ground as injury to the crop or poor weed control may result.

Do not apply to sand, loamy soil, gravelly soils, or exposed subsoils. Do not apply to soils that have a high salt content and/or high water table or poor drainage that retards mint root development resulting in a shallow root system. Do not apply to soils having less than 1% organic matter.

Application Timing: Apply this product to established (at least one year) stands of mint during the late winter dormant period or after flaming in the spring prior to the emergence of new growth. Do not cultivate after application.

If weeds are present at time of application, the use of a surfactant at 0.25% v/v or crop oil concentrate at 1.0% v/v may be used to increase the performance of this product postemergence to weeds.

Tank Mixes and Sequential Treatments: This product can be applied either alone or in a program involving tank mixes and/or sequential treatments with other herbicides and adjuvants providing this product is not applied to actively growing mint plants.

When using a tank mix with other herbicides, use the lower end of the Alligare Diuron 4L use rate range unless prior experience indicates it is safe to use higher rates. Tank mixes and sequential treatments with other herbicides can increase the risk of crop injury. When using a certain tank mix or sequential treatment for the first time, limit use to a small area to determine safety before treating large areas.

PINEAPPLE

Aerial application is prohibited.

Hawaii: Apply 1.6 to 4.8 quarts per acre as a broadcast spray just before or immediately after planting but prior to weed emergence. Use 1.6 to 3.2 quarts per acre after harvesting the plant crop or ratoon crop (for the first ratoon crop as well as subsequent ratoon crops) but before differentiation. For plant crop only, additional broadcast or interspace applications may be made prior to differentiation at the rate of 1.6 quarts per acre at intervals of not less than 2 months. Additional applications to plant crop may be made as needed to interspace only using 1.6 quarts per acre. Do not apply more than 9.6 quarts per acre as broadcast sprays nor more than 12.8 quarts total per acre per plant crop. Treated areas may be planted to pineapple or sugarcane 1 year after last application.

Florida: Apply 3.2 to 5.0 quarts per acre as a broadcast spray just before or immediately after planting but prior to weed emergence. For ratoon crop use 3.2 quarts per acre after harvesting plant crop. For plant crop only, a second and third broadcast or interspace application may be made prior to differentiation at the rate of 1.6 quarts per acre at intervals of not less than 2 months. Additional applications to plant crop may be made as needed to interspace only using 1.6 quarts per acre. Do not apply more than three broadcast sprays (maximum 9.6 quarts per acre) prior to differentiation nor more than 12.8 quarts total per acre per plant crop. Treated areas may be planted to pineapple or sugarcane 1 year after last application.

Puerto Rico: Apply 3.0 to 5.0 quarts per acre as a broadcast spray before or immediately after planting but prior to weed emergence. Preemergence application controls weeds such as pigweed, crotalaria, morningglory, purslane, crabgrass, foxtail, goosegrass, fall panicum, and sourgrass.

RED CLOVER

Aerial application is prohibited.

Western Oregon: Make a single application of 1.6 quarts per acre on established red clover stands at least 9 months old. Apply when red clover is dormant between October 15 to December 15. Do not apply to seedling red clover. Do not replant treated area to any crop within 1 year after last application as injury to subsequent crops may result.
Treatment will control annual weeds such as bluegrass, chickweed, hawksbeard, rattail fescue, ryegrass, and velvetgrass.

SORGHUM (Grain)

Aerial application is prohibited.

DO NOT SPRAY OVER TOP OF SORGHUM.

Southwestern States: Apply 0.2 to 0.4 quart per acre plus surfactant. Apply as a directed postemergence spray after sorghum is 15 inches tall to control weeds 2 to 4 inches in height. Use lower rate on broadleaf weeds up to 2 inches tall. Use the higher rate on grasses up to 2 inches and broadleaf weeds up to 4 inches tall. When the lower rate is used, a second application may be made if needed. Do not exceed 0.4 quart per acre. Treatment of weeds under drought stress is usually ineffective.

Do not replant treated areas to crops other than cotton or corn within 4 months following band treatment and 6 months following broadcast treatment as injury to subsequent crops may result.

SUGARCANE

To prevent possible crop injury on new cane varieties, tolerance to this product should be determined prior to adoption as field practice. Do not treat sugarcane growing on thinly covered sub-soils or rocky areas as crop injury may result. Temporary chlorosis and stunting of the crop may result from application over emerged cane. Application over emerged cane should be made only as directed below without the addition of a surfactant or crop oil concentrate. To minimize chlorosis and stunting, use directed postemergence sprays.

Preemergence-Florida: For high organic soils, apply 1.6 to 3.2 quarts per acre as a broadcast or band spray prior to weed emergence after planting or after harvesting plant crop (for ratoon crop).

Postemergence-Florida: Make one or two applications of 1.6 quarts per acre as needed by directed spray inter-row. Alternatively, for panicum control, make up to three applications of 0.4 to 0.8 quart per acre plus surfactant as a directed spray after cane has emerged but before panicum exceeds 2 inches in height. Adjust nozzles to spray beneath cane plants and between rows to cover weed foliage and to minimize contact of cane leaves with spray or drift. Do not apply more than 4.8 quarts total per acre between planting (or ratooning) and harvest.

Postemergence-Hawaii: Apply 1.6 to 4.8 quarts per acre as a broadcast spray prior to weed emergence after planting or after harvesting plant crop or ratoon crop. Sequential applications of 1.6 to 3 quarts per acre may be made as a broadcast spray over emerged cane or by directed spray inter-row.

If weeds are emerged, add a surfactant to the spray mixture at the rate of 1 to 2 quarts per 100 gallons and apply as a directed spray. Do not apply more than three treatments nor more than 9.6 quarts per acre in Hawaii between planting (or ratooning) and harvest. Treated areas may be replanted to sugarcane or pineapple 1 year after last application.

Postemergence-Puerto Rico: Apply 3.2 to 5.0 quarts per acre as a broadcast spray prior to weed emergence after planting or after harvesting plant crop or ratoon crop. A second and third application of 1.6 to 3.2 quarts per acre may be made as a broadcast spray over emerged cane or by directed spray inter-row.

If weeds are emerged, add a surfactant and apply as a directed spray.
Do not apply more than 3 treatments nor more than 8 quarts per acre in Puerto Rico between planting (or ratooning) and harvest. Treated areas may be replanted to sugarcane or pineapple 1 year after last application.

Louisiana, Texas: Apply 2.4 to 3.0 quarts per acre. This product may be applied as a broadcast spray after planting and following the harvesting of sugarcane. This product may also be applied broadcast in late winter. Application is best when made prior to weed emergence. This product may be applied as a post-directed spray immediately after the last cultivation. Direct the spray application to the base (no more than 1/3 the plant height) of the sugarcane plants. When small weeds (3 inches or less) are present at application, add a surfactant at 0.25% v/v or crop oil concentrate at 1.0% v/v to the spray mix.

Use Precautions: Temporary leaf yellowing may occur following application. Do not apply more than 6 quarts per acre broadcast per year. Use proportionately less for band applications.

TREE PLANTINGS

Aerial application is prohibited.

Colorado, Montana, Nebraska, North Dakota, South Dakota, Wyoming: Use only under established plantings 1 year or older of American elm, caragana, cottonwood, Douglas fir, green ash, honeysuckle, Ponderosa pine, red cedar, Russian olive, and Siberian elm. Use 2.0 to 4.0 quarts per acre. Apply as a band 4-feet wide in the tree row (2 feet on each side of row). For example, 1.6 ounces of this product treats 135 feet of tree row (2 feet on each side of row) at the rate of 4.0 quarts per acre. Apply as a directed spray in the early spring before weeds emerge and before trees leaf out. Do not apply to foliage of trees, nor under trees growing in low areas as injury may result.

Idaho, Oregon, Washington: Use this product for control of weeds to aid in the establishment of hybrid poplar plantings. Apply at 0.8 to 2.4 quarts per acre depending upon soil texture and organic matter content. Use 0.8 to 1.6 quarts per acre on coarse-textured soils and 1.6 to 2.4 quarts per acre on medium- to fine-textured soils. Do not use on gravelly soils or on any soil having less than 0.5% organic matter as injury to trees may result. **Injury may result from applications to poplar plantings grown on sandy soil with low organic matter with sprinkler irrigation.** When applied in a band, the application rate will be in proportion to the area banded on a per acre basis.

Apply in late winter or early spring as a uniform broadcast spray before or after planting but prior to bud swell or as a directed spray after bud swell. Apply before weeds emerge or after emergence while weeds are small. Some rainfall or water is necessary to move this product into the weed root zone before weeds become well established. If weeds are present at time of treatment, add a surfactant at 1 to 2 quarts per 100 gallons of spray solution.

PREPLANT: Take precautions to prevent treated soil (usually top 1 inch) from coming into contact with roots of trees during the planting process as injury may result.

POST-PLANT (BROADCAST): It is best to wait until rain or irrigation has settled the soil around the newly planted trees before applying this product. If trees are dormant, a broadcast application can be made.

POST-PLANT (DIRECTED): If buds have started to swell, use a directed spray pattern that prevents this product from contact with trees as injury may result. During the growing season (from bud swell to leaf drop), this product may be applied (alone or with tank mix) between tree rows in shielded and directed sprays.

This product can be tank mixed with a glyphosate herbicide preplant and as a directed spray to broaden the spectrum of weeds controlled and improve post-emergence activity. Use 0.8 to 2.4 quarts of this product plus glyphosate herbicide (according to label directions) depending upon soil type and weeds to be controlled. Note: There are several formulations of glyphosate herbicide. Check the glyphosate herbicide label to verify that the intended use as a pre-plant or post-directed spray on hybrid poplar plantations is allowed. Avoid contact of glyphosate herbicide with foliage, green stems, trees, or other desirable vegetation because severe damage or destruction may result.

TRITICALE (Oregon only)

Aerial application is prohibited.

Crop injury may result where severe winter stress, disease, or insect damage follows application. Winter-sensitive varieties may be less tolerant of this product than winter-hardy varieties. Crop injury may result from failure to observe the following: Do not use on sand or loamy sand soils nor on gravelly or sandy loams with less than 1% organic matter. Do not use on thinly covered or exposed subsoils (clay knolls). Do not treat triticale planted less than 1 inch deep. Do not treat triticale where winter climatic conditions have caused “heaving” of plants. Do not treat triticale plants lacking in vigor due to poor emergence, insect damage, disease, high alkalinity, or other causes. Do not apply after triticale has reached the “boot stage” of maturity. Unless specified otherwise, do not use with surfactants or nitrogen solution. Do not replant treated areas to any other crop within one year after last treatment (except as noted) as injury to subsequent crops may result.

East of Cascade Range: Where average annual rainfall exceeds 16 inches, make a single application at the rate of 0.8 to 1.2 quarts per acre. For early fall planted triticale (seeded before September 10), apply 3 to 6 weeks after planting but before weeds are 3 to 4 inches tall. Treatment after October 1 has generally given best results. Application should not be made after soil freezes in the fall. Triticale planted in late October should not be treated until the following spring. For spring treatment, apply as soon as triticale starts to grow. Treatment made prior to April 10 will usually give good results, provided weed growth is less than 4 inches tall. Application later than May 1 may give poor results. Alternatively, make a single application of 0.4 to 0.8 quart Alligare Diuron 4L plus 0.25 lb. bromoxynil per acre as a tank mix, in either the fall after triticale has emerged but before soil freezes or in the spring as soon as soil thaws. Apply before weeds are more than 2 inches tall or across.

Where average annual rainfall is 10 to 16 inches, following fall planting, make a single application of 0.8 to 1.2 quarts per acre where sufficient moisture is available to germinate triticale seed. Apply before soil freezes and before weeds are two inches tall. Application later than March 1 may give poor results. If fall-planted triticale fails to grow due to winter kill or adverse growing conditions after fall treatment, only fields treated before November 1 may be replanted to spring triticale. Spring triticale should not be planted before April 1 and only after deep discing and plowing to a depth of 4 to 6 inches prior to planting. Do not make a second application during the same crop year or injury to the crop may result.

West of Cascade Range: Make a single application of 1.2 to 1.6 quarts per acre as soon as possible after planting. If triticale and weeds have emerged, apply before weeds are 3 to 4 inches tall. Alternatively, apply a tank mixture of this product plus bromoxynil as detailed above in East of Cascade Range section.

Other areas: Make a single application in the spring as soon as triticale (fall-planted) starts to grow and before weeds are 2 inches tall. Application later than May 1 may give poor results.

WALNUT (ENGLISH)

Aerial application is prohibited.

California, Oregon, Washington: Use only under trees which have been established in the orchards for at least 1 year. As an initial treatment, apply 2.2 quarts per acre after the orchard has been laid-up in final form (no-tillage program) in late fall or early winter. Retreat annually with 1.6 to 2.2 quarts per acre. In California, apply 1.6 to 3 quarts per acre. Alternatively, apply 1.6 quarts per acre in October or November and repeat at the same rate in March or April.

Do not use on sand, loamy sand, gravelly soils, or exposed sub-soils, nor where organic matter is less than 1%.

Do not graze livestock in treated orchards and groves.

Do not make more than two applications per year. Do not apply more than 3.2 quarts per acre per year. In California, do not apply more than 3 quarts per acre per year. When using this product in a sequential treatment program, allow a minimum of 150 days between applications. In all areas except California, the maximum application rate is 2.2 quarts per acre and the maximum application rate per year is 3.2 quarts per acre. In California only, the maximum application rate is 3 quarts per acre and the maximum application rate per year is 3 quarts per acre.

WHEAT (WINTER)

Use Precautions: Crop injury may result where severe winter stress, disease, or insect damage follows application. Winter-sensitive varieties may be less tolerant of this product than winter-hardy varieties. Crop injury may result from failure to observe the following: Do not use on sand or loamy sand soils nor on gravelly or sandy loams with less than 1% organic matter. Do not use on thinly covered or exposed sub-soil areas (clay knolls). Do not treat wheat planted less than 1-inch deep. Do not treat wheat where winter climatic conditions have caused "heaving" of plants. Do not treat wheat plants lacking in vigor due to poor emergence, insect damage, disease, high alkalinity, or other causes. Do not apply after wheat has reached the "boot" stage of maturity. Unless specified otherwise, do not use with surfactants or nitrogen solution. Do not replant treated areas to any other crop within 1 year after last treatment (except as noted) as injury to subsequent crops may result.

Idaho, Oregon, Washington-East of Cascade Range: Where average annual rainfall exceeds 16 inches, make a single application of 0.8 to 1.2 quarts per acre. Fall Treatment: For early fall planted wheat (seeded before September 10), apply 3 to 6 weeks after planting but before weeds are 3 to 4 inches tall. Treatment after October 1 has generally given best results. Application should not be made after soil freezes in the fall. Wheat planted in late October should not be treated until the following spring. Spring Treatment: Apply as soon as wheat starts to grow. Treatment made prior to April 10 will usually give good results provided weed growth is less than 4 inches tall. Application later than May 1 may give poor results.

Alternatively, make a single application of 0.4 to 0.8 quart Alligare Diuron 4L plus 0.25 pound bromoxynil per acre as a tank mixture in either the fall after wheat has emerged but before soil freezes or in the spring as soon as soil thaws. Apply before weeds are more than 2 inches tall or across. Where average annual rainfall is 10 to 16 inches following fall planting, make a single application of 0.8 to 1.2 quarts per acre when sufficient moisture is available to germinate wheat seed. Apply before soil freezes and weeds are 2 inches tall. Application later than March 1 may give poor results.

Note: If fall-planted wheat fails to grow due to winter kill or adverse growing conditions after fall treatment, only fields treated before November 1 may be replanted to spring wheat. Spring wheat should not be planted before April 1 and only after deep discing and plowing to a depth of 4 to 6 inches prior to planting. Do not make a second application during the same crop year or injury to the crop may result.

Oregon, Washington-West of Cascade Range: Make a single application of 1.2 to 1.6 quarts per acre as soon as possible after planting. If wheat and weeds have emerged, apply before weeds are 3 to 4 inches tall. Alternatively, apply a tank mixture of this product plus bromoxynil as detailed above in **East of Cascade Range** section.

Other Areas of Oregon, Washington: Make a single application in the spring as soon as wheat (fall-planted) starts to grow and before weeds are 2 inches tall. Application later than May 1 may give poor results.

Kansas, Oklahoma, Texas: Do not use on sand or sandy loam soils. Use 0.8 quart per acre on silt and silt loam soils and 1.2 to 1.6 quarts per acre on clay, clay loam, and silty clay loam soils.

Central Plains, Midwest: Use 0.8 to 1.6 quarts per acre.

Northeast: Use 0.8 to 1.2 quarts per acre.

NONCROP WEED CONTROL
SPECIFIC DIRECTIONS

Mix proper amount of this product into volume of water necessary to obtain uniform coverage. If a surfactant is used, dilute with 10 parts of water and add as last ingredient to nearly full tank. This product must be kept in suspension at all times. Agitate by mechanical or hydraulic means in the spray tank. If bypass or return line is used, it should terminate at bottom of tank to minimize foaming. Openings in screens should be equal to or larger than 50 mesh.

Note: This product may be applied by either ground application equipment or by air application equipment (helicopter only) for the control of various weeds and grasses in rights-of-way sites. When making aerial applications, apply in sufficient water volume to ensure thorough coverage of the site to be treated; generally 3 gallons of water per acre are sufficient.

Do not exceed an application rate of 2 gallons per acre of formulated product except in areas of high rainfall (more than 40 inches per year) or dense vegetation (more than 90% weed ground cover). In areas with high rainfall or dense vegetation, a maximum application of 3 gallons per acre of formulated product is allowed. Do not make more than two applications per year. If products containing diuron are used in a sequential program, allow a minimum of 90 days between applications.

Weed Control: To control most annual weeds for an extended period of time on uncultivated nonagricultural areas (such as airports, highway, utility and railroad rights-of-way including switch yards and storage yards, sewage disposal areas); uncultivated agricultural areas (noncrop producing, which includes farmyards, fuel storage areas, fence rows, barrier strips); industrial sites (outdoor, such as, lumberyards, pipeline and tank farms), apply 4 to 12 quarts per acre of formulated product to control annual weeds including:

Broadleaves
4 to 12 quarts/acre

Ageratum	Knawel	Ragweed
Chickweed	Kochia	Sesbania
Cocklebur	Lambsquarter	Shepherdspurse
Corn Speedwell	Marigold	Sicklepod
Corn Spurry	Mexican Clover	Smartweed, Annual
Dayflower	Morningglory, Annual	Sowthistle, Annual
Dogfennel	Pennycress	Spanishneedles
Fiddleneck (Amsinckia)	Pigweed	Tansymustard
Flora's Paintbrush	Pineappleweed	Velvetleaf (Buttonweed)
Gromwell	Pokeweed	Wild Buckwheat
Groundcherry, Annual	Prickly Lettuce	Wild Lettuce
Hawksbeard	Prickly Sida (Teaweed)	Wild Mustard
Horsenettle	Purslane	Wild Radish
Horseweed	Rabbit Tobacco	

Grasses
4 to 6.4 quarts/acre

Barnyardgrass (Watergrass)	Orchardgrass	Ryegrass, Annual
Bluegrass, Annual	Peppergrass	Sandbur
Crabgrass	Quackgrass	Seedling, Johnsongrass
Foxtail	Rattail Fescue	Velvetgrass
Kyllinger (Kyllinga)	Red Sprangletop	Vernalgrass, Sweet, Annual
Lovegrass, Annual	Ricegrass	

6.4 to 12 quarts/acre

Guineagrass	Maidencane	Pangolagrass

Irrigation and drainage ditches: Apply 4 to 12 quarts per acre to control most annual weeds as shown above. Apply only when water is not in the ditch. For irrigation ditches, apply during the noncrop season and when ditch is not in use. To avoid crop injury, it is essential to minimize movement of this product in irrigation water. The herbicide must be fixed in the soil by moisture. Apply before expected seasonal rainfall, if possible when soil in the ditch is still moist. Following treatment, if rainfall has not totaled at least 4 inches, fill ditch with water and allow to stand for 72 hours. Drain off any waste water remaining before using ditch. Do not treat any ditch area into which roots of trees or other desirable plants may extend as injury may result.

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal.

PESTICIDE STORAGE: Store product in original container only, away from other pesticides, fertilizer, food, or feed.

PESTICIDE DISPOSAL: Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

CONTAINER HANDLING:

Nonrefillable Container (five gallons or less): Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, if allowed by state and local authorities, by burning. If burned, stay out of smoke. **DO NOT REUSE EMPTY CONTAINER.**

Nonrefillable Container (greater than five gallons): Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, if allowed by state and local authorities, by burning. If burned, stay out of smoke. **DO NOT REUSE EMPTY CONTAINER.**

CONDITION OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

To the extent consistent with applicable law, upon purchase or use of this product, purchaser and user agree to the following terms:

Warranty: Alligare, LLC (the Company) warrants that this product conforms to the chemical description on the label in all material respects and is reasonably fit for the purpose referred to in the directions for use, subject to the exceptions noted below, which are beyond the Company's control. To the extent consistent with applicable law, the Company makes no other representation or warranty, express or implied, concerning the product, including no implied warranty of merchantability or fitness for a particular purpose. To the extent consistent with applicable law, no such warranty shall be implied by law, and no agent or representative is authorized to make any such warranty on the Company's

behalf.

Terms of Sale: The Company's directions for use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, and the manner of use or application (including failure to adhere to label directions), all of which are beyond the Company's control. To the extent consistent with applicable law, all such risks are assumed by the user.

Limitation of Liability: To the extent consistent with applicable law, the exclusive remedy against the Company for any cause of action relating to the handling or use of this product is a claim for damages, and in no event shall damages or any other recovery of any kind exceed the price of the product which caused the alleged loss, damage, injury or other claim. To the extent consistent with applicable law, under no circumstances shall the Company be liable for any special, indirect, incidental or consequential damages of any kind, including loss of profits or income. Some states do not allow the exclusion or limitation of incidental or consequential damages.

The Company and the seller offer this product, and the purchaser and user accept this product, subject to the foregoing warranty, terms of sale and limitation of liability, which may be varied or modified only by an agreement in writing signed on behalf of the Company by an authorized representative.

EPA 20100802

BAYER

Roundup QuikPRO®

SC TOTAL Herbicide

RESIDUAL NON-SELECTIVE HERBICIDE

Non-selective control of emerged and pre-emerged grasses and broadleaf weeds in Non-Crop Areas including, Paths, Parking Lots, Curbs, Sidewalks, Driveways, Around Buildings, Gravel Areas, Loading Ramps, Educational Facilities, Storage Yards, Vacant Lots, Fence Rows, Parks, Hardscapes (including crack and crevice), Municipal, Mulched Areas, Landscape Ornamental Beds, and Government Sites.

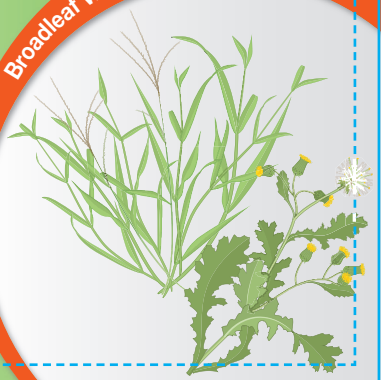
- **Dual Action FORMULA Kills EXISTING WEEDS & GRASSES PLUS Prevents New Weeds & GRASSES for up to 6 Months**
- **Rainproof in 30 minutes**
- **Visible Results in Hours**
- **Simple, Convenient, Easy to use**
- **An easier way to manage large areas of unwanted weeds & grasses**

ACTIVE INGREDIENTS:	
Indaziflam	**0.089%**
Diquat dibromide	**0.890%**
Glyphosate isopropylamine salt	**20.460%**
OTHER INGREDIENTS:	**78.561%**
TOTAL:	**100.00%**

Contains 1.87 lbs Glyphosate isopropylamine salt, 0.08 lbs Diquat dibormide and 0.008 lbs Indaziflam per gal

EPA Reg. No. 432-1532

Broadleaf Weeds • Grass Weeds



KEEP OUT OF REACH OF CHILDREN

CAUTION

See Back Panel for First Aid Instructions and Booklet for Complete Precautionary Statements and Directions for Use.

Contains

1.125 Gal. (144 Fl. Oz.)

XXXXXXXX

USXXXXXXXXA 160930Av2 04/22

For MEDICAL and TRANSPORTATION Emergencies ONLY Call 24 Hours A Day 1-800-334-7577
For PRODUCT USE Information Call 1-800-331-2867

FIRST AID	
If swallowed:	• Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by a poison control center or doctor. • Do not give anything by mouth to an unconscious person.
If on skin:	• Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15 – 20 minutes. • Call a poison control center or doctor for further treatment advice.
If in eyes:	• Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for further treatment advice.

NOTE: Have the product container or label with you when calling a poison control center or doctor or going for treatment. **You may call toll-free 1-877-229-3763 for medical emergency information.**
Active Ingredients: 20.460% glyphosate isopropylamine salt (CAS No. 38641-94-0), 0.890% diquat dibromide (CAS No. 85-00-7), and 0.089% indaziflam (CAS No. 950782-86-2).

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

Harmful if swallowed or absorbed through skin. Causes moderate eye irritation. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse.

ENVIRONMENTAL HAZARDS

This product is toxic to fish, aquatic invertebrates, and plants. To protect the environment, do not allow pesticide to enter or run off into storm drains, drainage ditches, gutters, or surface waters. Applying this product in calm weather when rain is not predicted for the next 24 hours will help to ensure that wind or rain does not blow or wash pesticide off the treatment area. This chemical has properties and characteristics associated with chemicals detected in groundwater. This chemical may leach into ground water if used in areas where soils are permeable, particularly where the water table is shallow. This pesticide may impact water quality due to runoff of rainwater. This is especially true for poorly draining soils and soils with shallow ground water. This product is classified as having a high potential for reaching surface water via runoff for several months or more after application.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.
Read entire label before using this product.

PRODUCT INFORMATION

ROUNDUP QUIKPRO® SC TOTAL HERBICIDE is a non-selective, residual herbicide that offers broad-spectrum control of many annual weeds, perennial weeds, shrubs, and trees. ROUNDUP QUIKPRO SC TOTAL HERBICIDE is a highly active herbicide that provides effective weed control when applied to the soil. ROUNDUP QUIKPRO SC TOTAL HERBICIDE may damage sensitive plants, if the product is allowed to contact foliage. Carefully apply ROUNDUP QUIKPRO SC TOTAL HERBICIDE in strict accordance to the label. Be sure to follow all label restrictions.

PRODUCT RESTRICTIONS

- Do not use this product in or around vegetable gardens or in landscaped areas where young plants including ornamental bedding plants (annuals and/or perennials), trees, shrubs, and sod will soon be planted within 6 months after treatment.
- Do not allow people or pets to enter the treated area until sprays have dried.
- Seed may be planted 12 months after application.
- Do not use on desirable turfgrass.
- Do not use over-the-top of ornamentals.
- Do not apply around the root zone of herbaceous plants.
- Do not allow spray to contact desirable foliage, stems, green bark, or bare roots of turfgrasses, trees, shrubs, or other listed desirable vegetation, since severe damage may result. Apply when the air is calm to avoid spray drift onto desirable plants.
- Avoid tracking product onto desirable vegetation - do not walk on treated area until the spray has dried.
- If spraying near the base of established plants (plants that have been in the ground at the same location for one or more years), shield them from spray drift using cardboard, plastic, or other materials. If the spray accidentally contacts a desirable plant, rinse it off immediately with water.
- Do not apply using a steel sprayer, except stainless steel.
- Do not apply where heavy rainfall or irrigation can runoff into cool season lawns (e.g. Tall Fescue, Kentucky Bluegrass, Fine Fescue and Ryegrass).

USE AROUND ORNAMENTALS IN COARSE AND SANDY SOILS

Soil conditions can affect the tolerance of ornamentals to ROUNDUP QUIKPRO SC TOTAL HERBICIDE. Excessively coarse or sandy soils may allow for downward movement of ROUNDUP QUIKPRO SC TOTAL HERBICIDE into the root zone and cause significant root damage and phytotoxicity. Coarse soils, for example, may include significant quantities of sand, gravel, decomposed granite, and ground cinders.

USE DIRECTIONS

- Apply to small and actively growing weeds. Best results will be achieved when temperatures are above 60 ° F.
- Thoroughly spray existing weeds and the entire area that you want protected.
- A subsequent application of ROUNDUP QUIKPRO SC TOTAL HERBICIDE can be made 4 months after the initial application to extend weed control. Certain hard-to-control weeds can be re-sprayed 1 month after initial treatment only using spot treatment. The maximum applied rate must not exceed 32 fl oz of product/1000 sq ft. in a 12 month period.
- Add 16 oz of product per 1 gallon of water.
- Shake bottle well before use. Add appropriate amounts of water & product to spray tank.

Rate	Add To	Covers
16 fl oz Product	1 gal of water	1000 sq ft

Note: Do Not Apply more than a maximum of 32 fl oz/ 1000 sq ft per year. .

FOR BEST RESULTS

WHEN TO APPLY

- Disturbing the soil after application may reduce the effectiveness of this product by disturbing the weed preventative barrier.
- Rain or watering 30 minutes after application will not wash away effectiveness.
- Under drought conditions, it may be necessary to lightly water the product in. Irrigate to move the residual herbicide into the soil, but not to the point of visible runoff.

CLEAN UP

- Triple rinse the spray tank and flush all sprayer components with water to remove residual product. Empty the rinse water onto bare soil or gravel.

WEEDS CONTROLLED

Broadleaf Weeds	Scientific Name	Broadleaf Weeds	Scientific Name
Chickweed, Common	*Stellaria media*	Lambsquarters, common	*Chenopodium album*
Chickweed, Mouse-ear	*Cerastium vulgatum*	Lespedeza, Serecia	*Lespedeza cuneata*
Clover, White	*Trifolium repens*	London rocket	*Sisymbrium irio*
Corn speedwell	*Veronica arvensis*	Mustard, Wild	*Sinapis arvensis*
Curly dock	*Rumex crispus*	Spotted spurge	*Euphobia maculata*
Evening primrose, Cutleaf	*Oenothera laciniata*	Prostrate spurge	*Euphorbia humifusa*
Dandelion, Common	*Taraxacum officinale*	Ragweed, Common	*Ambrosia artimisiifolia*
Filaree, redstem	*Erodium cicutarium*	Redroot pigweed	*Amaranthus retroflexus*
Fleabane, blackleaved	*Conyza bonariensis*	Shepherd's-purse	*Capsella bursa-pastoris*
Florida pusley	*Richardia scabra*	Sida, Prickly / Teaweed	*Sida spinosa*
Gromwell, Yellow	*Amsinckia calycina*	Sowthistle, Annual	*Sonchus olerachus*
Groundsel, common	*Senecio vulgaris*	Sunflower, Common	*Helianthus spp.*
Hairy fleabane	*Erigeron bonariensis*	Velvetleaf	*Albutilon theophrasti*
Henbit	*Lamium amplexicaule*	Vetch, Common	*Vicia sativa*
Horseweed/Marestail	*Erigeron canadensis*	Wild mustard	*Sinapis arvensis*
Kochia	*Kochia scoparia*		

Grass Weeds	Scientific Name	Grass Weeds	Scientific Name
Annual bluegrass/ *'Poa'*	*Poa annua*	Foxtail brome	*Bromus rubens*
Barnyardgrass, common	*Echinochloa crus-galli*	Foxtail, Giant	*Setaria faberi*
Cheatgrass	*Bromus secalinus*	Foxtail, Green	*Setaria viridis*
Crabgrass	*Digitaria* sp	Foxtail, Yellow	*Setaria glauca*
Crabgrass, Henry	*Digitaria adscendens*	Goosegrass	*Eleusine indica*
Crabgrass, Large/Hairy	*Digitaria sanguinalis*	Ryegrass, Italian	*Lolium multiflorum*
Crabgrass, Smooth	*Digitaria ischaemum*	Ryegrass, Perennial	*Lolium perenne*

LANDSCAPE ORNAMENTAL USES

Use ROUNDUP QUIKPRO SC TOTAL HERBICIDE in residential, commercial, as well as federal, state and local plantings of ornamentals for non-selective weed control. Apply ROUNDUP QUIKPRO SC TOTAL HERBICIDE as a directed spray only to established (rooted) plants (plants that have been in the ground at the same location for one or more years) and not to newly rooted cuttings or seedlings. For best weed control, make applications prior to mulching. Plant damage will occur if ROUNDUP QUIKPRO SC TOTAL HERBICIDE contacts foliage.

Apply ROUNDUP QUIKPRO SC TOTAL HERBICIDE as a directed spray at 16 fl oz of product / 1000 sq ft around ornamentals. When applying ROUNDUP QUIKPRO SC TOTAL HERBICIDE with a backpack sprayer, follow all above restrictions.

When tank mixing with other products, it is the responsibility of the end-user/applicator to ensure that the tank-mix partner is registered in the state where the application is being made.

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal.

PESTICIDE STORAGE: Store in original container and keep tightly closed. Store in a cool dry place and protect ROUNDUP QUIKPRO SC TOTAL HERBICIDE, from freezing temperatures.

PESTICIDE DISPOSAL: Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

CONTAINER HANDLING:

Rigid Non-Refillable containers with capacities smaller or equal to 5 gallons

Non refillable container. Do not reuse or refill this container. Tripled rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration.

IMPORTANT: READ BEFORE USE

Read the entire Directions for Use, Conditions, Disclaimer of Warranties, and Limitations of Liability before using this product. If terms are not acceptable, return the unopened product container at once.

By using this product, user or buyer accepts the following Conditions, Disclaimer of Warranties, and Limitations of Liability.

CONDITIONS: The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of Bayer CropScience LP. All such risks shall be assumed by the user or buyer.

DISCLAIMER OF WARRANTIES: TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER CROPSCIENCE LP MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE, THAT EXTEND BEYOND THE STATEMENTS MADE ON THIS LABEL. No agent of Bayer CropScience LP is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER CROPSCIENCE LP DISCLAIMS ANY LIABILITY WHATSOEVER FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT.

LIMITATIONS OF LIABILITY: TO THE EXTENT CONSISTENT WITH APPLICABLE LAW THE EXCLUSIVE REMEDY OF THE USER OR BUYER FOR ANY AND ALL LOSSES, INJURIES OR DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, WHETHER IN CONTRACT, WARRANTY, TORT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE, SHALL NOT EXCEED THE PURCHASE PRICE PAID, OR AT BAYER CROPSCIENCE LP'S ELECTION, THE REPLACEMENT OF PRODUCT.

Produced for
Bayer Environmental Science
A Division of Bayer CropScience LP
5000 CentreGreen Way, Suite 400
Cary, NC 27513

Bayer

Roundup QuikPRO®

SC TOTAL Herbicide

RESIDUAL NON-SELECTIVE HERBICIDE

ACTIVE INGREDIENTS:

Indaziflam	0.089%
Diquat dibromide	0.890%
Glyphosate isopropylamine salt	20.460%
OTHER INGREDIENTS:	78.561%
TOTAL:	100.00%

Contains 1.87 lbs Glyphosate isopropylamine salt, 0.08 lbs Diquat dibormide and 0.008 lbs Indaziflam per gal

EPA Reg. No. 432-1532

FIRST AID

If swallowed:	• Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by a poison control center or doctor. • Do not give anything by mouth to an unconscious person.
If on skin:	• Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15 – 20 minutes. • Call a poison control center or doctor for further treatment advice.
If in eyes:	• Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for further treatment advice.

NOTE: Have the product container or label with you when calling a poison control center or doctor or going for treatment. **You may call toll-free 1-877-229-3763 for medical emergency information.**

Active Ingredients: 20.460% glyphosate isopropylamine salt (CAS No. 38641-94-0), 0.890% diquat dibromide (CAS No. 85-00-7), and 0.089% indaziflam (CAS No. 950782-86-2).

Produced for
Bayer Environmental Science
A Division of Bayer CropScience LP
5000 CentreGreen Way, Suite 400
Cary, NC 27513

Bayer

Contains
1.125 Gal. (144 Fl. Oz.)

XXXXXXXX USXXXXXXXXA 160930Av2 04/22

KEEP OUT OF REACH OF CHILDREN

CAUTION

See Back Panel for First Aid Instructions and Booklet for Complete Precautionary Statements and Directions for Use.

For MEDICAL and TRANSPORTATION Emergencies ONLY
Call 24 Hours A Day 1-800-334-7577
For PRODUCT USE Information Call 1-800-331-2867

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS
CAUTION

Harmful if swallowed or absorbed through skin. Causes moderate eye irritation. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse.

ENVIRONMENTAL HAZARDS

This product is toxic to fish, aquatic invertebrates, and plants. To protect the environment, do not allow pesticide to enter or run off into storm drains, drainage ditches, gutters, or surface waters. Applying this product in calm weather when rain is not predicted for the next 24 hours will help to ensure that wind or rain does not blow or wash pesticide off the treatment area. This chemical has properties and characteristics associated with chemicals detected in groundwater. This chemical may leach into ground water if used in areas where soils are permeable, particularly where the water table is shallow. This pesticide may impact water quality due to runoff of rainwater. This is especially true for poorly draining soils and soils with shallow ground water. This product is classified as having a high potential for reaching surface water via runoff for several months or more after application.

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal. **PESTICIDE STORAGE:** Store in original container and keep tightly closed. Store in a cool dry place and protect ROUNDUP QUIKPRO SC TOTAL HERBICIDE, from freezing temperatures. **PESTICIDE DISPOSAL:** Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility. **CONTAINER HANDLING: Rigid Non-Refillable containers with capacities smaller or equal to 5 gallons:** Non refillable container. Do not reuse or refill this container. Tripled rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration.

This information is for promotional purposes only. Space considerations may require information to be omitted. Always refer to the actual package for complete label verbiage. This product may not yet be available or approved for sale or use in your area.

FOSAMINE	GROUP 27	HERBICIDE

SUMTER™ S

Contains fosamine, the active ingredient used in Krenite® S.

Brush Control Agent

Water-Soluble Liquid

ACTIVE INGREDIENT:	**(% by weight)**
Ammonium salt of fosamine [ethyl hydrogen (aminocarbonyl) phosphonate]	41.5%
OTHER INGREDIENTS:	58.5%
TOTAL	100.0%

Contains 4 Lbs. of Active Ingredient per Gallon.

EPA Reg. No.: 91234-209

KEEP OUT OF REACH OF CHILDREN

CAUTION

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.
(If you DO NOT understand the label, find someone to explain it to you in detail.)

See inside label booklet for First Aid, Precautionary Statements and Directions for Use.

FIRST AID	
If in eyes:	▪ Hold eye open and rinse slowly and gently with water for 15 - 20 minutes. ▪ Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. ▪ Call a poison control center or doctor for treatment advice.
HOT LINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact SafetyCall at **1-844-685-9173** for emergency medical treatment information.	

For Chemical Emergency: Spill, Leak, Fire, Exposure, or Accident,
Call CHEMTREC Day or Night Within USA and Canada: 1-800-424-9300 or +1 703-527-3887 (collect calls accepted)

Sumter™ S is not manufactured, or distributed by Albaugh, Inc., seller of Krenite® S.

Manufactured for:
Atticus, LLC
940 NW Cary Parkway, Suite 200
Cary, NC 27513

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

1. Long-sleeved shirt and long pants
2. Shoes plus socks

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

User Safety Recommendations

Users should:

- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

DO NOT apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high-water mark. **DO NOT** contaminate water by cleaning of equipment or disposal of equipment washwaters.

POLLINATOR ADVISORY STATEMENT: This product may adversely impact the forage and habitat of local pollinators, including the monarch butterfly (and its larvae), birds, or bats if it reaches non-target areas. Protect pollinators by following label directions to minimize spray drift.

PRODUCT INFORMATION

Sumter S brush control agent is a water-soluble liquid to be diluted with water and applied as a foliar spray for control and/or suppression of many woody species.

Sumter S may be applied for use in pine plantations and non-crop sites, including highway rights-of-way, industrial sites, railroad rights-of- way, storage areas, utility and pipeline rights-of-way.

This product may be applied in pine plantations and non-crop sites that contain areas of temporary surface water caused by collection of water between planting beds, in equipment ruts, or in other depressions created by management activities. It is permissible to treat intermittent drainage, intermittently flooded low-lying sites, seasonally dry flood plains and transitional areas between upland and lowland sites when no water is present. It is also permissible to treat marshes, swamps and bogs after water has receded, as well as seasonally dry flood deltas. **DO NOT** make applications to natural or man-made bodies of water, including lakes, reservoirs, ponds, streams and canals.

Sumter S is non-flammable and nonvolatile.

ENVIRONMENTAL CONDITIONS AND BIOLOGICAL ACTIVITY

A **Sumter S** spray directed to only part of susceptible brush species will provide control of the portion sprayed, resulting in a trimming effect. Treatment with **Sumter S** generally does not immediately affect deciduous woody plants; they retain normal foliage for the remainder of the growing season. Treated susceptible plants **DO NOT** produce foliage or grow the following spring. Coniferous species treated with **Sumter S** generally displays visible symptoms following application.

Effectiveness may be reduced if, following treatment, rainfall occurs on the same day.

RESISTANCE MANAGEMENT

For resistance management, **Sumter S** is a Group 27 herbicide. Any weed population may contain or develop plants naturally resistant to **Sumter S** and other Group 27 herbicides. The resistant biotypes may dominate the weed population if these herbicides are used repeatedly in the same field. Appropriate resistance-management strategies should be followed.

To delay herbicide resistance take one or more of the following steps:

- Rotate the use of **Sumter S** or other Group 27 herbicides within a growing season sequence or among growing seasons with different herbicide groups that control the same weeds in a field.
- Use tank mixtures with herbicides from a different group if such use is permitted; where information on resistance in target weed species is available, use the less resistance-prone partner at a rate that will control the target weed(s) equally as well as the more resistance-prone partner. Consult your local extension service or certified crop advisor if you are unsure as to which active ingredient is currently less prone to resistance.
- Adopt an integrated weed-management program for herbicide use that includes scouting and uses historical information related to herbicide use and crop rotation, and that considers tillage (or other mechanical control methods), cultural (e.g., higher crop seeding rates; precision fertilizer application method and timing to favor the crop and not the weeds), biological (weed-competitive crops or varieties) and other management practices.
- Scout before and after herbicide application to monitor weed populations for early signs of resistance development. Indicators of possible herbicide resistance include: (1) failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds; (2) a spreading patch of non-controlled plants of a particular weed species; (3) surviving plants mixed with controlled individuals of the same species. If resistance is suspected, prevent weed seed production in the affected area by an alternative herbicide from a different group or by a mechanical method such as hoeing or tillage. Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment when moving between fields, and planting clean seed.
- If a weed pest population continues to progress after treatment with this product, discontinue use of this product, and switch to another management strategy or herbicide with a different mode of action, if available.
- Contact your local extension specialist or certified crop advisors for additional pesticide resistance-management and/or integrated weed-management recommendations for specific crops and weed biotypes.
- For further information or to report suspected resistance, contact Atticus, LLC at (984) 465-4754 or at www.atticusllc.com.

INTEGRATED PEST MANAGEMENT

This product may be used as part of an Integrated Pest Management (IPM) program that can include biological, cultural, and genetic practices aimed at preventing economic pest damage. IPM principles and practices include field scouting or other detection methods, correct target pest identification, population monitoring, and treating when target pest populations reach locally determined action thresholds. Consult your state cooperative extension service, professional consultants or other qualified authorities to determine appropriate action treatment threshold levels for treating specific pest/crop systems in your area.

Mandatory Spray Drift

Aerial Applications

- **DO NOT** release spray at a height greater than 10 ft above the vegetative canopy, unless a greater application height is necessary for pilot safety.
- For all applications, applicators are required to use a medium or coarser spray droplet size (ASABE S572.1).
- The boom length must not exceed 65% of the wingspan for airplanes or 75% of the rotor blade diameter for helicopters.
- Applicators must use ½ swath displacement upwind at the downwind edge of the field.
- Nozzles must be oriented so the spray is directed toward the back of the aircraft.
- **DO NOT** apply when wind speeds exceed 10 miles per hour at the application site.
- **DO NOT** apply during temperature inversions.

Ground Applications

- Apply with the nozzle height recommended by the manufacturer, but no more than 3 feet above the ground or crop canopy.
- For all applications, applicators are required to use a medium or coarser spray droplet size (ASABE S572.1).
- **DO NOT** apply when wind speeds exceed 10 miles per hour at the application site.
- **DO NOT** apply during temperature inversions.

Boom-less Ground Applications:

- Applicators are required to use a medium or coarser droplet size (ASABE S572.1) for all applications.
- **DO NOT** apply when wind speeds exceed 10 miles per hour at the application site.
- **DO NOT** apply during temperature inversions.

Spray Drift Advisories

- THE APPLICATOR IS RESPONSIBLE FOR AVOIDING OFF-SITE SPRAY DRIFT.
- BE AWARE OF NEARBY NON-TARGET SITES AND ENVIRONMENTAL CONDITIONS.
- IMPORTANCE OF DROPLET SIZE

  An effective way to reduce spray drift is to apply large droplets. Use the largest droplets that provide target pest control. While applying larger droplets will reduce spray drift, the potential for drift will be greater if applications are made improperly or under unfavorable environmental conditions.

  Controlling Droplet Size - Ground Boom
  - Volume - Increasing the spray volume so that larger droplets are produced will reduce spray drift. Use the highest practical spray volume for the application. If a greater spray volume is needed, consider using a nozzle with a higher flow rate.
  - Pressure - Use the lowest spray pressure recommended for the nozzle to produce the target spray volume and droplet size.
  - Spray Nozzle - Use a spray nozzle that is designed for the intended application. Consider using nozzles designed to reduce drift.

  Controlling Droplet Size - Aircraft
  - Adjust Nozzles - Follow nozzle manufacturers recommendations for setting up nozzles. Generally, to reduce fine droplets, nozzles should be oriented parallel with the airflow in flight.
- BOOM HEIGHT - Ground Boom

  Use the lowest boom height that is compatible with the spray nozzles that will provide uniform coverage. For ground equipment, the boom should remain level with the crop and have minimal bounce.
- RELEASE HEIGHT - Aircraft

  Higher release heights increase the potential for spray drift. When applying aerially to crops, **DO NOT** release spray at a height greater than 10 ft above the crop canopy, unless a greater application height is necessary for pilot safety.
- SHIELDED SPRAYERS

  Shielding the boom or individual nozzles can reduce spray drift. Consider using shielded sprayers. Verify that the shields are not interfering with the uniform deposition of the spray on the target area.
- TEMPERATURE AND HUMIDITY

  When making applications in hot and dry conditions, use larger droplets to reduce effects of evaporation.
- TEMPERATURE INVERSIONS

  Drift potential is high during a temperature inversion. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. The presence of an inversion can be indicated by ground fog or by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing. Avoid applications during temperature inversions.
- WIND

  Drift potential generally increases with wind speed. AVOID APPLICATIONS DURING GUSTY WIND CONDITIONS.
  Applicators need to be familiar with local wind patterns and terrain that could affect spray drift.
- Boom-less Ground Applications:

  Setting nozzles at the lowest effective height will help to reduce the potential for spray drift.
- Handheld Technology Applications:

  Take precautions to minimize spray drift.

IMPORTANT PRECAUTIONS – PINE PLANTATIONS AND NON-CROP SITES

- Cutting of treated stems of brush before they are completely dead may result in sprouting.
- Drift or spray mist contact with desirable trees, shrubs, or other plants may result in injury.
- Not registered for sale or use in California or Arizona.

TANK MIXES

It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

Sumter S herbicide may be tank mixed with other herbicides and/or adjuvant registered for use in pine plantations and non-crop sites. Follow all use directions, precautions, and restrictions on labels of tank-mixed products.

SPRAY EQUIPMENT

Sumter S may be applied using high volume or low volume ground sprayers as well as aircraft (helicopter only). Application equipment must be calibrated before making applications of **Sumter S**.

SPRAY ADJUVANTS

A penetrating type oil-based adjuvant (surfactant or crop oil concentrate) may be used with **Sumter S**. The adjuvant must be mixed in the spray solution at a minimum concentration of 1/4% by volume (1 quart per 100 gallons of spray solution) or at the manufacturer's specified dosage.

If foaming is a problem during mixing, an anti-foam agent may be added.

MIXING INSTRUCTIONS

1. Fill spray tank ½ full of water.
2. With the agitator running, add the desired amount of **Sumter S**.
3. If using a tank mix partner, add the specified amount. Follow the use precautions and directions on the tank mix partner label.
4. Add spray adjuvant as last ingredient prior to filling the spray tank with water.
5. Agitate the spray solution thoroughly.

After **Sumter S** has been thoroughly mixed in the spray tank, agitation of the spray solution is not required.

SPRAY CLEAN-UP

Thoroughly clean all mixing and spray equipment immediately following applications of **Sumter S**. Flush tank, pump, hoses and boom with several changes of water after removing the nozzle tips and screens (clean these parts separately).

Dispose of the rinsate on a labeled site or at an approved waste disposal facility.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

DO NOT apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

DO NOT apply this product through any type of irrigation system. **DO NOT** use on food or feed crops.

Sumter S must be used only in accordance with the labeling, or in supplemental Atticus, LLC labeling.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

DO NOT enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 12 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, including plants, soil, or water, is:

- Coveralls
- Shoes plus socks

PINE PLANTATIONS PREPARATION SITE

Sumter S may be applied for the post-harvest (pre-plant) control of undesirable pine and hardwood seedlings and saplings and suppression of brush and vines to aid site planting preparation for southern pines and/or genetically improved pines.

APPLICATION INFORMATION

Apply as a foliar spray from mid-summer to when the target tree pests begin defoliation in late summer or fall. Applications of **Sumter S** may be made by ground or air (helicopter only) equipment. Use sufficient water to ensure complete coverage of the vegetation, 20 to 50 gallons per acre by ground and 10 to 15 gallons per acre by air.

USE RATES AND PLANTS CONTROLLED

Pine Seedlings and Saplings

Apply 2 to 4 quarts (2 - 4 lbs ai/A) of **Sumter S** per acre for the control of seedling and sapling pines when burning is allowed on the site. Apply 4 to 6 quarts (4 – 6 lbs ai/A) of **Sumter S** per acre to control seedling and sapling pines when burning is not allowed on the site.

Use the higher rate when either pine saplings predominate or when high infestations of seedling pines are in the area to be sprayed.

RESTRICTIONS

- **DO NOT** apply more than 6 quarts (6 lbs ai/A) of **Sumter S** per single application when burning is not allowed on the site.
- **DO NOT** apply more than 4 quarts (4 lbs ai/A) of **Sumter S** per single application when burning is allowed on the site.
- **DO NOT** apply more than 6 quarts (6 lbs ai/A) of **Sumter S** per acre per year.
- **DO NOT** make more than 2 applications per year when burning is allowed on the site.
- **DO NOT** make more than 1 application per year when burning is not allowed on the site.
- **DO NOT** make second application within 30 days of first application.

Combinations of Pine and Hardwood Seedlings and Saplings

To control a combination of pine and hardwood seedlings and saplings, apply a tank mixture of **Sumter S** at use rates indicated for spraying pine seedlings and saplings plus Imazapyr (4 pound active per gallon) at 8 to 20 ounces per acre (0.25 – 0.625 lbs ai/A). This tank mix may be applied for the control of Ash, Blackberry, Black gum, Black locust, Box elder, Cherry, Dogwood, Elms (winged, slippery), Oaks (red, white), Red maple, Sassafras, and Sourwood.

Follow all use directions, precautions and restrictions on Imazapyr product labels.

RESTRICTIONS

- **DO NOT** apply more than 6 quarts (6 lbs ai/A) of **Sumter S** per single application when burning is not allowed on the site.
- **DO NOT** apply more than 4 quarts (4 lbs ai/A) of **Sumter S** per single application when burning is allowed on the site.
- **DO NOT** apply more than 6 quarts (6 lbs ai/A) of **Sumter S** per acre per year.
- **DO NOT** make more than 2 applications per year when burning is allowed on the site.
- **DO NOT** make more than 1 application per year when burning is not allowed on the site.
- **DO NOT** make second application within 30 days of first application.

Brush and Vine Suppression

The application of **Sumter S** plus Imazapyr will also provide suppression of brush and vines, including, American beautyberry (French mulberry), Baccharis (groundsel tree), Vaccinium (blueberry) species, Wax myrtle (bayberry) and Wild grape.

*Suppression – a visible reduction in plant population and/or plant vigor as compared to an untreated area and generally not accepted as control.

PRECAUTIONS

- Cutting of treated stems of brush before they are completely dead may result in sprouting.
- Drift or spray mist contact with desirable trees, shrubs, or other plants may results in injury.

RESTRICTIONS

- **DO NOT** apply more than 1.5 gallons (6 lbs ai/A) of **Sumter S** per single application when burning is not allowed on the site.
- **DO NOT** apply more than 1 gallon (4 lbs ai/A) of **Sumter S** per single application when burning is allowed on the site.
- **DO NOT** apply more than 3 gallons (12 lbs ai/A) of **Sumter S** per acre per year.
- **DO NOT** make more than 2 applications per year.
- **DO NOT** make second application within 30 days of first application.

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

DO NOT enter or allow entry into treated areas until sprays have dried to perform hand tasks.

NON-CROP SITES

Sumter S may be applied for general weed control as follows: uncultivated non-agricultural areas (including airports, highway, railroad and utility rights-of-way, sewage disposal areas); uncultivated agricultural areas (non-crop producing, which includes: farmyards, fuel storage areas, fence rows, barrier strips); industrial sites (outdoor, including lumberyards, pipeline and tank farms).

APPLICATION INFORMATION

Make a foliar application of the specified rate of **Sumter S** from full leaf expansion in the spring to the development of full canopy coloration in the fall for deciduous species to be controlled. Coniferous species, listed in the "USE RATES AND PLANTS CONTROLLED" chart below, may be treated at anytime during the growing season.

LOW- AND HIGH-VOLUME DIRECTED SPRAYS

Prepare either a low-volume or high-volume spray solution of **Sumter S**. For the low-volume directed spray application, **DO NOT** exceed a spray concentration of 30% by volume. For the high-volume directed spray application, **DO NOT** use a spray concentration of less than 1.5% by volume.

Prepare the desired volume of spray solution by mixing the amount of this product in water as shown in the Spray Solution Table. Apply a quantity of spray solution which will thoroughly and uniformly cover the target plant foliage (spray to wet for high-volume applications). Rate and volume per acre will depend on the plant species, the height and density of plant growth as well as the type of application equipment used. On tall or dense stands of brush it may be necessary to spray from opposite sides in order to obtain thorough coverage of the foliage. Use the higher rate range on stands where difficult-to-control species are dominant. See the "USE RATES AND PLANTS CONTROLLED" section of the label for use rates and a listing of **difficult-to-control species.

PRECAUTIONS

- Cutting of treated stems of brush before they are completely dead may result in sprouting.

RESTRICTIONS

- **DO NOT** apply more than 3 gallons of **Sumter S** per acre (12.0 lbs ai/A) in a single application
- **DO NOT** apply more than 6 gallons of **Sumter S** per acre (24.0 lbs ai/A) per acre per year.
- **DO NOT** make more than 2 applications per year.
- **DO NOT** make second application within 30 days of first application.
- **DO NOT** use for the control of woody plants on lawns, walks, driveways, tennis courts or similar areas.

AERIAL and BROADCAST APPLICATIONS

Prepare a spray solution using 1.5 to 3 gallons (6 - 12 lbs ai/A) of **Sumter® S** in 10 to 40 gallons of water (see Spray Solution Table). For broadcast ground applications, use this product at the rate of 1.5 to 6 gallons (6 – 24 lbs ai/A) per acre. For aerial applications, use this product at the rate of 1.5 to 3 gallons (6 - 12 lbs ai/A) per acre. Use sufficient spray volume to uniformly and thoroughly cover the foliage. Use the higher concentrations on stands in which difficult-to-control species are predominant (see "USE RATES AND PLANTS CONTROLLED" section for a listing of **difficult-to-control species).

RESTRICTIONS

- **DO NOT** apply more than 6 gallons per acre (24.0 lbs ai/A) when using ground equipment.
- **DO NOT** apply more than 3 gallons of **Sumter S** per acre (12.0 lbs ai/A) when using aerial equipment.

SPRAY SOLUTION TABLE

Desired Volume	Amount of Sumter S						
	1.5%	2%	3%	4%	10%	20%	30%
5 Gal	**	**	**	0.8 qt	0.5 gal	1 gal	1.5 gal
10 Gal	0.6 qt	0.8 qt	1.2 qt	1.6 qt	1 gal	2 gal	3 gal
20 Gal	1.2 qt	1.6 qt	0.6 gal	0.8 gal	2 gal	4 gal	6 gal
30 Gal	0.45 gal	0.6 gal	0.9 gal	1.2 gal	3 gal	6 gal	**
40 Gal	0.6 gal	0.8 gal	1.2 gal	1.6 gal	4 gal	**	**
50 Gal	0.75 gal	1 gal	1.5 gal	2 gal	5 gal	**	**
100 Gal	1.5 gal	2 gal	3 gal	4 gal	**	**	**

Manufactured for:
Atticus, LLC
940 NW Cary Parkway, Suite 200
Cary, NC 27513

USE RATES AND PLANTS CONTROLLED

Sumter S effectively controls or suppresses (**difficult-to-control listings) the following plants when applied at the use rates shown.
**Suppression – a visible reduction in plant population and/or plant vigor as compared to an untreated area and generally not accepted as control.

1.5 to 6 gal (6 – 24 lbs ai/A) Sumter S per acre			
Alder, red	*Alnus rubra*	Oak, red	*Quercus rubra*
Ash, white	*Fraxinus Americana*	Oak, water	*Quercus arkansana*
Aspen, quaking	*Populus tremuloides*	Oak, white	*Quercus alba*
Birch	*Betula* sp.	Persimmon**	*Diospyros virginiana*
Blackberry	*Rubus* sp.	Pine, loblolly	*Pinus taeda*
Blackgum	*Nyssa sylvatica*	Pine, Virginia	*Pinus virginiana*
Cherry, black**	*Prunus serotina*	Poplar, yellow (tulip tree)**	*Liriodendron tulipifera*
Cherry, pin	*Prunus pensylvanica*	Salmonberry	*Rubus spectabilis*
Chokecherry, common**	*Prunus virginiana*	Sassafras**	*Sassafras sassafras*
Elm**	*Ulmus* sp.	Sourwood**	*Oxydendrum arboretum*
Fern, bracken	*Pteridium acquilinum*	Spurge, leafy***	*Euphoribia ésula*
Hawthorn**	*Crataegus* sp.	Sumac	*Rhus* sp.
Hickory**	*Carya* sp.	Sweetgum	*Liquidambar styraciflua*
Locust, black	*Robinia pseudoaccacia*	Tallow, Chinese	*Sapium Sebiferum*
Maple, bigleaf**	*Acer macrophyllum*	Thimbleberry	*Rubus parviflorus*
Maple, red**	*Acer rubrum*	Willow**	*Salix* sp.
Maple, vine	*Acer circinatum*		

2 to 6 gal (3 – 24 lbs ai/A) Sumter S per acre			
Basswood, American**	*Tilia Americana*	Grape, wild	*Vitis* sp.
Bindweed, field***	*Convolvulus arvensis*	Pine, Eastern white	*Pinus strobes*
Cottonwood, Eastern	*Populus deltoids*	Plum, wild	*Prunus munsoniana*
Elder, American	*Sambucus canadenis*	Rose, multiflora	*Rosa multiflora*
Elm, slippery	*Ulmus rubra*	Sycamore	*Platanus occidentalis*
Elm, winged**	*Ulmus alata*	Tree-of-heaven	*Ailanthus altissima*

**Difficult-to-control or Suppression
Suppression – A visible reduction in plant population and/or plant vigor as compared to an untreated area and generally not accepted as control.
***Make applications after plants begin to bloom.

TANK MIXTURES

It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

Sumter S plus metsulfuron methyl

Sumter S plus metsulfuron methyl herbicide may be applied for the control of Eastern red cedar and improved control of Ailanthus (tree of heaven), Ash, Cherry, Elm and Red maple.
Apply 1.5 to 3 gallons (6 – 12 lbs ai/A) of **Sumter S** plus specified application rate of metsulfuron methyl per acre. Apply a quantity of spray solution that will thoroughly and uniformly cover the target brush/trees without causing unnecessary run-off (spray to wet). If the site contains difficult to control species (see ** in "USE RATES AND PLANTS CONTROLLED" section), use the higher rates of both **Sumter S** and metsulfuron methyl.
Follow the use directions, precautions and restrictions on the metsulfuron methyl label.

Sumter S plus imazapyr

Sumter S plus imazapyr herbicide (2 pounds active ingredient per gallon) may be applied for the control of Box elder, Hackberry, Persimmon, Wild pecan and Dogwood and for improved control of Ash, Black Cherry, Elm, Maple, Sassafras and Willow.
Apply 1.5 to 3 gallons (6 – 12 lbs ai/A) of **Sumter S** plus 8 to 20 ounces of imazapyr per acre. Apply a quantity of the spray solution that will thoroughly and uniformly cover the target brush without causing unnecessary run-off (spray to wet). If the site contains difficult-to-control species (see ** in "USE RATES AND PLANTS CONTROLLED" section), use the higher rates of both **Sumter S** and imazapyr.
Follow the use directions, precautions and restrictions on the Imazapyr label.

Sumter S plus picloram

Sumter S plus picloram (2 pound active per gallon) herbicide may be applied for the control of Hackberry, Persimmon, and Walnut for improved control of Cherry, Elm, Hickory, Locust, Oak, Poplar, Sassafras, Sumac, and Sweet gum.
Apply 1.5 to 3 gallons (6 – 12 lbs ai/A) of **Sumter S** plus 1 to 2 pints of picloram per acre. Apply a quantity of the spray solution that will thoroughly and uniformly cover the target brush without causing unnecessary run-off (spray to wet). If the site contains difficult-to-control species (see ** in "USE RATES AND PLANTS CONTROLLED" section), use the higher rates of both **Sumter S** and picloram.
Follow the use directions, precautions and restrictions on the picloram label.

SIDE TRIMMING

For control of only a portion of a plant, direct the spray solution to thoroughly cover (spray to wet) only the portion of the plant to be controlled.

PRECAUTIONS

- Drift or spray mist contact with desirable trees, shrubs, or other plants may results in injury.

RESTRICTIONS

- **DO NOT** apply more than 3 gallons of **Sumter S** per acre (12.0 lbs ai/A) in a single application.
- **DO NOT** apply more than 6 gallons of **Sumter S** per acre (24.0 lbs ai/A) per acre per year.
- **DO NOT** make more than 2 applications per year.
- **DO NOT** make second application within 30 days of first application.
- Not registered for sale or use in California or Arizona.

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CUT SURFACE APPLICATIONS

Sumter S may be used for controlling the re-sprouting of cut stumps of the plants listed in the "USE RATES AND PLANTS CONTROLLED" section. Control of re-sprouting in plants listed as "difficult to control" may not be as effective.

Sumter S may either be used undiluted or mixed with water. Use the method that is best suited for the particular application equipment. When mixing with water a ratio of no less than 1 part **Sumter S** to 1 part water on a volume basis must be used. Apply the undiluted or mixed solution to wet the area adjacent to the cambium and bark around the entire circumference and the sides of the cut stumps. The sides of the stumps must be wet down to the root collar area.

Apply with appropriate application equipment using low spray pressure. Applications can be made any time of the year, except during periods of heavy sap flow in the spring. Applications must be made soon after cutting, before the stump surface forms a layer of callous tissue (hardens off).

To prevent freezing of the spray solution, add ethylene glycol (commercial antifreeze) to the water used in preparing the spray solution. Add the antifreeze according to the manufacturer's label for preventing freezing of water at the lowest expected ambient temperature. **Sumter S** will freeze at -11°F. A 1:1 aqueous dilution of **Sumter S** will freeze at 21°F.

A spray pattern indicator may be used in the spray solution to facilitate application. The user must check the compatibility of the spray indicator with the spray solution prior to using large quantities.

STORAGE AND DISPOSAL

DO NOT contaminate water, food or feed by storage or disposal.

PESTICIDE STORAGE: Store in a tightly closed container in a cool, dry place. Store in original container and out of reach of children, preferably in a locked storage area.

PESTICIDE DISPOSAL: Pesticide spray mixture or rinsate that cannot be used must be disposed of in a landfill approved for pesticides. Improper disposal of excess pesticide spray mixture or rinsate is a violation of Federal law. If these wastes cannot be disposed of by the use according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER HANDLING:

For plastic containers ≤ 5 gallons: Nonrefillable Container: DO NOT reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple Rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by other procedures allowed by state and local authorities.

For plastic containers > 5 gallons: Nonrefillable container. DO NOT reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple Rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Recap and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by other procedures allowed by state and local authorities.

LIMITATION OF WARRANTY AND LIABILITY

IMPORTANT: READ BEFORE USE. Read the entire Directions for Use, Conditions of Warranties and Limitations of Liability before using this product. If these terms and conditions are not acceptable, return the unopened product container at once. By using this product, user or buyer accepts the following Disclaimer of Warranties and Limitations of Liability. **CONDITIONS:** The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Ineffectiveness, injury, and other unintended consequences may result because of such factors as manner of use or application (including misuse), the presence of other materials, weather conditions, and other unknown factors, all of which are beyond the control of ATTICUS, LLC. To the extent consistent with applicable law, all such risks shall be assumed by the user or buyer. **DISCLAIMER OF WARRANTIES:** To the extent consistent with applicable law, ATTICUS, LLC makes no other warranties, express or implied, of merchantability or of fitness for a particular purpose or otherwise, that extend beyond statements on this label. **LIMITATIONS OF LIABILITY:** To the extent consistent with applicable law, neither ATTICUS, LLC the manufacturer, nor the Seller shall be liable for any indirect, special, incidental or consequential damages resulting from the use, handling, application, storage, or disposal of this product. To the extent consistent with applicable law, the exclusive remedy of the user or buyer for any and all losses, injuries or damages resulting from the use, handling, application, or storage of this product, whether in contract, warranty, tort, negligence, strict liability or otherwise, shall not exceed the purchase price paid.

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Manufactured for:
Atticus, LLC
940 NW Cary Parkway, Suite 200
Cary, NC 27513

ALLIGARE

BROMACIL/DIURON 40/40

Specimen Label

ACTIVE INGREDIENTS:	**By Weight**
Bromacil: (5-bromo-3-sec-butyl-6-methyluracil)	40.0%
Diuron: (3-(3,4-dichlorphenyl)-1,1-dimethylurea)	40.0%
OTHER INGREDIENTS:	20.0%
TOTAL:	100.0%

EPA Reg. No. 81927-3

KEEP OUT OF REACH OF CHILDREN

CAUTION

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.
(If you do not understand this label, find someone to explain it to you in detail.)

FIRST AID	
If on skin or clothing:	• Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
If in eyes:	• Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
If inhaled:	• Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. • Call a poison control center or doctor for further treatment advice.
If swallowed:	• Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by the poison control center or doctor. • Do not give anything by mouth to an unconscious person.
HOT LINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-424-9300 for emergency medical treatment information.	

Manufactured for:
Alligare, LLC
1565 5th Avenue
Opelika, AL 36801

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION: Harmful if swallowed. Harmful if absorbed through skin. Causes moderate eye irritation. Avoid contact with eyes, skin, or clothing.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical resistant to this product are made out of any waterproof material. If you want more options, follow the instructions for Category A on an EPA chemical resistance category selection chart.

All pilots, flaggers and groundboom applicators must wear:
- Long-sleeved shirt and long pants and,
- Shoes plus socks

All mixers, loaders, other applicators, and other handlers must wear:
- Long-sleeved shirt and long pants,
- Shoes plus socks,
- Chemical-resistant gloves,
- A NIOSH-approved particulate filtering respirator equipped with N, R, or P class filter media (The respirator should have a NIOSH approval number prefix TC-84A and it is recommended that you require the respirator wearer be fit tested, and trained in the use, maintenance, and limitations of the respirator),
- Chemical-resistant apron when mixing, loading, or cleaning equipment or spills

See engineering controls for additional requirements.

Discard clothing or other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

ENGINEERING CONTROL STATEMENT

Pilots must use an enclosed cockpit that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(6)].

Flaggers supporting aerial applications must use an enclosed cab that meets the definition in the Worker Protection Standard for Agricultural Pesticides [40 CFR 170.240(d)(5)] for dermal protection. In addition, flaggers must wear long-sleeved shirt, long pants, shoes, and socks.

USER SAFETY RECOMMENDATIONS

Users should:
- Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing/PPE immediately, if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

For terrestrial uses, do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment washwaters.

Bromacil is known to leach through soil and has been found in ground water as a result of normal field use. Users are advised not to apply in areas where soils are permeable, particularly where ground water is used for drinking water. Consult with the pesticide state lead agency for information regarding soil permeability and aquifer vulnerability in your area. Apply this product only as specified on this label.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 12 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:
- Coveralls
- Chemical resistant gloves made of any waterproof material
- Shoes plus socks

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are not within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

Non-crop weed control is not within the scope of the Worker Protection Standard.

Do not enter or allow others to enter the treated area until sprays have dried.

GENERAL INFORMATION

Bromacil/Diuron 40/40 is a selective herbicide for use in non-crop areas. Bromacil/Diuron 40/40 controls many annual weeds at lower rates and perennial weeds at the highest rates allowed by this label.

As this product must be absorbed through the root system of weeds, best results are obtained if treatment is made just before or after weeds have germinated to moist soil and moisture is supplied by rainfall or sprinkler irrigation within two weeks of application. Weed control symptoms are slow to appear and may not become apparent until the chemical has been carried into the root zone of the weeds by moisture. The degree and duration of control will vary with the amount of herbicide applied, rainfall, soil texture, and other soil and water management practices.

USE PRECAUTIONS AND RESTRICTIONS

To avoid injury to or loss of desirable trees or other plants, observe the following use guidelines:
- Do not apply this product using any type of irrigation system.
- Aerial application is prohibited for all uses except for rights of way.
- Except as instructed, do not apply or drain or flush equipment on or near desirable trees or other plants, or on areas where their roots may extend, or in locations where the chemical may be washed or moved into contact with their roots.
- Do not use in any recreational areas or in or around homes, in home fruit plantings, on lawns, walks, tennis courts, driveways, or other similar areas.
- Do not allow dry powder or spray to drift to desirable plants.
- Keep from contact with seeds, insecticides, fungicides, and fertilizers.
- Do not store near well sites.
- Do not graze cattle in treated areas.
- Thoroughly clean all traces of Bromacil/Diuron 40/40 from application equipment immediately after use. Flush tank, pump, hoses, and boom with several changes of water after removing nozzle tips and screens (clean these parts separately).
- Treated areas may be planted to citrus one year after last application. Do not replant to other crops within two years after last application as injury may result.

When Preparing for Use:
- Calibrate sprayers only with clean water away from well sites.
- Regularly inspect spray equipment.
- Mix only enough Bromacil/Diuron 40/40 for the specific application.
- Do not discharge excess material on the soil at a single spot in the field/grove or mixing/loading station.
- Ensure accurate measurement of pesticides.
- Avoid over-filling of spray tank.
- Dilute and agitate excess solution and apply at labeled rates/uses.

Tank Mixture Specific Guidelines:
- Bromacil/Diuron 40/40 may be tank mixed with other suitable herbicides registered for non-agricultural use. Use only those herbicides approved for use in non-agricultural areas if applying to non-agricultural areas. Refer to the label(s) of the other products being added to the tank mix for any additional use information or restrictions. Before applying a tank mixture, read and observe all label directions for each product. *Follow the most restrictive label guidelines.*
- Bromacil/Diuron 40/40 may also be tank mixed with appropriate adjuvants used with herbicides in non-agricultural uses. Use only those adjuvants approved for use in non-agricultural areas if applying to non-agricultural areas.
- When tank mixing with Bromacil/Diuron 40/40, completely mix the product in the spray tank carrier before adding any other herbicide or spray adjuvant. A small compatibility test (see below) should be performed prior to adding the products into the spray tank using a combination of products not previously used. Refer to the Spray Preparation section of this label for further information.
- The spray tank contents must be thoroughly re-agitated if they are allowed to settle for any period of time.

APPLICATION INFORMATION

IMPORTANT NOTE: Bromacil/Diuron 40/40 use rates listed on this label are for broadcast treatments. For band treatments, use proportionately less.

Follow the application guidelines below:
- Apply using a properly calibrated fixed-boom power sprayer.
- Because over application of the herbicide may result in injury to the crop or successive crops, the spray booms must be shut off while starting, turning, slowing or stopping.
- Use sufficient spray volume, a minimum of 10 gallons per acre, to provide uniform coverage of the treated areas and to allow proper dispersion and suspension of the product in the spray tank.
- Prior to and during application, continuous agitation is necessary to keep the product in suspension. Agitate spray tank contents by mechanical or hydraulic means; *do not use air agitation*. Note: If a by-pass or return line is used, it should terminate at the bottom of the tank to minimize foaming.
- Nozzle screens should be 50 mesh or larger.
- Best results are obtained if Bromacil/Diuron 40/40 is applied to bare ground. If dense populations of hard-to-kill weed species are present, control of these weeds prior to application of Bromacil/Diuron 40/40 is recommended. If weeds are present at the time of application, tank mixtures with foliar active herbicides are recommended (refer to the Tank Mixture Specific Guidelines section of this label for guidelines on using Bromacil/Diuron 40/40 in a tank mixture).

SPRAY PREPARATION

Mixing in Water – Fill tank half full with water. Start agitation system and while continuing to add water, add Bromacil/Diuron 40/40 and each additional component of any tank-mix separately. Be sure to agitate the entire time.

Test for Mixing with Other Herbicides – Determine the tank mixture partner(s) compatibility with Bromacil/Diuron 40/40 by following the directions below. If the testing procedure shows the mixture to be compatible, Bromacil/Diuron 40/40 may be used in the tank mixture.
1. Put 1 pint of water into a quart jar with a tightly sealing lid.
2. In a separate container, combine 2 teaspoons of Bromacil/Diuron 40/40 with 2 tablespoonfuls of water; mix thoroughly and add to the water.
3. Close the jar and shake well.
4. If additional herbicides are to be used in the mixture, follow steps two and three above for each additional herbicide.
5. Once all components of the tank mix are combined in the test jar, watch the mixture for several seconds and then check again in 30 minutes. If mixture does not separate, foam, gel or become lumpy, it may be used.

SPRAY TANK CLEAN OUT

Thoroughly clean all traces of Bromacil/Diuron 40/40 from application equipment immediately after use. Flush the tank, pump, hoses, and boom with several changes of water after removing nozzle tips and screens (clean these parts separately). Dispose of the equipment wash water by applying it to a use-site listed on this label.

VERIFICATION OF SAFE ROTATIONAL USE IN ARID CLIMATES

In arid climates (areas that experience 10 inches of rainfall or less in a year) or areas that have experienced drought conditions for one or more years, a field bioassay should be conducted prior to planting any desired crop(s). The bioassay may consist of a test strip of the crop and should cross the entire field, including high and low lying portions. If a test strip of the crop(s) intended for production is not successfully grown to maturity, it may be necessary for the two-year crop rotation interval to be extended.

WEED RESISTANCE TO HERBICIDES

Weeds may become resistant to any herbicide if an herbicide is used in the same field repeatedly over several years. If weed control is unsatisfactory, it may be necessary to retreat the problem area using a product with a different mode of action.

The following suggestions will assist in managing herbicide resistance:
- It may be necessary to change cropping practices within and between crop seasons. For example, using a combination of tillage, retreatment, tank-mixtures and/or sequential herbicide applications that have different modes of action.
- Preventing weeds from going to seed (by mowing, tilling, etc.) will prevent the spread of resistant plants.
- Consult your agricultural dealer, consultant, applicator, and/or appropriate state agricultural extension service representative for specific alternative cultural practices or herbicide recommendations available in your area.

INTEGRATED PEST MANAGEMENT

This product may be used as part of an Integrated Pest Management (IPM) program such as biological, cultural, and genetic practices aimed at preventing economic pest damage. IPM principles and practices include field scouting or other detection methods, correct target pest identification, population monitoring, and treating when target pest populations reach locally determined action thresholds. Consult your state cooperative extension service, professional consultants or other qualified authorities to determine appropriate action treatment threshold levels for treating specific pest/crop systems in your area.

SPRAY DRIFT

Use best practices to avoid drift to all other crops and non-target areas. Do not apply when conditions favor drift from target areas. The interaction of many equipment- and weather-related factors determine the potential for spray drift. Avoiding spray drift at the application site is the responsibility of the applicator. The applicator must follow the most restrictive precautions to avoid drift, including those found in this labeling as well as applicable state and local regulations and ordinances. A drift control agent may reduce drift, however, it may also decrease weed control.

Make aerial or ground applications only when the wind speed is less than or equal to 10 miles per hour. Do not make aerial or ground applications into temperature inversions. Apply with medium or coarser spray (according to ASAE standard 572) for standard nozzles.

For ground applications: When applying to non-crop areas, use the lowest nozzle height consistent with safety and efficacy. Direct spray into target vegetation.

For aerial applications (rights-of-way only): The spray boom should be mounted on the aircraft so as to minimize drift caused by wing tip vortices. The boom length must not exceed 75% of the wingspan or 90% of rotor blade diameter. Use upwind swath displacement. When applying to rights of way, apply at a minimum safe altitude above the area being treated. Do not apply by air if sensitive non-target crops are within 100 feet of the application site.

NON-AGRICULTURAL USES

Use Restrictions – State of Florida

In Florida, the use of Bromacil/Diuron 40/40 (bromacil + diuron) is prohibited in Hardee, Highland, Polk, Orange and Lake Counties. For Non-Agricultural Usage in all other areas of the state, do not apply more than 16 pounds of Bromacil/Diuron 40/40 per acre per year. This amount corresponds to 6.4 pounds of bromacil and 6.4 pounds of diuron, the active ingredients in Bromacil/Diuron 40/40. The maximum allowable use rate for bromacil is 6.4 pounds per acre per year inclusive of all bromacil formulations.

Instructions for Non-Agricultural Uses of Bromacil/Diuron 40/40

For general weed control in uncultivated non-agricultural areas (for example: airports, highway, railroad and utility rights-of-way, sewage disposal areas), uncultivated non-crop producing areas (for example: farmyards, fuel storage areas, fence rows, barrier strips) and outdoor industrial sites (for example: lumberyards, pipelines and tank farms).

Combination with other herbicides broadens the spectrum of weeds controlled. In addition, total vegetation control can be achieved with higher rates of Bromacil/Diuron 40/40 plus residual-type companion herbicides.

To improve the control of emerged weeds, add surfactant at 0.25% by volume.

Do NOT apply this product to:
- Open water (such as creeks, estuaries, lakes, reservoirs, rivers, streams or salt water bays);
- When water is present in fresh water wetlands (such as bogs, marshes, potholes or swamps);
- Saltwater marshes within tidal areas;
- Ditches, banks along waterways or impervious substrates; or,
- Areas near desirable plants where roots of these plants may extend.

Application Information

Apply Bromacil/Diuron 40/40 using a properly calibrated fixed-boom power sprayer with sufficient spray volume (minimum of 10 gallons per acre) to provide uniform coverage of the treated area and to allow proper dispersion and suspension of the product in the spray tank. All use rates of Bromacil/Diuron 40/40 are expressed for broadcast treatments. For band treatments, use proportionately less.
- Apply a maximum of two applications per year.
- The minimum retreatment interval is 90 days.
- A maximum of 12 pounds active ingredient bromacil per year is allowed.
- A maximum of 12 pounds diuron active ingredient is allowed per year in areas of high rainfall or dense vegetation. A maximum of 8 pounds diuron active ingredient is allowed in all other areas.

Notes for Non-Agricultural Uses:
- For small areas, a hand sprayer or sprinkling may be used. When preparing to a small area, 1/4 cupful of Bromacil/Diuron 40/40 per 200 sq. ft. is approximately 15 pounds per acre.
- Use a spray volume of at least 40 gallons per acre to ensure uniform coverage.
- Do not apply to sites which have roots of desirable plants growing into the treatment zone as plant injury or death may occur.
- Do not apply to hard or impervious soils, water saturated soils or to any surface that does not allow the herbicide to be moved into the soil horizon with moisture. Unusually heavy rainfall shortly after application may move the product off-target to the lowest surrounding point and cause plant injury or death.
- If herbicide treated soil is disturbed by any physical or mechanical means, the herbicide barrier is disrupted and the likelihood of non-performance may increase. For best performance results, make sure the treatment area is stable after the application for the desired weed control period.

Application Timing
Apply Bromacil/Diuron 40/40 as a preemergence spray prior to or during the rainy season when weeds are actively germinating or growing. Moisture is required to activate and move Bromacil/Diuron 40/40 into the root zone of weeds for preemergence control. For best preemergence weed control, apply prior to rainfall and weed germination.

In arid regions of the Western U.S., to ensure adequate moisture for activation and even dispersion of the herbicide in the soil profile, Bromacil/Diuron 40/40 should be applied several weeks prior to the fall freeze or shortly after spring thaw to coincide with periods of higher seasonal moisture. *Do not treat frozen or saturated soils, or soils that are non-receptive to percolation.*

Retreatments of Bromacil/Diuron 40/40 may be made when annual weeds and grasses reappear on sites where weed growth has been controlled. Apply 4-6 pounds of Bromacil/Diuron 40/40 per acre.

Apply a maximum of 2 applications per year. The minimum retreatment interval is 90 days.

Application Rates
Apply Bromacil/Diuron 40/40 at the rates indicated by weed type in the tables below. When applied at lower rates, Bromacil/Diuron 40/40 provides short-term control of the weeds listed; when applied at higher rates, weed control is extended.

Note: Use the higher levels of the dosage ranges listed when applying on adsorptive soils (for example, those high in organic matter or carbon).

For areas of high rainfall or dense vegetation the maximum single application rate is 30 pounds Bromacil/Diuron 40/40 per acre. This amount corresponds to 12 pounds of bromacil and 12 pounds of diuron, the active ingredients in Bromacil/Diuron 40/40. For all other areas, the maximum single application rate is 20 pounds Bromacil/Diuron 40/40 per acre. This amount corresponds to 8 pounds of bromacil and 8 pounds of diuron per acre.

Weeds Controlled
Bromacil/Diuron 40/40 effectively controls the following broadleaf weeds and grasses when applied at the rates shown.

Broadleaf Weeds – 6 to 8 pounds per acre

Clovers (annual)	*Trifolium spp.*
Fiddleneck	*Amsinckia intermedia*
Filaree	*Erodium spp.*
Knapweed, diffuse	*Centaurea diffusa*
Lambsquarter, common	*Chenopodium album*
Lettuce, prickly	*Lactuca serriola*
Mustards	*Brassica spp.*
Pigweed	*Amaranthus spp.*
Ragweed	*Ambrosia spp.*
Sunflower, common	*Helianthus annuus*
Thistle, Russian	*Salsola iberica*

Broadleaf Weeds – 8 to 12 pounds per acre

Carrot, wild	*Caudus carota*
Dandelion, common	*Taraxacum officinale*
Dock, curly	*Rumex crispus*
Knapweed, spotted	*Centaurea maculosa*
Knotweed, prostrate	*Polygonum aviculare*
Kochia	*Kochia scoparia*
Marestail, common (horseweed)	*Conyza canadensis*
Parsnip, wild	*Pastinaca sativa*
Plantain	*Plantago spp.*
Puncturevine	*Tribulus terrestris*
Spurge	*Euphorbia spp.*
Thistle, milk	*Silybum marianum*
Yarrow, common	*Achillea millefolium*

Broadleaf Weeds – 12 to 16 pounds per acre

Cinquefoil, common	*Potentilla Canadensis*
Goldenrod	*Solidago spp.*
Milkweed, common	*Asclepias syriaca*

Grasses – 6 to 8 pounds per acre

Barley, foxtail	*Hordeum jubatum*
Brome	*Bromus spp.*
Cheat	*Bromus secalinus*
Cupgrass, Prairie	*Eriochloa contracta*
Foxtail	*Setaria spp.*
Oat, wild	*Avena fatua*
Ryegrass, Italian	*Lolium multiflorum*
Quackgrass	*Agropyron repens*
Wheatgrass, intermediate	*Agropyron intermedium*

Grasses – 8 to 12 pounds per acre

Bahiagrass	*Paspalum notatum*
Crabgrass	*Digitaria spp.*
Goosegrass	*Eleusine indica*
Rye	*Secale cereale*
Vaseygrass	*Paspalum urvillei*

Grasses – 12 to 16 pounds per acre

Bluegrass	*Poa spp.*
Dropseed, sand*	*Sporobolus cryptandrus*
Fescue	*Festuca spp.*
Saltgrass*	*Distichlis spp.*

*Note: Best control of Saltgrass and Sand Dropseed is achieved from a Spring application prior to plant green-up.

For control of hard-to-kill perennials such as bermudagrass (*Cynodon dactylon*), bouncingbet (*Saporaria officinalis*), dogbane (*Apocynum spp.*), Johnsongrass (*Sorghum halepense*), and nutsedge (*Cyperus spp.*) apply 19-30 pounds per acre (***except in Florida***).

For extended control of annual weeds and partial control of perennials such as bermudagrass and nutsedge, apply 10-18 pounds per acre. In areas of high rainfall (40 inches or more per year) and/or dense vegetation (greater than 90% weed ground cover) apply 19 to 30 pounds of product (except in Florida). Use the higher Bromacil/Diuron 40/40 rates on adsorptive soils (high in organic matter or carbon). Best results occur when application is made just before weed emergence or in the early stages of weed growth.

SPECIAL USES

UNDER ASPHALT AND CONCRETE PAVEMENT
Important Precautions when Applying Under Asphalt
- Do not use Bromacil/Diuron 40/40 under pavement in residential properties such as driveways, or in recreational areas, including jogging or bike paths, tennis courts, or golf cart paths.
- Desirable plants may be injured if their roots extend into treated areas or if planted in treated areas.

Application Information
Bromacil/Diuron 40/40 may be used to control weeds under asphalt and concrete pavement such as that used in parking lots, highway shoulders, median strips, roadways and other industrial sites.

Bromacil/Diuron 40/40 should only be used in an area that has been prepared according to good construction practices. Use sufficient water to ensure uniform coverage, generally 100 gallons per acre. Agitate the tank continuously to keep Bromacil/Diuron 40/40 in suspension.

Application Timing
Bromacil/Diuron 40/40 should be applied immediately before paving to avoid lateral movement of the herbicide as a result of soil movement due to rainfall or mechanical means.

Application Rates
Apply Bromacil/Diuron 40/40 at 17 to 30 pounds per acre. Use a higher rate on hard to control weeds and/or for longer term weed control.

Tank Mixtures
To control a broader spectrum of weeds, or for an extended period of weed control, a tank mixture of Bromacil/Diuron 40/40 at 7 to 15 pounds per acre plus Oust® XP at 4 to 8 ounces per acre may be used.

STORAGE AND DISPOSAL
Do not contaminate water, food, or feed by storage or disposal.
PESTICIDE STORAGE: Store product in original container only.
PESTICIDE DISPOSAL: Wastes resulting from the use of this product may be disposed of on-site or at an approved waste disposal facility.
CONTAINER DISPOSAL: Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available. Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

Use of this product in certain portions of California, Oregon, and Washington is subject to the January 22, 2004 Order for injunctive relief in Washington Toxics Coalition, et. al. v. EP, C01-0132C, (W.D. WA). For further information, please refer to http://www.epa.gov/espp/wtc.

TERMS AND CONDITIONS OF USE

If terms of the following Warranty Disclaimer, Inherent Risks of Use, and Limitation of Remedies are not acceptable, return unopened package at once to the seller for a full refund of purchase price paid. Otherwise, use by the buyer or any other user constitutes acceptance of the terms under Warranty Disclaimer, Inherent Risks of Use and Limitations of Remedies.

WARRANTY DISCLAIMER

Alligare, LLC warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in strict accordance with the directions, subject to the inherent risks set forth below. To the extent consistent with applicable law, Alligare, LLC MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

INHERENT RISKS OF USE

It is impossible to eliminate all risks associated with use of this product. Plant injury, lack of performance, or other unintended consequences may result because of such factors as use of the product contrary to label instructions (including conditions noted on the label, such as unfavorable temperatures, soil conditions, etc.), abnormal conditions (such as excessive rainfall, drought, tornadoes, hurricanes), presence of other materials, the manner of application, or other factors, all of which are beyond the control of Alligare, LLC or the seller. To the extent consistent with applicable law, all such risks shall be assumed by buyer.

Specimen Label

LIMITATION OF REMEDIES

To the extent consistent with applicable law, the exclusive remedy for losses or damages resulting from this product (including claims based on contract, negligence, strict liability, or other legal theories), shall be limited to, at Alligare, LLC's election, one of the following:
(1) Refund of purchase price paid by buyer or user for product bought, or
(2) Replacement of amount of product used

Alligare, LLC shall not be liable for losses or damages resulting from handling or use of this product unless Alligare, LLC is promptly notified of such loss or damage in writing. In no case shall Alligare, LLC be liable for consequential, incidental or special damages or losses.

The terms of the Warranty Disclaimer above and this Limitation of Remedies cannot be varied by any written or verbal statements or agreements. No employee or sales agent of Alligare, LLC or the seller is authorized to vary or exceed the terms of the Warranty Disclaimer or this Limitation of Remedies in any manner. Buyer accepts this product subject to the foregoing limitations of warranty and of liability.

Oust® is a registered trademark of E.I. duPont de Nemours and Company.

EPA 20181221

SULFOSULFURON | GROUP 2 | HERBICIDE

CRYDER™

Contains sulfosulfuron, the active ingredient used in Outrider®.

CRYDER is a Selective Herbicide for the Control of Certain Annual and Perennial Grasses and Broadleaf Weeds in Select Pasture Grasses and Rangelands, Non-Crop Areas and in Winter and Spring Wheat.

ACTIVE INGREDIENT:	**(% by weight)**
Sulfosulfuron	75.0%
OTHER INGREDIENTS:	25.0%
TOTAL:	100.0%

Water dispersible granule.

EPA Reg. No.: 91234-119

KEEP OUT OF REACH OF CHILDREN

CAUTION!

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.
(If you do not understand the label, find someone to explain it to you in detail.)

See below for additional Precautionary Statements.

FIRST AID	
If in eyes:	• Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
HOT LINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact SafetyCall at **1-844-685-9173** for emergency medical treatment information.	

For Chemical Emergency: Spill, Leak, Fire, Exposure, or Accident, Call CHEMTREC Day or Night
Within USA and Canada: 1-800-424-9300 or +1 703-527-3887 (collect calls accepted)

CRYDER™ is not manufactured, or distributed by Valent USA Corporation seller of Outrider®.

Manufactured for:
Atticus, LLC
940 NW Cary Parkway, Suite 200
Cary, NC 27513

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

CAUTION!

CAUSES MODERATE EYE IRRITATION. Avoid contact with eyes or clothing.

Personal Protective Equipment (PPE)

Applicators and other handlers must wear: long-sleeved shirt and long pants, shoes plus socks, protective eyewear, and chemical-resistant gloves, including nitrile rubber, neoprene rubber or polyethylene. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

When handlers use closed systems or enclosed cabs in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides 40 CFR 170.240 (d) (4-6), the handler PPE requirements may be reduced or modified as specified in the WPS.

USER SAFETY RECOMMENDATIONS

Users should:

- Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

Non-Target Organism Advisory

This product is toxic to plants and may adversely impact the forage and habitat of non-target organisms, including pollinators, in areas adjacent to the treated area. Protect the forage and habitat of non-target organisms by minimizing spray drift. For further guidance and instructions on how to minimize spray drift, refer to the **SPRAY DRIFT** section of this label.

Windblown Soil Particles Advisory

WINDBLOWN SOIL PARTICLES: **CRYDER** has the potential to move off-site due to wind erosion. Soils that are subject to wind erosion usually have a high silt and/or fine to very fine sand fractions and low organic matter content. Other factors which can affects the movement of windblown soil include the intensity and direction of prevailing winds, vegetative cover, site slope, rainfall, and drainage patterns. Avoid applying **CRYDER** if prevailing local conditions may be expected to result in off-site movement.

Groundwater Advisory

This chemical has properties and characteristics associated with chemicals detected in groundwater. This chemical may leach into groundwater if used in areas where soils are permeable, particularly where the water table is shallow.

Surface Water Advisory

This product may impact surface water quality due to runoff of rain water. This is especially true for poorly draining soils and soils with shallow groundwater. This product is classified as having high potential for reaching surface water via runoff for months or more after application. A level, well-maintained vegetative buffer strip between areas to which this product is applied and surface water features including ponds, streams, and springs will reduce the potential loading of sulfosulfuron from runoff water and sediment. Runoff of this product will be greatly reduced by avoiding applications when rainfall or irrigation is expected to occur within 48 hours.

The use of any pesticide in a manner that may kill or otherwise harm an endangered species or adversely modify their habitat is a violation of Federal Laws.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in any manner inconsistent with its labeling. This product can only be used in accordance with the Directions for Use on this label. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, including plants, soil, or water, is coveralls, shoes plus socks, chemical-resistant gloves, including nitrile rubber, neoprene rubber or polyethylene.

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard (40 CFR Part 170) for agricultural pesticides. The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries or greenhouses.

Keep people and pets off treated areas until spray solution has dried.

PRODUCT INFORMATION

Product Description: CRYDER is a selective, systemic herbicide, formulated as a water dispersible granule (WDG) for control of many annual and perennial weeds in non-crop sites, pastures and rangeland, and for control of certain grasses and broadleaf weeds in winter and spring wheat.

Time to Symptoms: This product is absorbed through the roots and foliage of plants. Soon after application, growth of susceptible weeds is inhibited and in cropping situations susceptible weeds are no longer competitive with the crop. Following growth inhibition, affected plants may appear dark green and stunted, affected leaves will turn yellow and/or red, and the growing point of the plant may turn reddish-purple. These visible effects of control may not be observed for 1 to 3 weeks after application. Within 6 weeks after application the growing points die. Warm and moist conditions following application will accelerate herbicidal activity. Cool, dry conditions will delay herbicidal activity. Weeds stressed by drought are less susceptible to this product.

Rainfastness: Heavy rainfall soon after application (less than 2 hours) may wash this product off of the foliage and a repeat application may be required for adequate control.

RESISTANCE MANAGEMENT

For resistance management, **CRYDER** is a Group 2 herbicide. Any weed population may contain or develop plants naturally resistant to **CRYDER** and other Group 2 herbicides. The resistant biotypes may dominate the weed population if these herbicides are used repeatedly in the same field. Appropriate resistance-management strategies should be followed.

To delay herbicide resistance take one or more of the following steps:

- Rotate the use of **CRYDER** or other Group 2 herbicides within a growing season sequence or among growing seasons with different herbicide groups that control the same weeds in a field.
- Use tank mixtures with herbicides from a different group if such use is permitted; where information on resistance in target weed species is available, use the less resistance-prone partner at a rate that will control the target weed(s) equally as well as the more resistance-prone partner. Consult your local extension service or certified crop advisor if you are unsure as to which active ingredient is currently less prone to resistance.
- Adopt an integrated weed-management program for herbicide use that includes scouting and uses historical information related to herbicide use and crop rotation, and that considers tillage (or other mechanical control methods), cultural (e.g., higher crop seeding rates; precision fertilizer application method and timing to favor the crop and not the weeds), biological (weed-competitive crops or varieties) and other management practices.

- Scout before and after herbicide application to monitor weed populations for early signs of resistance development. Indicators of possible herbicide resistance include: (1) failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds; (2) a spreading patch of non-controlled plants of a particular weed species; (3) surviving plants mixed with controlled individuals of the same species. If resistance is suspected, prevent weed seed production in the affected area by an alternative herbicide from a different group or by a mechanical method including hoeing or tillage. Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment when moving between fields, and planting clean seed.
- If a weed pest population continues to progress after treatment with this product, discontinue use of this product, and switch to another management strategy or herbicide with a different mode of action, if available.
- Contact your local extension specialist or certified crop advisors for additional pesticide resistance-management and/or integrated weed-management recommendations for specific crops and weed biotypes.
- For further information or to report suspected resistance, contact Atticus, LLC at (984) 465-4754.

MIXING

Thoroughly clean mixing and application equipment prior to mixing spray solution.

Eliminate any risk of siphoning the contents of the spray or mixing tank back into the carrier source while mixing. Use approved anti-back-siphoning devices where required by State or local regulations.

Apply spray solutions within 24 hours after mixing.

Water Carrier

This product mixes readily with water. Mix spray solutions of this product as follows. Fill the spray tank with three-fourths of the desired final volume. Add the appropriate amount of this product to achieve the desired application rate as defined on this label (see the appropriate section of this label for application rates). Continue the filling process while maintaining agitation. When using a nonionic surfactant in non-crop uses or in postemergence applications in wheat, add the nonionic surfactant near the end of the filling process.

Surfactant and Adjuvants

A nonionic surfactant is required for all postemergence applications of this product and is the only adjuvant required to be added to the spray solution. For in-crop applications, use only nonionic surfactants that are approved by EPA for use on food crops. Use only nonionic surfactants that contain at least 90 percent active ingredient. Add nonionic surfactants to a concentration of 0.25 to 0.5 percent by volume (1 to 2 quarts per 100 gallons of spray solution), unless otherwise directed. **DO NOT USE NONIONIC SURFACTANTS OR OTHER ADDITIVES THAT ALTER THE pH OF THE SPRAY SOLUTION BELOW pH 5.**

DO NOT mix oil-based adjuvants or adjuvant containing oils when this herbicide is tank-mixed with emulsifiable concentrate pesticide formulations.

DO NOT use low rates of liquid fertilizer as a substitute for surfactant.

pH Adjustment

Spray solutions of between pH 6.0 and 8.0 are required for optimal performance of this product. Failure to adjust the pH of the spray solution may result in reduced weed control. Follow the mixing procedure described on this label and adjust the pH of the spray solution after the addition of nonionic surfactant. To adjust the pH, add between 2 to 4 quarts (depending on the starting pH of your water carrier) of a 7-percent solution of ammonia for every 100 gallons of spray solution.

Restriction: DO NOT use ammonia with chlorine bleach as your pH adjuster, as dangerous gases will form.

Tank Mixtures

Tank mixtures of this product with other herbicide products may be used to provide a broader spectrum of weed control and an alternate mode of herbicidal action. Tank-mix this product with other herbicides or materials that are listed in the specific use site sections of this label. Refer to each individual product label or supplemental labeling for all products in the tank mixture, and observe all instructions, precautions and limitations on the label, including application rates and restrictions related to soil texture, soil organic matter, wheat growth stage and crop rotation. Use the mixture according to the most restrictive precautionary statements for each product in the tank mixture.

It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

To the extent consistent with applicable law, buyer and all users are responsible for all loss or damage in connection with the use or handling of mixtures of this product with herbicides or other materials that are not expressly listed on this label. Mixing this product with herbicides or other materials that are not listed on this label may result in reduced performance.

Tank mixtures with broadleaf herbicides formulated as amines (including 2,4-D and others) may decrease the effectiveness.

When a generic active ingredient, including 2,4-D, dicamba, diuron or MSMA is listed on this label for tank-mixing with this product, the user is responsible for ensuring that the specific application being made is included on the label of the product being used in the tank mixture.

Always predetermine the compatibility of all tank-mix products together in the carrier by mixing small proportional quantities before mixing in the spray tank. When preparing tank mixtures, add individual components to the spray tank in the following sequence: water, water dispersible granules (this product), water-soluble bags, dry flowables, emulsifiable concentrates, drift control additives, water-soluble liquids, nonionic surfactants.

APPLICATION EQUIPMENT AND TECHNIQUES

This product may be applied using either ground or aerial (fixed-wing or helicopter) spray application equipment. Apply spray solutions of this product using properly maintained and calibrated equipment capable of delivering desired volumes. Use equipment that is capable of continuous and vigorous agitation. Use an agitation system capable of creating a rippling or rolling action on the liquid surface when the tank is full.

DO NOT apply this product through any type of irrigation system.

DO NOT allow this herbicide solution to mist, drift, or splash onto desirable vegetation or soil areas where sensitive crops will be planted, as minute quantities of this product can cause severe damage or destruction to susceptible plants on which treatment was not intended.

Aerial Application

All treatments described on this label may be made using aerial equipment where appropriate, except where specifically prohibited, provided that the applicator complies with the precautions and restrictions described in the **SPRAY DRIFT** section of this label.

Injection Systems

This product may be used in ground applicator injection spray systems. It may be diluted prior to injecting into the spray stream. **DO NOT** mix this product with the undiluted concentrate of other products when using injections systems, unless specifically directed.

Equipment Cleaning

Thoroughly clean application equipment with a 1-percent solution of ammonia (one quart of ammonia for every 25 gallons of rinse water) promptly after using this product. Use a sufficient volume of cleaning solution to thoroughly rinse all surfaces and to flush all hoses. Rinse with water and repeat the cleaning procedure with the ammonia solution. Complete the cleaning procedure by rinsing thoroughly with clean water.

If visible residue is present in the spray tank, use a 1-percent solution of ammonia plus 0.25 percent nonionic surfactant (8 fluid ounces for every 25 gallons of rinse water) as the cleaning solution.

MANDATORY SPRAY DRIFT

Aerial Applications:

- Do not release spray at a height greater than 10 ft above the vegetative canopy, unless a greater application height is necessary for pilot safety.
- For applications prior to the emergence of crops and target weeds, applicators are required to use a Coarse or coarser droplet size (ASABE S572.1).
- For all other applications, applicators are required to use a Medium or coarser droplet size (ASABE S572.1).
- The boom length must not exceed 65% of the wingspan for airplanes or 75% of the rotor blade diameter for helicopters.
- Applicators must use 1/2 swath displacement upwind at the downwind edge of the field.
- Nozzles must be oriented so the spray is directed toward the back of the aircraft.
- Do not apply when wind speeds exceed 10 miles per hour at the application site.
- Do not apply during temperature inversions.

Ground Boom Applications:

- Apply with the nozzle height recommended by the manufacturer, but no more than 3 feet above the ground or crop canopy unless making a turf, pasture, or rangeland application, in which case applicators may apply with a nozzle height no more than 4 feet above the ground.
- For applications prior to the emergence of crops and target weeds, applicators are required to use a Coarse or coarser droplet size (ASABE S572.1).
- For all other applications, applicators are required to use a Medium or coarser droplet size (ASABE S572.1).
- Do not apply when wind speeds exceed 10 miles per hour at the application site.
- Do not apply during temperature inversions.

Boom-Less Ground Applications:

- Applicators are required to use a Medium or coarser droplet size (ASABE S572.1) for all applications.
- Do not apply when wind speeds exceed 10 miles per hour at the application site.
- Do not apply during temperature inversions.
- Setting nozzles at the lowest effective height will help to reduce the potential for spray drift.

SPRAY DRIFT ADVISORIES

THE APPLICATOR IS RESPONSIBLE FOR AVOIDING OFF-SITE SPRAY DRIFT.

BE AWARE OF NEARBY NON-TARGET SITES AND ENVIRONMENTAL CONDITIONS.

IMPORTANCE OF DROPLET SIZE

An effective way to reduce spray drift is to apply large droplets. Use the largest droplets that provide target pest control. While applying larger droplets will reduce spray drift, the potential for drift will be greater if applications are made improperly or under unfavorable environmental conditions.

Controlling Droplet Size – Ground Boom

- Volume - Increasing the spray volume so that larger droplets are produced will reduce spray drift. Use the highest practical spray volume for the application. If a greater spray volume is needed, consider using a nozzle with a higher flow rate.
- Pressure - Use the lowest spray pressure recommended for the nozzle to produce the target spray volume and droplet size.
- Spray Nozzle - Use a spray nozzle that is designed for the intended application. Consider using nozzles designed to reduce drift.

Controlling Droplet Size – Aircraft

- Adjust Nozzles - Follow nozzle manufacturers specifications for setting up nozzles. Generally, to reduce fine droplets, nozzles should be oriented parallel with the airflow in flight.

BOOM HEIGHT – Ground Boom

Use the lowest boom height that is compatible with the spray nozzles that will provide uniform coverage. For ground equipment, the boom should remain level with the crop and have minimal bounce.

RELEASE HEIGHT – Aircraft

Higher release heights increase the potential for spray drift. When applying aerially to crops, do not release spray at a height greater than 10 ft above the crop canopy, unless a greater application height is necessary for pilot safety.

SHIELDED SPRAYERS

Shielding the boom or individual nozzles can reduce spray drift. Consider using shielded sprayers. Verify that the shields are not interfering with the uniform deposition of the spray on the target area.

TEMPERATURE AND HUMIDITY

When making applications in hot and dry conditions, use larger droplets to reduce effects of evaporation.

TEMPERATURE INVERSIONS

Drift potential is high during a temperature inversion. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. The presence of an inversion can be indicated by ground fog or by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing. Avoid applications during temperature inversions.

WIND

Drift potential generally increases with wind speed. AVOID APPLICATIONS DURING GUSTY WIND CONDITIONS.

Applicators need to be familiar with local wind patterns and terrain that could affect spray drift.

HANDHELD TECHNOLOGY APPLICATIONS

Take precautions to minimize spray drift.

NON-CROP, PASTURES AND RANGELAND

Use Sites:

Non-Crop Use Sites: Use this product for weed control on non-crop sites including airports, conservation areas, ditch banks, dry ditches, dry canals, fallow areas, fencerows, industrial sites, lumberyards, manufacturing sites, natural areas, petroleum tank farms and pumping installations, railroads, roadsides, storage areas, utility rights-of-way, utility sites and substations, warehouse areas and wildlife areas.

Pasture and Rangeland Use Sites: Use this product for weed control in pastures, hayfields and rangelands as defined in this label. It can be used for weed control in perennial native grasses as defined on the label.

DO NOT use this product on or around athletic fields, commercial turf sites, golf courses, residential turf sites or sod and turfgrass seed farms.

IMPORTANT: DO NOT allow this product to contact roots or foliage of desirable vegetation, areas where roots of desirable vegetation may extend, or areas where this product may be washed or moved into contact with roots of desirable vegetation. Desirable plants may be injured if planted into treated areas.

Application Equipment and Techniques

Best results are obtained when weeds are actively growing and not disturbed by mowing for at least 14 days before and 14 days after application.

Ground Broadcast Application

Apply this product uniformly with properly calibrated ground application equipment at rates specified on this label in 10 to 50 gallons of water per acre. Select spray volumes that ensure thorough and uniform weed coverage. Spray booms need to be equipped with nozzles that provide optimum spray distribution and uniform coverage at the appropriate spray pressure to minimize streaking, skips, overlaps and spray drift during application.

Aerial Application

Apply this product at rates specified on this label in 5 to 15 gallons of water per acre when making aerial applications, unless otherwise specified.

Hand-Held and High-Volume Application

Hand-held spray guns, backpack sprayers and other similar types of sprayers may be used to apply this product. Follow the use directions for hand-held and high-volume application in the specific use sections of this label. Apply to foliage of vegetation to be controlled at a rate of approximately 2 gallons of spray solution per 1000 square feet. Spray coverage needs to be uniform and complete. **DO NOT** spray to the point of runoff. Use coarse sprays only.

BERMUDAGRASS AND BAHIAGRASS NON-CROP SITES

Use this product to control or partially control many annual and perennial weeds for effective release of bermudagrass and bahiagrass on roadsides and other non-crop sites listed in this section of this label.

Ground Broadcast Application

Apply at 0.75 to 2 ounces of product (0.035 to 0.093 lb ai) per acre in a spray solution containing a nonionic surfactant at a concentration of 0.25 percent by volume. Use the higher application rate of this product within the range for control of large established weeds or when weed growth is heavy or dense. Follow-up applications can be made after suitable re-growth of weeds but no sooner than 30 days after the previous application.

Restrictions:

- **Maximum Annual Use Rate:** The combined total of all applications of this product must not exceed 2.66 ounces of product (0.124 lb ai) per acre per year.
- **Single Maximum Use Rate:** 2 ounces (0.093 lb ai) per acre
- **Maximum Number of Applications/Year:** 2
- **RTI:** 30 days

Hand-Held and High-Volume Application

With hand-held and high-volume spray equipment, apply a spray solution consisting of 1 ounce (0.046 lb ai) of this product plus 1 quart of a nonionic surfactant (0.25 percent) per 100 gallons of spray solution.

Tank Mixtures

ESTABLISHED STANDS OF BERMUDAGRASS AND BAHIAGRASS ARE TOLERANT TO THIS PRODUCT AT RATES SPECIFIED ON THIS LABEL; HOWEVER, TANK MIXTURES OF THIS PRODUCT WITH OTHER HERBICIDES MAY INCREASE GRASS INJURY. USE THESE TANK MIXTURES ONLY WHEN SOME TEMPORARY INJURY OR DISCOLORATION OF THE BERMUDAGRASS AND BAHIAGRASS CAN BE TOLERATED.

Tank mixtures of this product with other herbicides may be used to increase the spectrum of weed control in bermudagrass and bahiagrass.

It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

This product may be applied at a rate of 0.75 to 2 ounces (0.035 to 0.093 lb ai) per acre in a tank-mix with the following products:

2,4-D, chlorsulfuron, clopyralid, dicamba, diuron, glyphosate, imazapic, metsulfuron methyl, MSMA, sulfometuron methyl, triclopyr

Refer to the label of each individual product included in the tank mixture for application rates and use instructions for weed control on bermudagrass and bahiagrass turf sites.

A surfactant does not need to be added to the spray solution when this product is tank-mixed with Campaign® (EPA Reg. No. 524-351, Glyphosate-isopropylammonium and 2,4-D, isopropylamine salt), Roundup PROMAX® (EPA Reg. No. 524-579, Glycine, N-(phosphonomethyl)- potassium salt), or Roundup PRO® Concentrate (EPA Reg. No. 524-529, Glyphosate-isopropylammonium) herbicides.

Release of Dormant Bermudagrass or Bahiagrass

This product may be tank-mixed with Campaign® (EPA Reg. No. 524-351, Glyphosate-isopropylammonium and 2,4-D, isopropylamine salt), Roundup PROMAX® (EPA Reg. No. 524-579, Glycine, N-(phosphonomethyl)- potassium salt), or Roundup PRO® Concentrate (EPA Reg. No. 524-529, Glyphosate-isopropylammonium) herbicides to control or partially control many winter annual weeds in dormant bermudagrass and bahiagrass prior to spring green-up. In dormant bermudagrass or bahiagrass, apply 0.75 to 2 ounces of this product (0.035 to 0.093 lb ai) per acre, alone or in a tank mixture with one of the following herbicide products at an application rate within the range indicated.

Tank-Mix Product	Application Rate
Campaign® (EPA Reg. No. 524-351, Glyphosate-isopropylammonium and 2,4-D, isopropylamine salt)	16 - 64 fl oz/acre (0.15 - 0.6 lb ai/acre glyphosate isopropylammonium and 0.2375 - 0.95 lb ai/acre 2,4-D isopropylamine salt)
Roundup PROMAX® (EPA Reg. No. 524-579, Glycine, N-(phosphonomethyl)- potassium salt)	5 - 44 fl oz/acre (0.214 - 1.88 lb ai/acre)
Roundup PRO® Concentrate (EPA Reg. No. 524-529, Glyphosate-isopropylammonium)	6.4 - 51 fl oz/acre (0.25 - 1.99 lb ai/acre)

In dormant bermudagrass only, up to 1 ounce per acre of Escort (EPA Reg. No. 432-1549, metsulfuron) may be applied along with 0.75 to 2 ounces of this product (0.035 to 0.093 lb ai), alone or in a three-way tank mixture with Roundup PRO (EPA Reg. No. 524-475, Glyphosate-isopropylammonium) or Roundup PRO Concentrate (EPA Reg. No. 524-529, Glyphosate-isopropylammonium) herbicides at the rates indicated in the previous table, to increase the spectrum of broadleaf weeds controlled. Addition of Escort (EPA Reg. No. 432-1549, metsulfuron) may delay green-up of bermudagrass in the spring. TANK MIXTURES OF THIS PRODUCT WITH ESCORT (EPA Reg. No. 432-1549, metsulfuron) IN HIGHLY MAINTAINED TURFGRASS AREAS WILL RESULT IN UNACCEPTABLE TURF INJURY.

In the state of Texas, applications of this product applied before September 30 will not delay green-up of bermudagrass the following spring; however, some temporary discoloration of desirable spring germinating wildflowers may occur.

Release of Actively Growing Bermudagrass

This product may be tank-mixed with Roundup PROMAX (EPA Reg. No. 524-579, Glycine, N-(phosphonomethyl)- potassium salt) or Roundup PRO Concentrate (EPA Reg. No. 524-475, Glyphosate-isopropylammonium) herbicides to control or partially control johnsongrass and other weeds in bermudagrass when it is actively growing. Use only on well-established stands of bermudagrass. Apply 0.75 to 2 ounces (0.035 to 0.093 lb ai) of this product alone or in a tank mixture with one of the following herbicide products within the range of application rates indicated. Use the higher application rate within the range to control perennial weeds or annual weeds greater than 6 inches in height.

Tank-Mix Product	Application Rate
Roundup PROMAX (EPA Reg. No. 524-579, Glycine, N-(phosphonomethyl)- potassium salt)	5 - 22 fl oz/acre (0.214 - 0.94 lb ai/acre)
Roundup PRO Concentrate (EPA Reg. No. 524-475, Glyphosate-isopropylammonium)	6.4 - 26 fl oz/acre (0.25 - 1.01 lb ai/acre)

The following herbicide products can also be applied at the application rates indicated in a tank mixture with 0.75 to 2 ounces (0.035 to 0.093 lb ai) of this product per acre, alone or in a three-way tank mixture with Roundup PROMAX (EPA Reg. No. 524-579, Glycine, N-(phosphonomethyl)- potassium salt) or Roundup PRO Concentrate (EPA Reg. No. 524-529, Glyphosate-isopropylammonium) herbicides at the application rates indicated in the previous table.

Tank-Mix Product	Application Rate
Escort (EPA Reg. No. 432-1549, metsulfuron)	1 fl oz/acre (0.004 lb ai/acre)
Oust (EPA Reg. No. 352-401, sulfometuron)	0.5 fl oz/acre (0.023 lb ai/acre)
Telar (EPA Reg. No. 432-1561, chlorsulfuron)	0.5 fl oz/acre (0.023 lb ai/acre)

DO NOT apply this product in tank mixtures with Escort (EPA Reg. No. 432-1549, metsulfuron), Oust (EPA Reg. No. 352-401, sulfometuron), or Telar (EPA Reg. No. 432-1561, chlorsulfuron) in highly maintained turfgrass areas.

Release of Actively Growing Bahiagrass

This product may be tank-mixed with Roundup PROMAX (EPA Reg. No. 524-579, Glycine, N-(phosphonomethyl)- potassium salt) or Roundup PRO Concentrate (EPA Reg. No. 524-475, Glyphosate-isopropylammonium) herbicides to control or partially control johnsongrass and other weeds in bahiagrass while it is actively growing. Use only on well-established stands of bahiagrass. Apply 0.75 to 2 ounces of this product (0.035 to 0.093 lb ai) per acre, alone or in a tank mixture with one of the following herbicide products at the application rate indicated.

Tank-Mix Product	Application Rate
Roundup PROMAX (EPA Reg. No. 524-579, Glycine, N-(phosphonomethyl)- potassium salt)	4 fl oz/acre (0.171 lb ai/acre)
Roundup PRO Concentrate (EPA Reg. No. 524-475, Glyphosate-isopropylammonium)	5 fl oz/acre (0.195 lb ai/acre)

TALL FESCUE NON-CROP SITES

This product may be used to control or partially control johnsongrass and other weeds listed in the **WEEDS CONTROLLED** section of this label in tall fescue on roadsides and other non-crop sites listed on this label.

Use this product only on well-established stands of tall fescue. Even at rates listed in this section, use of this product may result in temporary chlorosis and discoloration, and may result in transient growth reduction of the desirable turf. These symptoms generally appear 7 to 10 days after application and are typically gone within 21 to 28 days.

Ground Broadcast Application

Apply this product at 0.75 to 1 ounce (0.035 to 0.046 lb ai) per acre in a spray solution containing a nonionic surfactant at a concentration of 0.25 percent by volume. **DO NOT** exceed 1 ounce of this product (0.046 lb ai) per acre per year. Use the higher application rate of this product within the range for control of large established weeds or when weed growth is heavy or dense.

Restrictions:

- **Maximum Annual Use Rate:** 1 ounce (0.046 lb ai) per acre per year
- **Single Maximum Use Rate:** 1 ounce (0.046 lb ai) per acre
- **Maximum Number of Applications/Year:** 1

Hand-Held and High-Volume Application

With hand-held and high-volume spray equipment, apply a spray solution consisting of 1 ounce of this product (0.046 lb ai) plus 1 quart of a nonionic surfactant (0.25 percent) per 100 gallons of spray solution.

Tank Mixtures

Tank mixtures of this product may be used to increase the spectrum of vegetation controlled in tall fescue. This product may be applied at 0.75 to 1 ounce (0.035 to 0.046 lb ai) per acre in a tank-mix with the following products:

Escort (EPA Reg. No. 432-1549, metsulfuron), Escort XP (EPA Reg. No. 432-1549, metsulfuron), Garlon 3A (EPA Reg. No. 62719-37, triclopyr), Garlon 4 (EPA Reg. No. 62719-40, triclopyr), Transline (EPA Reg. No. 62719-259, clopyralid)

Refer to the label of each individual product included in the tank mixture for application rates and use instructions for weed control on tall fescue sites.

BERMUDAGRASS AND BAHIAGRASS PASTURE SITES

This product may be used in early spring through the fall to control or partially control the weeds listed in the **WEEDS CONTROLLED** section of this label in well-established bermudagrass and bahiagrass pastures.

Grass forage may be grazed immediately after application. However, for best weed control, **DO NOT** mow or harvest the pasture to be treated for 2 weeks before or 2 weeks after application. For best control of johnsongrass, make application when the johnsongrass is actively growing, is at least 18 to 24 inches tall and up to the heading stage.

For control of large established weeds or when weed growth is particularly heavy or dense, a single application of up to 2 ounces of this product (0.093 lb ai) per acre can be made.

Ground Broadcast Application

Apply 1.33 ounces of this product (0.062 lb ai) per acre along with a nonionic surfactant at a concentration of 0.25 percent by volume (1 quart per 100 gallons of spray solution) in 10 - 50 gallons of spray solution per acre. A follow-up application can be made after suitable regrowth of weeds but no sooner than 40 days after the previous application.

Restrictions:

- **Maximum Annual Use Rate:** 2.66 ounces (0.124 lb ai) per acre per year
- **Single Maximum Use Rate:** 1.33 ounces (0.062 lb ai) per acre
- **Maximum Number of Applications/Year:** 2
- **RTI:** 40 days

Hand-Held and High-Volume Application

With hand-held and high-volume spray equipment, apply a spray solution consisting of 1.33 ounces of this product (0.062 lb ai) per acre plus 1 quart of a non-ionic surfactant (0.25 percent) per 100 gallons of spray solution. A follow-up application can be made after suitable regrowth of weeds but no sooner than 40 days after the previous application.

Pasture and Rangeland Sites in States West of the Mississippi River

This product may be used in pasture and rangeland grasses in States west of the Mississippi River in the fall or spring to provide selective post-emergent control or partial control of the weeds specified in the **WEEDS CONTROLLED** section of this label.

This product is selective in crested wheatgrass and selectivity in other pasture grasses is increased when they are not actively growing. Temporary stunting or chlorosis of grasses may occur but desirable grasses will recover. If concern exists about selectivity on desirable grasses, a small area needs to be treated to confirm selectivity.

Grass forage may be grazed immediately after application. However, for best weed control **DO NOT** mow or graze the pasture or rangeland for 2 weeks before or after application.

Ground Broadcast and Aerial Application

Apply 0.75 to 1.33 ounces of this product (0.035 - 0.062 lb ai) per acre along with a nonionic surfactant. Use the higher rate when weeds are in advanced growth stage. The level of weed control following application is dependent on weed species and weed stage of growth at application. For best results, weeds need to be actively growing and in an early vegetative stage. Refer to the **SPRAY DRIFT MANAGEMENT** section of this label for guidelines regarding spray drift management.

Restrictions:

- **Maximum Annual Use Rate:** 2.66 ounces (0.124 lb ai) per acre per year
- **Single Maximum Use Rate:** 1.33 ounces (0.062 lb ai) per acre
- **Maximum Number of Applications/Year:** 2
- **RTI:** 30 days

Dormant Pastures and Rangelands

Apply 0.75 to 1.33 ounces of this product (0.035 - 0.062 lb ai) per acre in a tank mix with Roundup PRO Concentrate (EPA Reg. No. 524-529, Glyphosate-isopropylammonium) at 10 to 13 fluid ounces (0.39 - 0.505 lb ai) per acre or Roundup PROMAX (EPA Reg. No. 524-579, Glycine, N-(phosphonomethyl)- potassium salt) at 8 to 11 fluid ounces (0.342 - 0.47 lb ai) per acre for control of weeds in dormant pastures. Tank mixing this product with Roundup PROMAX (EPA Reg. No. 524-579, Glycine, N-(phosphonomethyl)- potassium salt) herbicide at rates below 12 ounces (0.513 lb ai) per acre requires the addition of a nonionic surfactant to the spray solution at a concentration of 0.25 percent by volume (1 quart per 100 gallons of spray solution). Make these applications when the desirable pasture grass species are dormant and a new flush of the target weeds is emerged and actively growing.

NATIVE GRASSES AND CONSERVATION RESERVE PROGRAM (CRP) SITES

This product may be used to selectively control the weeds listed in the **WEEDS CONTROLLED** section of this label in perennial native grassland areas, including land enrolled in the Federal Conservation Reserve Program (CRP). This product may be applied to the following native perennial grasses:

- big bluestem
- blue oats grama
- buffalograss
- bushy bluestem
- Indiangrass
- little bluestem
- lovegrass
- side oats grama
- switchgrass

For selective weed control in the native grasses listed in this section, apply 1.33 to 2 ounces of this product (0.062 - 0.093 lb ai) per acre. Use the higher application rate of 2.0 ounces (0.093 lb ai) per acre of this product for control of large established weeds, or when weed growth is heavy or dense.

Addition of a nonionic surfactant to the spray solution at a concentration of 0.25 percent by volume (1 quart per 100 gallons of spray solution) is required for this application.

Sequential applications of this product may be made at a minimum of 30 days between applications, up to a maximum use rate of 2.66 ounces of product (0.124 lb ai) per acre per year.

Restrictions:

- **Maximum Annual Use Rate:** 2.66 ounces (0.124 lb ai) per acre per year
- **Single Maximum Use Rate:** 2 ounces (0.093 lb ai) per acre
- **Maximum Number of Applications/Year:** 2 at lower rate of 1.33 ounces (0.062 lb ai)
- **RTI:** 30 days

DO NOT apply this product to newly seeded perennial native grasses prior to the 3-leaf growth stage. Native grasses listed in this section may be reseeded into treated areas, but no sooner than 14 days after treatment.

Crop Rotation Restrictions

No crop, except wheat, may be planted into pasturelands, rangelands, or land taken out of the CRP that has been treated with this product within 12 months after application. For all crops, except wheat, a successful field bioassay, as described in this section, must be completed before planting.

DO NOT seed any crop, except wheat, any sooner than 3 months after the last application of this product. There are no crop rotation restrictions for wheat.

Field Bioassay

To conduct an effective field bioassay, plant strips of the crop you plan to grow the following season in the fields previously treated with this product. Crop response to the bioassay will determine if the crop(s) planted in the test strips can be safely grown in the previously treated fields.

Non-Fruit Bearing Tree Sites

This product may be applied as a broadcast application around or over the top of select hardwood and conifer tree species in conservation and wildlife areas to control johnsongrass, tall fescue, purple and yellow nutsedge, and other weed species listed in the **WEEDS CONTROLLED** section of this label.

This product has been shown to provide selective control on the following tree species:

- American Plum
- Bald Cypress
- Bur Oak
- Cottonwood
- Green Ash
- Pecan
- Pin Oak
- Swamp White Oak
- Sycamore
- Walnut

Treated trees must be growing in areas where commercial fruit or nut harvest will not occur. Make over-the-top applications to non-bearing trees only. Treat over the top of transplanted trees after they are well established. Temporary yellowing and growth reduction may occur in some species.

DO NOT apply by air.

Apply up to 1.33 ounces of this product (0.062 lb ai) per acre with a nonionic surfactant concentration of 0.25 percent (1 quart per 100 gallons of spray solution). Sequential applications of this product can be made at a minimum of 21 days between applications, up to a maximum use rate of 2.66 ounces (0.124 lb ai) per acre per year.

Restrictions:

- **Maximum Annual Use Rate:** 2.66 ounces (0.124 lb ai) per acre per year
- **Single Maximum Use Rate:** 1.33 ounces (0.062 lb ai) per acre
- **Maximum Number of Applications/Year:** 2
- **RTI:** 21 days

Selective Herbaceous Weed Control in Forestry Conifer Release

This product provides control or partial control of herbaceous weeds in a forestry conifer release program using a spring or early summer application after planting loblolly, slash or longleaf pine, and in fallow silvicultural nursery sites for these species. Best results are obtained when Accord® SP herbicide (EPA Reg. No. 524-517, Glyphosate-isopropylammonium) or a labeled tank-mix with Accord SP herbicide (EPA Reg. No. 524-517, Glyphosate-isopropylammonium) has been used for site preparation prior to planting.

Ground Broadcast Application

Apply **CRYDER** at 0.75 to 2 ounces (0.035 to 0.093 lb ai) per acre. **DO NOT** exceed 2 ounces of this product (0.093 lb ai) per acre per year.

Restrictions:

- **Maximum Annual Use Rate:** 2 ounces (0.093 lb ai) per acre per year
- **Single Maximum Use Rate:** 2 ounces (0.093 lb ai) per acre
- **Maximum Number of Applications/Year:** 2 at lower rate of 0.75 ounces (0.035 lb ai)
- **RTI:** 30 days

Use the higher application rate of this product within the range or in one of the tank mixtures described on this labeling for control of large established weeds or when weed growth is heavy or dense. Best results are obtained when weeds are in the early stage of growth. Addition of a nonionic surfactant at a concentration of 0.25 percent by volume (1 quart per 100 gallons of spray solution) is required for postemergence application of this product. Use only nonionic surfactants that contain at least 90 percent active ingredient.

Hand-Held and High-Volume Application

Apply a spray solution consisting of 1 to 2 ounces of **CRYDER** (0.046 to 0.093 lb ai) plus 1 quart of a nonionic surfactant per 100 gallons per acre of water. Use only nonionic surfactants that contain at least 90 percent active ingredient.

Aerial Application

DO NOT APPLY THIS PRODUCT USING AERIAL SPRAY EQUIPMENT EXCEPT UNDER CONDITIONS AS SPECIFIED WITHIN THIS LABEL.

Aerial application of this product is by helicopter only. Apply the specified rate of this product in 5 to 30 gallons of water per acre. Use the higher spray volumes where weeds are dense or form multiple canopy layers.

When used according to label directions, this product will give control or partial control of herbaceous weeds listed in the **WEEDS CONTROLLED** section of this label. Follow instructions in the **SPRAY DRIFT** section of this label to manage off-target drift movement from aerial application to agricultural field crops. Apply **CRYDER** at 0.75 to 2 ounces of product (0.035 to 0.093 lb ai) per acre. **DO NOT** exceed 2 ounces of this product (0.093 lb ai) per acre per year.

Use the higher application rate of this product within the range or in one of the tank mixtures described on this labeling for control of large established weeds or when weed growth is heavy or dense. Best results are obtained when weeds are in the early stage of growth.

Addition of a nonionic surfactant at a concentration of 0.25 percent by volume (1 quart per 100 gallons of spray solution) is required for postemergence application of this product. Use only nonionic surfactant that contains at least 90 percent active ingredient.

Tank Mixtures

Tank mixtures of this product may be used to increase the spectrum of herbaceous vegetation controlled in a conifer release program. When tank-mixing, read and carefully observe the label directions, precautionary statements and all information on the labels of all products used. Use according to the most restrictive precautionary statements for each product in the mixture.

It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

Ensure that the tank-mix product is approved for use prior to planting the desired species. Observe planting interval restrictions.

Any labeled rate of this product may be used in a tank-mix with the following products for forestry use.

Tank-Mix Product	Application Rate
Arsenal Applicators Concentrate* (EPA Reg. No. 241-299, imazapyr)	4 fl oz/acre (0.125 lb ai/acre)
Arsenal Applicators Concentrate* (EPA Reg. No. 241-299, imazapyr) + Oust (EPA Reg. No. 352-401, sulfometuron) or Oust XP (EPA Reg. No. 432-1552, sulfometuron)	4 fl oz/acre (0.125 lb ai/acre) + 1 fl oz/ acre (0.005 lb ai/acre)
Oust (EPA Reg. No. 352-401, sulfometuron) or Oust XP (EPA Reg. No. 432-1552, sulfometuron)	1 - 2 fl oz/acre (0.046 - 0.093 lb ai/acre)
Oust (EPA Reg. No. 352-401, sulfometuron) or Oust XP (EPA Reg. No. 432-1552, sulfometuron) + Velpar (EPA Reg. No. 432-1576, hexazinone)	1 - 2 fl oz/acre (0.046 - 0.093 lb ai/acre) + 0.375 - 0.05 lb/acre (0.281 - 0.562 lb ai/acre)
Oustar (EPA Reg. No. 432-1553, sulfometuron)	8 - 12 fl oz/acre (0.316 - 0.474 lb ai/acre)
Velpar (EPA Reg. No. 432-1576, hexazinone)	0.375 - 0.75 lb/acre (0.281 - 0.562 lb ai/acre)

* Use of surfactant not advised with these products for slash and longleaf pine.

Any of these mixtures can be used as a broadcast spray or in a banded application around trees to reduce potential for soil erosion.

Weeds Controlled

Barley, volunteer
Hordeum vulgare
Bedstraw, catchweed
Galium aparine
Bentgrass, creeping
Agrostis stolonifera
Bluegrass, bulbous
Poa bulbosa
Bluegrass, roughstalk
Poa trivialis
Brome, downy
Bromus tectorum
Brome, ripgut
Bromus rigidus
Buttercup
Ranunculus arvensis
Chamomile, mayweed
Anthemis cotula
Cheat
Bromus secalinus
Chess, hairy
Bromus commutatus
Chickweed, common
Stellaria media
Cocklebur, common
Xanthium strumarium
Fiddleneck, tarweed
Amsinckia lycopsoides
Flixweed
Descurainia sophia
Horseweed
Conyza canadensis
Johnsongrass
Sorghum halepense
Mustard, tumble
Sisymbrium altissimum
Mustard, wild
Sinapis arvensis
Nutsedge, purple
Cyperus rotundus
Nutsedge, yellow
Cyperus esculentus
Pennycress, field
Thlaspi arvense
Quackgrass
Elytrigia repens
Shepherd's-purse
Capsella bursa-pastoris
Sunflower, common
Helianthus annuus
Tansymustard, pinnate
Descurainia pinnata

WINTER WHEAT AND SPRING WHEAT**

**Not for Use in New York

Use Sites: Winter wheat and spring wheat

Preharvest Interval: Wheat forage may be grazed immediately after application of this product. **DO NOT** harvest wheat for hay within 30 days of **CRYDER** application. **DO NOT** harvest wheat for grain within 55 days of application of this product.

Application Equipment and Techniques

Select spray volumes that ensure thorough and uniform weed coverage. Use nozzles that provide optimum spray distribution and coverage at the appropriate spray pressure. Thorough coverage is necessary to provide good weed control without streaking, skips, overlaps, and spray drift during application.

To the extent consistent with applicable law, Atticus, LLC will not be liable for rotational crop injury resulting from spray overlaps.

Ground Broadcast Application

Apply this product uniformly as a broadcast spray with properly calibrated ground equipment in 5 to 20 gallons of water per acre, or in 10 to 40 gallons of liquid fertilizer solution per acre.

Aerial Application

Apply with aerial equipment in 5 to 15 gallons of water per acre.

Applications in Fluid Fertilizer Carrier

APPLICATION OF THIS HERBICIDE IN LIQUID FERTILIZER SOLUTIONS MAY RESULT IN LEAF BURN AND REDUCED FORAGE GROWTH.

This herbicide provides most consistent performance when applied with water as the spray carrier and surfactant is added to the spray solution. Liquid nitrogen fertilizer solutions (28-0-0 or 32-0-0) may, however, be used as a spray carrier in place of all or part of the water when the label directions are followed.

DO NOT USE IN FERTILIZER SOLUTIONS OF pH 5 OR LESS.

Fall applications of this herbicide in liquid fertilizer solutions may cause rapid leaf burn, resulting in reduced weed control and reduced forage growth.

Fertilizer solutions must contain less than 50 percent liquid nitrogen and not exceed 30 pounds of actual nitrogen per acre.

Nonionic surfactants must be added at 0.25 percent by volume (1 quart per 100 gallons of spray solution) to spray solutions containing fluid fertilizer.

Tank Mixtures with Insecticides

This product may be tank-mixed or used sequentially with insecticides labeled for use in wheat, except Malathion. **DO NOT** USE THIS PRODUCT PLUS MALATHION, AS CROP INJURY MAY RESULT.

It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

DO NOT use tank mixtures of this product plus insecticides when the wheat crop has significant insect damage, is under drought stress, or when growth is negatively influenced by other environmental stresses, including nutrient deficiency, poor soil pH, or disease. **DO NOT** apply this product within 60 days of crop emergence where an organophosphate insecticide has been applied as an in-furrow treatment, as crop injury may result.

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Winter Wheat

When applied to winter wheat as directed in this section, the following weeds are either controlled or suppressed by this product as indicated for either preemergence application, postemergence application in the fall, or postemergence application in the spring.

Weed Species	Pre	Fall Post	Spring Post
Barley, volunteer *Hordeum vulgare*	C	C	S
Bedstraw, catchweed *Galium aparine*	S	C	C
Bluegrass, bulbous *Poa bulbosa*	▪	▪	C
Bluegrass, roughstalk *Poa tinialis*	▪	C	▪
Brome, downy *Bromus tectorom*	C	C	S
Brome, Japanese *Bromus japonicus*	C	C	S
Brome, ripgut *Bromus rigidus*	▪	S	S
Chamomile, mayweed *Anthemis cotula*	▪	C	C
Cheat *Bromus secalinus*	C	C	S
Chess, hairy *Bromus commutatus*	C	C	S
Chickweed, common *Stellaria media*	▪	S	C
Fiddleneck, tarweed *Amsinckia lycopsoides*	▪	S	S
Flixweed *Descurainia sophia*	S	S	S
Henbit *Lamium amplexicaule*	S	S	▪
Lady's-thumb *Polygonum persicaria*	▪	▪	S
Mustard, tumble *Sisymbrium altissimum*	S	C	C
Mustard, wild *Sinapis arvensis*	C	C	C
Oat, wild (fall germinating) *Avena fatua*	▪	S	S
Oat, wild (spring germinating) *Avena fatua*	▪	▪	S
Pennycress, field *Thlaspi arvense*	S	S	S
Quackgrass *Elytrigia repens*	▪	▪	C
Rescuegrass *Bromus catharticus*	▪	S	S
Ryegrass, Italian *Lolium multiflorum*	▪	S	S**
Shepherd's-purse *Capsella bursa-pastoris*	▪	▪	C
Tansymustard, pinnate *Descurainia pinnata*	S	S	S
Wallflower, bushy *Erysimum repandum*	▪	C	C

** Spring application will provide suppression only in WA, ID, OR.
C = Control S = Suppression ▪ = Not Control or Suppressed

This product can be applied in winter wheat either as a single preemergence application, a single postemergence application, or as a split postemergence application to control or suppress the weeds listed in this section. Best weed control is obtained when soil moisture is adequate to support vigorous wheat and weed growth.

Choose one of the following application scenarios.

Preemergence in Winter Wheat

Apply **CRYDER** preemergence to winter wheat at 2/3 ounce of product (0.03 lb ai) per acre in a single application. Preemergence applications of **CRYDER** must be made after drilling wheat but before wheat or weed emergence. **DO NOT** use preemergence application if dry soil conditions will cause delayed wheat and/or weed emergence. Preemergence applications under dry soil conditions can:

1. Increase the risk of wheat injury due to slow and inconsistent winter wheat germination and growth prior to winter dormancy. (If winter wheat does not reach the 3-leaf stage prior to winter dormancy, a negative crop response the following spring can be expected.)
2. Result in poor weed control performance.
3. Make this product vulnerable to wind erosion until fall moisture is received.

Under these conditions wait until crop and weeds have emerged and are showing good vigor, and then follow directions for postemergence application. **DO NOT** use preemergence applications for no-till systems or when high crop residue levels (plant material) are present on the soil surface.

Postemergence in Winter Wheat-Single Application

Apply this product at 2/3 ounce of product (0.03 lb ai) per acre in a single application when the target weeds listed in this section are actively growing. Use a nonionic surfactant at a concentration of 0.5 percent by volume (2 quarts per 100 gallons of spray solution) with this postemergence application.

In the states of KS, OK, TX and MT, the single postemergence application can be made after the wheat is in the 2-leaf stage, but prior to the jointing stage (Feekes' Scale 6). In all other states, postemergence application can be made after the wheat emerges, but prior to the jointing stage (Feekes' Scale 6).

Brome (Cheat, Downy Brome, Japanese Brome)

For best control of brome species, apply this product as a single postemergence fall application of 2/3 ounce of product (0.03 lb ai) per acre when brome is in the 2- to 3-leaf stage of growth. Best performance with fall applications of this product will occur with good soil moisture and/or rainfall soon after application.

For spring postemergence suppression of brome species, apply a single application of 2/3 ounce of this product (0.03 lb ai) per acre when brome has recovered from cold weather (majority of foliage is green and not red or purple) and is actively growing. For best control, apply when brome is less than the 5-tiller stage of growth.

Mustards and other winter annual broadleaf weeds

For fall postemergence control of mustards and other winter annual broadleaf weeds, apply 2/3 ounce of this product (0.03 lb ai) per acre in a single application. For best control, apply when weeds are less than 2 inches in diameter. Best performance with fall application of this product will occur with good soil moisture and/or rainfall soon after application.

For spring postemergence control of winter annual broad leaf weeds, apply 2/3 ounce of this product (0.03 lb ai) per acre. For best control, make application when weeds are less than 2 inches in diameter. Use tank mixtures with broadleaf herbicides when winter annual broadleaf weeds are greater than 2 inches in diameter.

Postemergence in Winter Wheat-Split Application

For use only in the following states: ID, MT, OR, WA, and WY

As an alternative to a single postemergence application, this product may be applied to winter wheat in a split application. Start with an initial application of 3/8 ounce of product (0.017 lb ai) per acre after winter wheat and target weeds have emerged and are beyond the 2-leaf stage, followed by a second application of 3/8 ounce of this product (0.017 lb ai) per acre in the spring, no sooner than two weeks following the initial application but prior to boot stage (Feekes' Scale 9). Add a nonionic surfactant at a concentration of 0.5 percent by volume (2 quarts per 100 gallons of spray solution) with this postemergence application.

FOR SPLIT APPLICATION ONLY, **DO NOT** EXCEED 3/4 OUNCE OF PRODUCT (0.035 lb ai) PER ACRE PER YEAR.

Restrictions:

- **Maximum Annual Use Rate:** 0.75 ounces (0.035 lb ai) per acre per year
- **Single Maximum Use Rate:** 0.375 ounces (0.017 lb ai) per acre
- **Maximum Number of Applications/Year:** 2
- **RTI:** 2 weeks

Tank Mixtures for Winter Wheat

For additional broadleaf weed control, this product may be applied as a spring postemergence application to winter wheat in a tank mixture with the following herbicides.

2,4-D amine[1,2,3] (EPA Reg. No. 81927-38)
Bronate (bromoxynil + MCPA) (EPA Reg. No. 264-690)
Buctril (bromoxynil) (EPA Reg. No. 264-437)
Buctril 4EC (bromoxynil) (EPA Reg. No. 264-540)
MCPA amine[1,2,3] (EPA Reg. No. 1381-104)
MCPA LV ester[2] (EPA Reg. No. 9779-265)
Sencor DF (metribuzin)[3,4] (EPA Reg. No. 264-738)

[1] Tank mixtures with this herbicide may result in reduced control of brome species.
[2] Tank mixtures with this product may be made provided the specific product being used is registered for postemergence application to wheat.
[3] Not required for use with split application rate of 0.375 ounce of **CRYDER** (0.017 lb ai).
[4] Different formulations of the active ingredient may be used, provided that the specific product being used is registered for postemergence application to wheat.

Tank mixtures with herbicides formulated as amines may decrease the effectiveness of this product.

Refer to individual tank-mix product label for application rate and restrictions related to soil texture, soil organic matter, and wheat growth stage.

Tank mixtures with metribuzin may be applied only in the spring.

See the **MIXING** section of this label for additional information on Tank Mixtures.

Spring Wheat

When this product is applied to spring wheat as directed in this section, the following weeds are either controlled or suppressed as indicated for either preemergence or postemergence application:

Weed Species	Pre	Post
Barley, volunteer *Hordeum vulgare*	S	S
Oat, wild *Avena fatua*	▪	C
Quackgrass *Elytrigia repens*	▪	S
Sunflower, common *Helianthus annuus*	C	C

C = Control S = Suppression ▪ = Not Controlled or Suppressed

In spring wheat, apply a single postemergence application of 0.667 ounce of this product (0.03 lb ai) per acre when soil moisture is adequate to support vigorous wheat and weed growth, and prior to jointing stage (Feekes' scale 6). Use a non-ionic surfactant at a concentration of 0.5 percent by volume (2 quarts per 100 gallons of spray solution) with this postemergence application.

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DO NOT apply this product postemergence to durum wheat.

For wild oat control, apply 0.667 ounce of this product (0.03 lb ai) per acre when wild oat is in the 1 to 4 true leaf stage.

Tank Mixtures for Spring Wheat

For additional broadleaf weed control, this product may be applied to spring wheat in a tank mixture with the following herbicides:

2,4-D amine[1,2] (EPA Reg. No. 81927-38)
Bronate (bromoxynil + MCPA) (EPA Reg. No. 264-690)
Buctril (bromoxynil) (EPA Reg. No. 264-437)
Buctril 4EC (EPA Reg. No. 264-540)
Cheyenne (fenoxaprop + MCPA) (EPA Reg. No. 264-654)
Curtail (clopyralid + 2,4-D)[1] (EPA Reg. No. 62719-48)
Dakota (fenoxaprop + MCPA) (EPA Reg. No. 83100-38-83979)
MCPA amine[1,2] (EPA Reg. No. 1381-104)
MCPA LV ester[2] (EPA Reg. No. 9779-265
Stinger (clopyralid) (EPA Reg. No. 62719-73)
Tiller (fenoxaprop + 2,4-D + MCPA) (EPA Reg. No. 264-649)

[1] Tank mixtures with this herbicide may result in reduced control of grass species.
[2] Tank mixtures with this herbicide may be made provided the specific product is registered for this use.

Crop Rotation

No crop other than wheat may be planted sooner than 3 months after application of this product.

The following tables provide crop rotation intervals (months) for selected crops based on soil pH and cumulative precipitation by geographic region. For soils with pH higher than listed or for cumulative precipitation less than listed, a successful field bioassay must be completed before planting, as described in this section under **Field Bioassay**. If a shorter rotation interval other than that listed for a crop is desired, a successful field bioassay must be completed before planting.

All crops other than those listed in these tables may be seeded into fields treated with this product only after the completion of a successful field bioassay.

Field Bioassay

To conduct an effective field bioassay, plant strips of the crop you plan to grow the following season in fields previously treated with this product. Crop response will determine if the crop(s) planted in the test strips can be adequately grown in these areas.

Table 1 - KS, NE, OK, TX

Crop	Soil pH	Cumulative Precipitation (Inches)	Rotation Interval (Months)
Millet	<7.5	18	3
Corn-IR (imidazolinone resistant)	<7.5	18	3
Soybean-STS™ (sulfonylurea resistant soybean)	<7.5	18	3
Winter Canola (varieties that exhibit resistance to sulfonylurea herbicides)	<7.5	18	3
Corn - Normal	<7.5	30	12
Cotton	<7.5	30	12
Soybean	<7.5	30	12
Sorghum (grain)	6.0 - 7.5	30	22
Sunflower	<6.0	30	17
Winter Canola (varieties that do not exhibit sensitivity to sulfonylurea herbicides)	6.0 - 7.5	30	22

Table 2 - ID, OR, WA

Crop	Soil pH	Cumulative Precipitation (Inches)	Rotation Interval (Months)
Millet	<7.5	18	3
CLEARFIELD Canola	<7.5	18	3
Corn-IR (imidazolinone resistant)	<7.5	18	3
Soybean-STS™ (sulfonylurea resistant soybean)	<7.5	18	3
Potato	<7.5	18	12
Barley	<7.5	24	22
Canola	<7.5	24	22
Corn - Normal	<7.5	24	22
Lentils	<7.5	24	22
Peas*- All Classes (including chickpeas)	>6.5	24	22
	<6.5	30	17
Soybean	<7.5	24	22

* Peas must not be planted on clay or eroded hillsides treated with **CRYDER** without conducting a field bioassay as described in this section.

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Table 3 - CO, SD, WY

Crop	Soil pH	Cumulative Precipitation (Inches)	Rotation Interval (Months)
Millet	<7.5	18	3
Corn-IR (imidazolinone resistant)	<7.5	18	3
Soybean-STS™ (sulfonylurea resistant soybean)	<7.5	18	3
Corn - Normal	<7.5	24	22
Soybean	<7.5	24	22
Sorghum (grain)	6.5 - 7.5	45	34
Sunflower	<6.5	35	22

Table 4 - MT, ND

Crop	Soil pH	Cumulative Precipitation (Inches)	Rotation Interval (Months)
CLEARFIELD Canola	<7.5	12	12

Table 5 - All Other Regions

Crop	Soil pH	Cumulative Precipitation (Inches)	Rotation Interval (Months)
Soybean-STS™ (sulfonylurea resistant soybean)	<6.5	30	3
Soybean	<6.5	30	5
	<7.5	24	12

STORAGE AND DISPOSAL

DO NOT contaminate water, food or feed by storage or disposal.

PESTICIDE STORAGE: Store in a tightly closed container in a cool, dry place. Store in original container and out of reach of children, preferably in a locked storage area.

PESTICIDE DISPOSAL: Pesticide spray mixture or rinsate that cannot be used must be disposed of in a landfill approved for pesticides. Improper disposal of excess pesticide spray mixture or rinsate is a violation of Federal law. If these wastes cannot be disposed of by the use according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER HANDLING:

Bag: Nonrefillable outer bag. **DO NOT** reuse or refill the outer bag. Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

Plastic Container: Nonrefillable container. **DO NOT** reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities.

LIMITATION OF WARRANTY AND LIABILITY

IMPORTANT: READ BEFORE USE. Read the entire Directions for Use, Conditions of Warranties and Limitations of Liability before using this product. If these terms and conditions are not acceptable, return the unopened product container at once. By using this product, user or buyer accepts the following Disclaimer of Warranties and Limitations of Liability. **CONDITIONS:** The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Ineffectiveness, injury, and other unintended consequences may result because of such factors as manner of use or application (including misuse), the presence of other materials, weather conditions, and other unknown factors, all of which are beyond the control of ATTICUS, LLC. All such risks shall be assumed by the user or buyer.

DISCLAIMER OF WARRANTIES: To the extent consistent with applicable law, ATTICUS, LLC makes no other warranties, express or implied, of merchantability or of fitness for a particular purpose or otherwise, that extend beyond statements on this label. **LIMITATIONS OF LIABILITY:** To the extent consistent with applicable law, neither ATTICUS, LLC the manufacturer, nor the Seller shall be liable for any indirect, special, incidental or consequential damages resulting from the use, handling, application, storage, or disposal of this product. To the extent consistent with applicable law, the exclusive remedy of the user or buyer for any and all losses, injuries or damages resulting from the use, handling, application, or storage of this product, whether in contract, warranty, tort, negligence, strict liability or otherwise, shall not exceed the purchase price paid.

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PENDIMETHALIN | GROUP 3 HERBICIDE

PIN-DEE™ 3.3 EC

Herbicide

For use in Alfalfa (Forage, Hay or Seed Production), Bearing Citrus Fruit Trees, Bearing Nut Trees, Bearing Pome Fruit Trees, Bearing Stone Fruit Trees, Carrots, Carrots Grown For Seed, Corn (Field, Pop, Seed, Sweet), Cotton, Edible Beans, Forage Legumes, Fruiting Vegetables (Pepper, Tomatoes), Garlic, Grain Sorghum, Juneberry, Leek, Lentils, Mint, Nonbearing Fruit Tree and Nut Trees, Nonbearing Vineyards, Onions (Dry, Bulb, Green), Peas, Pomegranate, Shallots, Peanuts, Potatoes, Rice, Soybeans, Strawberries, Sugarcane, Sunflowers, Tobacco and Wheat. Also for use as a pre-emergence weed control herbicide in Turfgrasses, Industrial (Unimproved) Turf, Ornamentals, Landscapes and Ground Maintenance, Noncropland including Tree Plantations and Total Vegetation Control.

ACTIVE INGREDIENT:

Pendimethalin	37.4%
OTHER INGREDIENTS*:	62.6%
TOTAL:	100.0%

This product contains 3.3 pounds of Pendimethalin per gallon.

* Contains Petroleum distillate.

KEEP OUT OF REACH OF CHILDREN

CAUTION

See FIRST AID Below

EPA Reg. No. 19713-668 **Net Content:**
EPA Est. No. 19713-XX-X **2.5 Gals. (9.46 L)**

FIRST AID

IF SWALLOWED:
- Immediately call a poison control center or doctor for treatment advice.
- Do not give any liquid to person.
- Do not induce vomiting unless told to by a poison control center or doctor.
- Do not give anything by mouth to an unconscious person.

IF IN EYES:
- Hold eye open and rinse slowly and gently with water for 15 to 20 minutes.
- Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.
- Call a poison control center or doctor for treatment advice.

IF ON SKIN OR CLOTHING:
- Take off contaminated clothing.
- Rinse skin immediately with plenty of water for 15 to 20 minutes.
- Call a poison control center or doctor for treatment advice.

Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also call CHEMTREC at 800-424-9300 for medical emergency information.

NOTE TO PHYSICIAN: Contains petroleum distillate. Vomiting may cause aspiration pneumonia.

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

CAUTION: Causes moderate eye irritation. Harmful if swallowed or absorbed through the skin. Avoid contact with skin, eyes or clothing. Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

(Continued)

PRECAUTIONARY STATEMENTS *(Cont.)*

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear: Long-sleeved shirt and long pants, chemical-resistant gloves made of barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils or viton ≥ 14 mils and shoes plus socks.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

ENGINEERING CONTROLS

When handlers use closed systems, enclosed cabs or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [(40 CPR 170.240)(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

USER SAFETY RECOMMENDATIONS

Users should: 1) Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. 2) Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

This product is toxic to fish. Do not apply directly to water or to areas where surface water is present or to intertidal areas below the mean high water mark. Drift and runoff from treated areas may be hazardous to aquatic organisms in adjacent aquatic sites. Do not contaminate water when disposing of equipment washwaters or rinsate.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Do not apply this product in a way that will contact workers or other persons either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your state or tribe, consult the agency responsible for pesticide protection.

This label must be in the possession of the user at the time of pesticide application. Observe all precautions and restrictions in this label and the labels of products used in combination with this product. The use of this product not consistent with this label can result in injury to crops, animals or persons.

Do not allow spray to drift from the application site and contact people, structures people occupy at any time and the associated property, parks and recreation areas, non-target crops, aquatic and wetland areas, woodlands, pastures, rangelands or animals.

Do not enter or allow other people (or pets) to enter the treated area until sprays have dried.

Manufactured By:
Drexel Chemical Company
P.O. Box 13327, Memphis, TN 38113-0327
SINCE 1972

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard (WPS), 40 CFR Part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, greenhouses and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about Personal Protective Equipment (PPE), notification to workers and Restricted Entry Interval (REI). The requirements in this box only apply to uses of this product that are covered by the WPS.

Do not enter or allow worker entry to treated areas during the REI of 24 hours.

Exception: If the product is soil-injected or soil-incorporated, the WPS, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated. PPE required for early entry to treated areas that is permitted under the WPS and that involves contact with anything that has been treated such as plants, soil or water is: Coveralls, chemical-resistant gloves made of barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils or viton ≥ 14 mils and shoes plus socks.

PRODUCT INFORMATION

PIN-DEE 3.3 EC is a selective herbicide for controlling most annual grasses and certain broadleaf weeds as they germinate. This product will not control established weeds. Destroy emerged weeds prior to application.

This product is most effective in controlling weeds mechanically incorporated or when incorporated into the weed germination zone by adequate rainfall or overhead irrigation after application.

Unusually cold, excessively wet or hot and dry conditions that delay germination or extend germination over a long period of time can reduce weed control.

Uneven application or improper soil incorporation can decrease weed control or cause crop injury. Soil incorporation deeper than directed can reduce weed control. Seedling diseases, cold weather, excessive moisture, shallow or deep planting, low or high soil pH, high soil salt concentration or drought can weaken seedlings and plants and increase the possibility of crop damage from this product. Under these conditions, crop yields can be reduced.

In the event of crop loss due to adverse weather conditions or other reasons, any crop registered for a pre-plant incorporated application of this product can be replanted without adverse effects the same year (see *"CROPS"* section for exceptions).

ENDANGERED SPECIES PROTECTION

This product may have effects on federally listed threatened or endangered plant species or their critical habitat. When using this product, you must follow the measures contained in the Endangered Species Protection Bulletin for the county or parish in which you are applying the pesticide. To determine whether your country or parish has a bulletin, and to obtain that bulletin, consult http://www.epa.gov/espp/ or call 1-800-447-3813 no more than 6 months before using this product. Applicators must use bulletins that are in effect in the month in which the pesticide will be applied. New bulletins will generally be available from the above sources 6 months prior to their effective dates.

If endangered plant species occur in proximity to the application site, the following mitigation measures are required:

- If applied by ground, leave an untreated buffer zone of 200 feet. The product must be applied using a low boom (20 inches above the ground) and ASABE fine to medium/coarse nozzles.
- If applied by air, leave an untreated buffer zone of 170 feet. Must use straight-stream nozzles (D-6 or larger). Wind can be no more than 8 mph and release height must be 15 feet or less.

RESISTANCE MANAGEMENT

PENDIMETHALIN | GROUP 3 | HERBICIDE

For resistance management, this product is a Group 3 mode of action herbicide. Any weed population may contain or develop plants naturally resistant to this product and other Group 3 mode of action herbicides. The resistant biotypes may dominate the weed population if these herbicides are used repeatedly in the same field. Appropriate resistance management strategies should be followed.

To delay herbicide resistance, take one or more of the following steps:

- Rotate the use of this product or other Group 3 herbicides within a growing season sequence or among growing seasons with different herbicide groups that control the same weeds in a field.
- Use tank-mixtures with herbicides from a different group if such use is permitted; where information on resistance in target weed species is available, use the less resistance-prone partner at a rate that will control the target weed(s) equally as well as the more resistance-prone partner. Consult your local extension service or certified crop advisor if you are unsure as to which active ingredient is currently less prone to resistance.
- Adopt an integrated weed-management program for herbicide use that includes scouting and uses historical information related to herbicide use and crop rotation, and that considers tillage (or other mechanical control methods), cultural (e.g., higher crop seeding rates; precision fertilizer application method and timing to favor the crop and not the weeds), biological (weed-competitive crops or varieties) and other management practices.
- Scout after herbicide application to monitor weed populations for early signs of resistance development. Indicators of possible herbicide resistance include: (1) failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds; (2) a spreading patch of non-controlled plants of a particular weed species; (3) surviving plants mixed with controlled individuals of the same species. If resistance is suspected, prevent weed seed production in the affected area by an alternative herbicide from a different group or by a mechanical method such as hoeing or tillage. Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment when moving between fields, and planting clean seed.
- If a weed pest population continues to progress after treatment with this product, discontinue use of this product, and switch to another management strategy or herbicide with a different mode of action, if available.
- Contact your local extension specialist or certified crop advisors for additional pesticide resistance-management and/or integrated weed-management recommendations for specific crops and weed biotypes.
- For further information or to report suspected resistance, contact Drexel Chemical Company representatives at (901) 774-4370.

WEEDS CONTROLLED

See *"CROPS"* section for additional weeds controlled.

Weeds Controlled By Up to 2.4 Qts. of This Product Per Acre		
Grasses		
Annual ryegrass	Foxtail (Yellow)	Panicum (Fall)
Barnyardgrass	Goosegrass	Panicum (Texas)
Canarygrass*,[a]	Hairy chess*,[b]	Sandbur (Field)
Cheat*,[a]	Itchgrass*	Shattercane*
Crabgrass	Italian ryegrass*	Signalgrass*
Crowfootgrass	Japanese brome*,[b]	Wild proso millet*
Downy brome* (Cheatgrass)	Johnsongrass (Seedling)	Witchgrass
Foxtail (Giant)	Jointed goatgrass*,[b]	Woolly cupgrass*
Foxtail (Green)	Oat (Wild)*	
Broadleaves		
Amaranth (Palmer)	Lambsquarters (Common)	Pusley (Florida)
Bugloss (Small)[b]	Lambsquarters (Slimleaf)	Shepherdspurse*
Carpetweed	London rocket*	Smartweed (Pennsylvania)*
Chickweed (Common)*	Mustard (Black)[a]	Spurge (Annual)
Henbit	Pigweed spp.	Velvetleaf*
Kochia	Purslane	Waterhemp spp.
Lady's thumb		

*Suppression but controlled when use rate of this product is greater than 2.4 qts./ac.
[a] Not controlled in California.
[b] Neither suppressed nor controlled in California.

Weeds Controlled By 2.4 Qts. or Greater of This Product Per Acre		
Grasses		
Annual bluegrass	Lovegrass	Swollen fingergrass
Browntop Panicum	Sprangletop (Mexican)	
Guinea grass[a]	Sprangletop (Red)	
Junglerice		
Broadleaves		
Dodder*	Knotweed (Prostate)	Puncturevine
Fiddleneck	Morningglory**	

*Use the highest labeled rate of this product specified in the specific crop for optimum control of Dodder.
**Suppression
[a] Not controlled in California.

APPLICATION RATE

Use rates for this product when used alone, in tank-mix or sequential applications are given in the *"CROPS"* section. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank-mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank-mixture.

Use rates of this product vary by soil texture and organic matter. See the following table for soil texture groupings used in this label.

Soil Texture	Soil Type
Coarse	Loamy sand, Sand, Sandy loam
Medium	Loam, Sandy clay, Sandy clay loam*, Silt, Silt loam
Fine	Clay, Clay loam, Silty clay, Silty clay loam*
Peat and Muck**	—

* Sometimes considered as transitional soils and may be classified as either Medium or Fine textured soil.

** This product may be used on Peat and Muck soils but weed control may be inconsistent and/or reduced. Use maximum labeled use rate allowed in the specific crop.

TIMING OF APPLICATION

This product will provide most effective weed control when applied by ground or aerial equipment and subsequently incorporated into the soil within 7 days after application by rainfall, sprinkler irrigation or mechanical tillage prior to weed seedling emergence from soil. This product can also be applied through chemigation including flooded basin irrigation systems. Apply this product as pre-plant surface, pre-plant incorporated, surface incorporated, pre-emergence, early post-emergence, post-emergence incorporated (CULTI-SPRAY) or lay-by treatment. See the *"CROPS"* section for specific application directions by crop.

Pre-plant Surface Applications: Apply this product alone or in tank-mixtures up to 45 days before planting in minimum tillage or no-tillage production systems. When making early pre-plant surface applications (15 to 45 days prior to planting), tank-mix this product or follow by a post-emergence herbicide application. Rainfall or sprinkler irrigation within 7 days after application is required to move this product into the upper soil surface where weed seeds germinate.

Pre-plant Incorporated Applications: Apply this product and incorporate into the upper (1 to 2 inches) soil surface up to 60 days before planting. Use an implement capable of giving uniform incorporation. Two-pass incorporation usually results in a more consistent result.

Surface Incorporated Applications: Uniformly apply this product as broadcast or banded treatment to soil surface underneath established trees and/or in ground areas between tree rows. Within 7 days after application, incorporate into upper (1 to 2 inches) soil surface using either rainfall, sprinkler irrigation or shallow mechanical incorporation using an implement capable of giving uniform incorporation. Two-pass mechanical incorporation usually results in a more consistent result.

Pre-emergence Surface Applications: Broadcast treatment uniformly to the soil surface at-planting and up to 2 days after planting. Rainfall, sprinkler irrigation or shallow mechanical incorporation within 7 days after application is required to move this product into the upper soil surface where weed seeds germinate. If adequate rainfall or irrigation does not occur and weed seedling emergence begins, a shallow cultivation or rotary hoeing will improve performance.

Early Post-emergence Applications: Apply this product prior to weed seedling emergence or in a tank-mix with products that control the emerged weeds. Refer to the *"CROPS"* section for specific post-emergence application directions by crop.

Post-emergence Incorporated Applications (CULTI-SPRAY):
Prior to application, cultivate crops in such a manner as to throw at least 1 inch of soil over the base of the crop plants. This will prevent direct contact of this product and the zone of brace root formation. Broadcast apply this product with a ground sprayer when crop is at least 4 inches tall up to lay-by. Use drop nozzles if crop foliage will prevent uniform coverage of the soil surface within the rows. Thoroughly and uniformly incorporate treatments of this product into the soil with (1) a sweep-type or rolling cultivator set to provide thorough incorporation in the top 1 inch of soil or (2) adequate overhead irrigation water or rainfall. See *"CORN"* and *"GRAIN SORGHUM"* under the *"CROPS"* section for more details on Culti-Spray application.

Lay-by Application: Apply this product directly to the soil between rows as a directed spray following the last normal cultivation (lay-by). See the *"CROPS"* section for more details on lay-by application.

Split Applications: This product may be applied pre-plant incorporated up to 60 days prior to planting followed by a pre-emergence application at-planting or up to 2 days after planting. The total amount of this product applied per acre per season cannot exceed the highest specified rate for any given soil type. See the *"CROPS"* section for more details on split applications.

Fall Applications: This product may be used in Fall application programs in certain crops. See the *"CROPS"* section for details on Fall application timing.

APPLICATION INSTRUCTIONS

This product may be applied using either water or sprayable fluid fertilizer (such as straight 32-0-0 or 28-0-0) as the spray carrier. Additionally, this product may be impregnated on dry bulk fertilizer. Do not use sprayable fluid fertilizer as a carrier after crop emergence unless the typical fertilizer burn symptoms on the crop are acceptable.

AERIAL APPLICATION

Uniformly apply in 5 or more gallons of water per acre.

Exercise precautions to minimize drift. Do not apply during periods of gusty winds or when wind conditions favor drifting.

Spray drift can cause injury to sensitive crops. Use a flagman or an automatic mechanical flagging unit on the aircraft to avoid overlapping and possible crop injury.

GROUND APPLICATION (BROADCAST)

Uniformly apply with properly calibrated ground equipment in 10 or more gallons of water per acre or 20 or more gallons of liquid fertilizer per acre. Use sprayers equipped with appropriate nozzles that provide uniform and accurate spray distribution and minimize drift. Keep the bypass line on or near the bottom of the tank to minimize foaming. Nozzle and in-line screens must be no finer than 50 mesh. Application of this product during periods of gusty winds may result in uneven applications. Do not apply this product post-emergence in liquid fertilizers.

If liquid fertilizer/herbicide(s) mixture separates in the spray tank, clogged equipment and uneven application can result. Always predetermine the compatibility of this product alone or with other herbicides based on the following compatibility jar test:

1. Add 1 pint of fertilizer to a quart jar.
2. Add 1 to 4 teaspoons of the Dry Flowable (DF), Wettable Powder (WP), Aqueous Solution (SL), Flowable (SC) or Liquid (L) formulation (depending on mixing ratio required) to the liquid fertilizer. The number of teaspoons of the formulation to add can be determined by the following formula:

$$\frac{\text{Lbs. or Pts. of the Product/Acre}}{\text{Gals. of Fertilizer/Acre}} \times 11.4 = \text{No. of Tsps. of Herbicide to Add to 1 Pt. of Fertilizer}$$

3. Close the jar and agitate until the herbicide(s) are evenly dispersed in the liquid fertilizer. If the materials do not disperse well, it may be necessary to slurry the chemicals in water before adding to the fertilizer.
4. After dispersing the materials, add appropriate number of teaspoons of this product to the jar and shake well. Add water soluble concentrate herbicides to the mixture last and agitate. Let the mixture stand for 30 minutes and then observe the results. Look for signs of separation: an oily layer or globules, sludge, flakes or other precipitates.
5. Evaluate compatibility.
   (a) If the herbicide(s) and liquid fertilizer mixture does not separate, use this mixture in your spray tank.
   (b) If the mixture separates but mixes readily with shaking, the mixture can be used provided that good agitation is maintained in the spray tank.
   (c) If separation of the mixture occurs and agitation does not correct this problem, a compatibility agent is needed.
6. If the need for a compatibility agent is demonstrated, the following procedure is recommended: Using a clean quart jar, repeat step 1 above and add one-half teaspoon of the compatibility agent to the liquid fertilizer. Mix well and repeat steps 2, 3 and 4. If separation or precipitation occurs with the compatibility agent, do not use this product with that specific liquid fertilizer.

GROUND APPLICATION (BAND)

Uniformly apply the broadcast equivalent rate and volume per acre. To determine these:

$$\frac{\text{Band width in Inches}}{\text{Row width in Inches}} \times \text{Broadcast Rate per Acre} = \text{Band Rate per Acre}$$

$$\frac{\text{Band width in Inches}}{\text{Row width in Inches}} \times \text{Broadcast Volume per Acre} = \text{Band Volume per Acre}$$

GROUND APPLICATION (DRY BULK FERTILIZER)

Apply this product/dry bulk fertilizer mixtures with ground equipment only. **Do not** impregnate this product onto coated Ammonium nitrate or limestone because these materials will not absorb the herbicide. Dry fertilizer blends containing mixtures of Ammonium nitrate or limestone may be impregnated with this product. A minimum of 200 pounds of impregnated dry bulk fertilizer excluding the weight of Ammonium nitrate or limestone must be applied per acre.

Use the following formula to determine the amount of this product (in qts.) to be impregnated on a ton of dry bulk fertilizer based on the rate of fertilizer to be applied per acre:

$$\frac{2000}{\text{Lbs. of Dry Fertilizer}} \times \text{Qts. of This Product (Specified Rate per Acre)} = \text{Qts. of This Product per Ton of Fertilizer}$$

To impregnate this product on bulk fertilizer, use a closed rotary drum mixer or other commonly used dry bulk fertilizer blender equipped with suitable spray equipment. Spray nozzles must be placed to provide uniform coverage of this product onto the fertilizer during mixing.

Apply this product/dry bulk fertilizer mixture with an accurately calibrated dry fertilizer spreader. This product/dry bulk fertilizer mixture must be spread uniformly on the soil surface.

CHEMIGATION APPLICATION (VIA SPRINKLER IRRIGATION SYSTEMS)

This product may be applied as a chemigation treatment through sprinkler irrigation systems. Refer to *"CROPS"* section for individual crops.

Do not apply this product via chemigation to crops unless specified in the *"CROPS"* section.

Apply this product ONLY through a sprinkler irrigation system of the following type: center pivot, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set or hand move. Do not apply this product through any other type of sprinkler irrigation system.

Uniform distribution of irrigation water treated with this product is the sole responsibility of the applicator and is required to avoid crop injury, lack of herbicide effectiveness or illegal pesticide residues in the crop. If you have any questions about calibration, contact your State Extension Service Specialists, equipment manufacturers or other experts. The system must be properly calibrated (with water only) to ensure that the amount of this product applied corresponds to the specified rate. Apply this product in one-half to three-fourths inches of water during the first sprinkler set (use at least 1 inch of water in the states of New Mexico, Oklahoma and Texas). Maintain agitation in the injection nurse tank to keep a uniform herbicide suspension during application. When application is complete, flush the system with water.

Instructions for Low Volume Micro Sprinklers

Output of low volume sprinkler equals 4 to 50 gallons per hour (gph) per emitter. Point of application must be above ground.

Irrigation system should run a sufficient amount of time prior to injection of this product to have all emitters functioning properly. After system is operating properly, length of injection should be such that at one period of time during the injection, the first and last emitters in the system contain water treated with this product. Add this product to the supply tank already filled with the volume of water required for the injection period. Maintain proper agitation in the injection tank containing this product. Mix this product in clean water and inject down-line from filters. Following injection of this product, flush the system for a period of time sufficient to clear the line of this product. (If application of this product is made during a normal irrigation cycle, make the injection during the last stage.)

Calibration of Low Volume Micro Sprinklers

Calculation of use rate is based on wetted area around emitters, **not** on tree acres. To determine the correct amount of this product, use the following formula:

1. Treated area per each emitter = A
   A = 3.14 x (radius x radius)
2. The area in square feet wet in each acre = B
   $B = \frac{A \times \text{Emitters/Acre}}{144}$
3. The total area (sq. ft.) wet by your system = C
   C = B x Acres covered by system
4. Rate per treated acre of this product (based on length of control desired) = R

$$\text{Amount of This Product to Inject (S)} = \frac{C}{43{,}560} \times R = \text{Qts. of This Product}$$

Example:

If the average distance from emitter to perimeter of wetted area measured 1 inch below soil surface is 13 inches, then:

A = 3.14 x (13" x 13") and A = 530.7 sq. in.

If there are 300 emitters per acre, then:

$B = \frac{530.7 \times 300}{144}$ and B = 1105.6 sq. ft. wetted per acre

If the system covers 20 acres, then:

$$C = \frac{1105.6 \text{ sq. ft.}}{} \times \frac{20 \text{ acres}}{} \text{ and } C = \frac{22{,}112 \text{ sq. ft.}}{} \text{ wetted by the system}$$

If the desired application rate per treated acre is 2.4 quarts of this product, then:

$$S = \frac{22{,}112}{43{,}560} \times 2.4 \text{ and } S = \text{1.2 qts. of this product have to be injected into the system}$$

Special Restrictions For Chemigation

1. Do not apply when wind speed favors drift beyond the area intended for treatment.
2. Do not connect an irrigation system used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place.
3. A person knowledgeable of the chemigation system and responsible for its operation or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.
4. The pesticide injection pipeline must contain a functional, automatic quick-closing check valve to prevent the flow of fluid back toward the injection pump. It must also contain a functional, normally closed solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
5. The sprinkler chemigation system must contain a functional check valve, vacuum relief valve and low-pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow. In addition, systems must use a metering pump such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
6. The sprinkler chemigation system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.
7. The irrigation line or water pump must include a functional pressure switch that will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

Chemigation Systems Connected to Public Water Systems

1. Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.
2. Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.
3. All chemigation systems connected to public water systems must also follow restrictions listed in the preceding section *"Special Restrictions for Chemigation"*.

CHEMIGATION APPLICATION (VIA FLOODED BASIN IRRIGATION SYSTEMS)

This product may be applied via flooded basin irrigation systems, but only to the following crops: Alfalfa grown for forage, hay or seed production; Bearing and Nonbearing Fruit and Nut trees; and Nonbearing vineyards.

Use Instructions and Restrictions for Flooded Basin Irrigation

1. This product may be applied through flooded basin irrigation systems designed to uniformly distribute irrigation water along the soil surface. Solid set systems utilizing tall riser for overhead application are excluded.
2. Follow all label directions for this product regarding rates per acre, timing of application and crop specific use restrictions.

3. Do not connect an irrigation system used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place.
4. A person knowledgeable of the chemigation system and responsible for its operation or under the supervision of the responsible person shall shut the system down and make necessary adjustments should the need arise.
5. Mix this product with water at a 1:1 ratio in the injection nurse tank to assist with product flowability. Maintain agitation in the injection nurse tank to keep a uniform herbicide suspension during application. When application is complete, flush the system with water.
6. Recirculate tail water (runoff water) from flood irrigation that contains this product and contain in the field of initial application or use only on adjacent tree or vine crops or Alfalfa for which this product is registered for this type of application.
7. Systems using a gravity-flow pesticide dispensing system must meter the pesticide in the water at the head of the field downstream of a hydraulic discontinuity such as a drop structure or weir box to decrease potential for water source contamination from backflow water.
8. Systems utilizing a pressurized water and pesticide injection system must meet the following requirements:
   - The system must contain a functional check valve, vacuum-relief valve and low-pressure drain appropriately located in the irrigation pipe to prevent water source contamination from backflow.
   - The pesticide injection pipeline must contain a functional automatic quick closing check valve to prevent flow of fluids back towards the injection pump.
   - The pesticide injection pipeline must also contain a functional, normally closed solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
   - The system must contain a functional interlocking control to automatically shut off the pesticide injection pump when the water pump stops.
   - The irrigation pipe or water pump must include a functional pressure switch, which will stop the pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
   - Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) of effective design and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
   - Any alternative to the above safety devices must conform to the list of EPA-approved alternative devices.
9. Be sure to regularly measure the flow in the field to ensure the correct amount of this product is being metered into the irrigation water and also regularly monitor to ensure that treated water is being uniformly distributed across the field. Flow rates through metering devices and distribution of this product can vary with water temperature and speed of water flow across the field.
10. Uniform distribution of irrigation water treated with this product is the sole responsibility of the applicator and is required to avoid crop injury, lack of herbicide effectiveness, or illegal pesticide residues in the crop.
11. If you have questions about calibration, contact your State Extension Service Specialists, equipment manufacturers or other experts.

SPRAY DRIFT MANAGEMENT

Avoiding spray drift at the application site is the responsibility of the applicator and the grower. The interaction of many equipment and weather-related factors determines the potential for spray drift. The applicator and grower are responsible for considering all these factors when making decisions. It is the responsibility of the applicator to avoid spray drift onto non-target areas.

The following drift management requirements must be followed to avoid off-target drift movement from aerial applications to agricultural field crops:

1. The distance of the outermost nozzles on the boom must not exceed three-fourths the length of the wingspan or rotor.
2. Nozzles must always point backward parallel with the airstream and never be pointed downwards more than 45 degrees.

Where states have more stringent regulations, they must be observed. The applicator should be familiar with and take into account the information covered in the following spray drift reduction advisory information.

Information on Droplet Size

The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential but will not prevent drift if applications are made improperly or under unfavorable environmental conditions (see "*Wind", "Temperature and Humidity"* and *"Temperature Inversions"*).

Controlling Droplet Size

Volume - Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
Pressure - Do not exceed the nozzle manufacturer's specified pressures. For many nozzle types, lower pressure produces larger droplets. When high flow rates are needed, use higher flow rate nozzles instead of increasing pressure.
Number of Nozzles - Use the minimum number of nozzles that provide uniform coverage.
Nozzle Orientation - Orient nozzles so that the spray released parallel to the airstream produces larger droplets than other orientations. Significant deflection from the horizontal will reduce droplet size and increase drift potential.
Nozzle Type - Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low drift nozzles. Solid or straight-stream nozzles oriented straight back produce the largest droplets and the lowest drift.

Boom Length

For some use patterns, reducing the effective boom length to less than three-fourths of the wingspan or rotor length may further reduce drift without reducing swath width.

Application Height

Applications should not be made at a height greater than 10 feet above the top of the largest plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

Swath Adjustment

When applications are made with crosswind, the swath will be displaced downwind. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase with increasing drift potential (higher wind, smaller droplets, etc.).

Wind

Drift potential is lowest between wind speeds of 2 to 10 mph. However, many factors including droplet size and equipment type determine drift potential at any given speed. Application should be avoided below 2 mph due to variable wind direction and high inversion potential.
Note: Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

Temperature and Humidity

When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

Temperature Inversions

Applications should not occur during a temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing which causes small suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light, variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog. However, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

Sensitive Areas

This pesticide should only be applied when the potential for drift to adjacent sensitive areas (e.g., residential areas, bodies of water, known habitat for threatened or endangered species or non-target crops or plants) is minimal (e.g., when wind is blowing away from the sensitive areas).

ADDITIVES

Spray adjuvants have little or no influence on performance of this product when applications are made prior to weed emergence. However, several tank-mixes with this product require adjuvants to improve burndown of emerged weeds. Therefore, surfactants,

liquid fertilizer (28%, 30% or 32% UAN (Urea Ammonium Nitrate) or Ammonium sulfate) or crop oil concentrate may be used with this product tank-mixed applied pre-plant, pre-emergence or early post-emergence to the crop. Follow the adjuvant directions for use on the label of the tank-mix partner.

TANK-MIXING INFORMATION

This product may be applied in a tank-mix or a sequential application with other herbicides registered for use in a given crop. Refer to the companion label for weeds controlled in addition to this product.

When using tank-mixtures or sequential applications with this product, always read the companion product label(s) to determine the specific use rate by soil types, weed species and weed or crop growth stage. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank-mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank-mixture.

Tank-Mixture With Other Product(s)

If compatibility with tank-mix partners is not known, perform a mixing test to check the compatibility of this product with the tank-mix partners.

Mixing Instructions

1. Fill tank one-half to three-fourths full with clean or liquid fertilizer and agitate. Prior to mixing this product or tank-mixtures of this product in liquid fertilizer, refer to appropriate label sections for use in liquid fertilizer, application instructions and compatibility determinations.

   Note: This product will not mix in high salt formulation fertilizers such as 10-34-0. When utilizing high salt formulation fertilizers as the spray carrier, use one of the following:

   a) Pre-slurry this product in water prior to adding to the tank. Use 1:1 ratio of water to this product.

   b) Add water to fertilizer solution prior to adding this product. The amount of water should be equal or greater than the amount of this product to be used.

2. This Product Alone

   When using this product alone, add this product to partially filled tank while agitating and then fill the remainder of the tank with water or liquid fertilizer.

3. This Product in Tank-Mixture

   Add the tank-mixture products in the order listed below prior to adding this product. For tank-mixtures with 2,4-DB, Paraquat or Glyphosate, see mixing instructions at the end of this section.

   a) Wettable Powder (WP) formulations - Make a slurry of the WP in water (1:2 ratio). Add the slurry slowly into the partially filled tank while agitating.

   b) Dry Flowable (DF)/Water Dispersible Granule (WDG) formulations - Add the granules to the partially filled tank while agitating. Make a slurry of the granules in water before adding to liquid fertilizer.

   c) Flowable (SC) formulations: Add the SC formulation to the partially filled tank while agitating.

   d) Water Soluble Concentrate (WSC) formulations: Add the WSC formulation to the partially filled tank while agitating.

   e) Emulsifiable Concentrate (EC) formulations: Add the EC formulation to the partially filled tank while agitating.

After complete mixing, add this product to the tank.

   f) **Note:** For tank-mixes including 2,4-DB, Paraquat or Glyphosate: After complete mixing of this product, continue filling the sprayer with water and add 2,4-DB or Paraquat or Glyphosate near the end of the filling process.

   If Paraquat is included in the tank-mixture, add 8 fluid ounces of non-ionic surfactant per 100 gallons of total spray mixture as the last ingredient in the tank.

Fill the remainder of the tank with water or liquid fertilizer while agitating.

4. Thorough and continuous sprayer-tank agitation must be maintained during mixing and spraying of this product. If the spray mixture is allowed to settle for any period of time, thorough agitation is essential to re-suspend the mixture before spraying is resumed.

Continue agitation while spraying.

CLEANING SPRAY EQUIPMENT

Clean application equipment thoroughly by using a strong detergent or commercial spray cleaner according to the manufacturer's directions and then triple rinsing the equipment before and after applying this product.

USE RESTRICTIONS

- Do not exceed the maximum labeled rate for any soil type.
- In the event of a crop loss due to adverse weather conditions or other reasons, any crop registered for a pre-plant incorporated application of this product can be replanted the same year without adverse effects (see *"CROPS"* section for exceptions). If replanting is necessary, do not work the soil deeper that the treated zone.
- Refer to the *"CROPS"* section for crop specific Pre-Harvest Intervals (PHI) and feeding and grazing restrictions.

CROP ROTATION

- Use of this product in accordance with label directions is expected to result in normal growth of rotational crops in most situations. However, various environmental and agronomic factors such as arid conditions make it impossible to eliminate all risks associated with the use of this product and, therefore, rotational crop injury is always possible. Soil characteristics and environmental conditions which may contribute to crop stress that may be accentuated by the use of this product include: *Coarse soils*, compaction, high salinity, eroded knolls/hilltops, cold and/or wet soils, drought and heavy rainfall soon after application.
- When this product is used in tank-mix or sequential combinations, refer to label(s) of other herbicide(s) for additional rotational crop restrictions.
- Restrictions for rotational cropping after the use of this product are dependent on the application use rate of this product in the primary crop. Read the following restrictions to determine the rotational crops for their specific situation according to application use rate.

CROP ROTATION RESTRICTIONS AND LIMITATIONS

Rotational Crop Restrictions Following Applications of This Product to Field and Row Crops

1. Application Rate ≤ 2.4 Quarts (≤ 2 lbs. a.i.) per Acre

a) Crops which are labeled for pre-plant incorporated application:
These crops may be planted the same season in which this product was applied.

b) Sugar beets, Red beets and Spinach:
To avoid crop injury, do not plant Sugar beets, Red beets or Spinach for 12 months following a Spring application of this product or 14 months following a Fall application of this product. Do not plant these crops for 18 months following a Spring application of this product or 20 months following a Fall application of this product if rainfall or irrigation was not sufficient to produce a crop.

To ensure thorough mixing of soil prior to planting Sugar beets, Red beets and Spinach, plow the land using a moldboard plow to a depth of 12 inches.

c) Proso millet, Sorghum (Milo) and Annual or Perennial grass crops or Mixtures:
Do not plant Proso millet, Sorghum (Milo) and annual or perennial Grass crops or mixtures for 10 months after a Spring application of this product or 12 months after a Fall application this product except in the following conditions:

- In the states of Minnesota, North Dakota and South Dakota: Do not plant these crops for 18 months following a Spring application of this product or 21 months following a Fall application of this product.
- To avoid the possibility of crop injury in areas that receive less than 20 inches of rainfall or irrigation to produce a crop, do not plant these crops for 18 months following a Spring application of this product or 20 months following a Fall application of this product if rainfall or irrigation was not sufficient to produce a field or row crop.

d) Wheat and Barley:
Wheat and Barley may be planted 4 months after an application of this product except under the following conditions:

- If less than 12 inches of rainfall or overhead irrigation was received between application and rotational crop planting, do not plant Wheat before 12 months after a Spring application of this product or 14 months after a Fall application of this product.
- In dryland areas and/or areas where irrigation is necessary to produce the crop treated with this product, do not plant Winter wheat or Barley as a follow crop if crop failure/destruction occurs and land is fallowed during the Summer.

e) All Other Rotational Crops Not Specifically Addressed Above:
Crops other than those to which this product may be applied as a pre-plant incorporated treatment may be planted the year following application of this product except under the following condition:

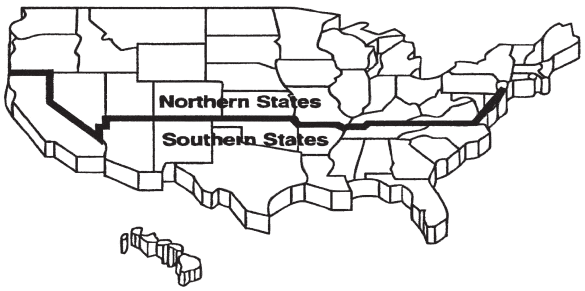
- If rainfall or irrigation was not sufficient to produce a crop, delay planting for 18 months following a Spring application of this product or 20 months following a Fall application of this product.

2. Application Rate > 2.4 Quarts (> 2 lbs. a.i.) per Acre
In the growing season following application of this product to field and row crops at greater than 2.4 quarts per acre, plant only those crops for which this product is labeled for pre-plant incorporated treatment or crop injury may occur. Do not plant other crops for 24 months.

Rotational Crop Restrictions Following Applications of This Product to Grove, Orchard and Vineyard Crops

In the growing season following application of this product to bearing Fruit and Nut trees, plant only those crops for which this product is labeled for pre-plant incorporated treatment or crop injury may occur. Do not rotate to other crops (except for Fruit trees, Grapes or Nut crops) for 24 months following an application of this product to bearing Fruit or Nut trees.

USE AREA



CROPS

Disclaimer: The use of this product may result in crop injury, loss or damage including but not limited to agronomic, cultural, mechanical and environmental. Numerous risks of loss or damage to certain crops may be associated with the use of this product even when directions for use are completely followed. The user or grower should take all such risks into consideration before deciding to apply the product.

Drexel recommends testing on a small portion of the target crop to determine if damage is likely to occur. Each grower who is considering the product for such use should test this product in order to determine its suitability. A grower should only use this product to the extent that in his sole opinion, the benefit of use of this product outweighs the potential injury to the grower's crop.

In addition, many factors can affect crop growth and/or yield including but not limited to insects, diseases, weed competition, poor seed quality, improper planting depth, mechanical cultivation, poor weather (such as freezing or excessive wind, rain heat or cold), lack of excessive moisture, crusting, fertility or hardpans. Risk of loss or damage to crops may be associated with the use of this product and contribute to poor stands due to failure of crop to emerge, swelling of roots or other below ground plant parts, less vigorous plant growth and development and reduction in yield potential.

ALFALFA (GROWN FOR FORAGE, HAY OR SEED PRODUCTION)

Methods of Application, Timing and Rates

Apply this product by ground, air, chemigation, flooded basin irrigation systems or on dry bulk fertilizers.

Established Alfalfa for Forage/Hay (Defined as Alfalfa planted in the Fall or Spring that has gone through a first cutting/mowing): Uniformly apply this product at a broadcast rate of 1.2 to 4.8 quarts per acre prior to weed emergence. Applications can be made in the Fall after the last mowing/cutting, during Winter dormancy, in the Spring or between cuttings. Apply prior to Alfalfa reaching 6 inches in regrowth.

Established Alfalfa Grown for Seed Production (Defined as Alfalfa planted in the Fall or Spring that has gone through a Summer season of cutting/mowing): Uniformly apply this product at a broadcast rate of 1.2 to 4.8 quarts per acre prior to weed emergence in one of the following ways:

1. Apply to dormant established Alfalfa.
2. Apply before Alfalfa exceeds 10 inches in height after first mowing/beating.
3. Once Alfalfa reaches 10 inches in height or if Alfalfa has been mowed/beaten two or more times, this product must be applied with drop nozzles directing the spray so that there is little to no contact with the foliage.

Seedling Alfalfa (Defined as Alfalfa planted in the Fall or Spring which has NOT gone through a cutting/mowing): Uniformly apply this product at a broadcast rate of 0.6 to 1.2 quarts per acre prior to weed emergence. Applications can be made once the seedling Alfalfa has reached the 2nd trifoliate stage of growth. Apply prior to Alfalfa reaching 6 inches in growth.

Alfalfa Stand Establishment: Apply this product at a broadcast rate of 0.6 to 0.9 quart per acre as a pre-plant incorporated or pre-emergence treatment in direct-seeded Alfalfa. Some crop stand reduction and stunting may occur with this use of this product, however, reduced weed competition will allow establishment of a quality stand. Use the lower rates on *Coarse textured soil* or in lower rainfall areas (receiving less than 20 inches of rainfall and irrigation a year).

- Pre-plant incorporated – Uniformly incorporate this product into the top 2 to 3 inches of the final seedbed prior to planting.
- Pre-emergence – Apply directly after drill seeding Alfalfa. Plant Alfalfa into a seedbed that is firm and free of clods.

Chemigation Applications:
This product may be applied through sprinkler irrigation systems. Follow all chemigation directions, special instructions and precautions found in *"APPLICATION INSTRUCTIONS"* section of this label.

Flooded Basin Irrigation Systems: This product may be applied in flooded basin irrigation systems. Follow all directions, special instructions and precautions for flooded basin irrigation found in *"Chemigation Application (Via Flooded Basin Irrigation Systems)"* under the *"APPLICATION INSTRUCTIONS"* section of this label.

Use Precautions on Alfalfa

- Some stunting and chlorosis of Alfalfa may occur with post-emergence applications.
- Applications made after Alfalfa exceeds 6 inches in height may result in poor weed control due to possible reduced spray coverage to the soil.
- Follow all use precautions and restrictions on label(s) of product(s) applied in combination with this product. Follow the most restrictive label.

Use Restrictions on Alfalfa

- Do not exceed 4.8 quarts of this product per acre in any one crop season.
- Pre-Harvest Interval (PHI): Do not apply this product less than 50 days prior to Alfalfa harvest for forage or hay.
- Pre-Harvest Interval (PHI): Do not apply this product less than 90 days prior to Alfalfa harvest for seed.

BEARING FRUIT AND NUT TREES

This product may be applied in the following individual crops within the Fruit tree and Tree nut crop groupings:

CITRUS FRUIT CROP GROUPING		
Calamondin	Kumquat	Orange (Sour, Sweet)
Citrus citron	Lemon	Pummelo
Citrus hybrids	Lime	Satsuma mandarin
Grapefruit	Mandarin (Tangerine)	Tangelo

POME FRUITS CROP GROUPING		
Apples	Mayhaw	Quince
Crabapple	Pear	
Loquat	Pear (Oriental)	

STONE FRUITS CROP GROUPING		
Apricot	Peach	Plumcot
Aprium	Plum	Pluot
Cherries (Sweet, Tart)	Plum (Chickasaw, Damson, Japanese)	Prunes
Nectarine		

OTHER FRUIT TREES	
Pomegranate	Juneberry

TREE NUTS CROP GROUPING		
Almond	Chestnut	Pecan
Beech nut	Chinquapin	Pistachio
Brazil nut	Filbert (Hazelnut)	Walnut
Butternut	Hickory nut	
Cashew	Macadamia nut	

Methods of Application, Timing and Rates

- Apply this product by ground, chemigation or flooded basin irrigation systems.
- Apply this product either in a single application or sequentially with an interval of 30 days or more.
- Apply this product at the rate of 2.4 to 4.8 quarts per acre depending on desired length of control (see below table) per application.

Use Rates:

Short-term control	2.4 qts. per ac.
Long-term control	4.8 qts. per ac.

Ground Applications: This product may be applied surface-incorporated or surface pre-emergence.
Apply this product as a broadcast or banded treatment using ground equipment before weed emergence. Apply the spray directly to the ground beneath the trees and/or in areas between rows. Do not apply over the top of trees with leaves or buds or fruit. Contact by the spray mixture with leaves, shoots or buds may cause injury.
Chemigation: This product may be applied through sprinkler irrigation systems. Follow all directions, special instructions and precautions for chemigation found in the *"APPLICATION INSTRUCTIONS"* section. Do not apply irrigation water treated with this product over top of trees with leaves or buds or fruits. Contact with leaves, shoots or buds by spray mixture may cause injury.
Flooded Basin Irrigation Systems: This product may be applied in flooded basin irrigation systems. Follow all directions, special instructions and precautions for flood basin found in the *"APPLICATION INSTRUCTIONS"* section.

Use Restrictions on Bearing Fruit and Nut Trees

- Do not apply by air.
- Do not apply to newly seeded nursery stock.
- Do not apply more than 4.8 quarts of this product per acre per year in Pome, Stone and other Fruit trees.
- Do not apply more than 7.2 quarts of this product per acre per year in Citrus and Nut trees.
- Pre-Harvest Interval (PHI): Do not apply within 1 day of harvest of Citrus fruit.
- Pre-Harvest Interval (PHI): Do not apply within 60 days of harvest of Pome and Stone fruits or other Tree fruits.
- Pre-Harvest Interval (PHI): Do not apply within 60 days of harvest of nuts except Almonds.
- Pre-Harvest Interval (PHI): Do not apply within 120 days of harvest of Almonds.
- Do not feed forage or graze livestock in treated groves or orchards.

CARROTS

Methods of Application, Timing and Rates

Apply this product by ground, air or chemigation.
Pre-emergence Applications: Make a single broadcast application by ground or air or by chemigation using 1.2 quarts of this product per acre as a post-plant treatment prior to emergence of the crop and before weed emergence. Apply a pre-emergence treatment within 2 days after planting.
Lay-by: This product may be applied only by ground equipment at lay-by (last mechanical cultivation) at 1 quart per acre as a directed spray to the soil between rows. Apply this product prior to weed emergence. Emerged weeds will not be controlled by this treatment. Do not allow the spray to contact Carrot plants or injury may occur. Do not apply lay-by applications by chemigation or by air.
Chemigation: This product may be applied through sprinkler irrigation systems. Follow all directions, special instructions and precautions for chemigation found in the *"APPLICATION INSTRUCTIONS"* section.
Do not allow irrigation water treated with this product to contact Carrot plants. Do not apply tank-mixtures through any type of irrigation system unless the label instructions on chemigation of all products are followed.

Use Restrictions on Carrots

- Do not apply more than 1.2 quarts of this product per acre per season.
- Pre-Harvest Interval (PHI): Do not apply within 60 days of harvest.
- Do not feed forage or graze livestock in treated fields.
- Do not apply as a broadcast spray over the top of Carrots or crop injury may result.
- Do not apply lay-by applications by chemigation or by air.

CARROTS GROWN FOR SEED PRODUCTION

Methods of Application, Timing and Rates

Apply this product only by lay-by.
Last Cultivation (Lay-by): Apply this product following the last mechanical cultivation (lay-by) at the rate of 0.6 to 2.4 quarts of this product per acre (on a broadcast basis). Uniformly apply as directed spray to the soil between rows.
Do not allow the spray to contact Carrot plants or injury may occur. Use protective shields to avoid contact with Carrot foliage. Use properly calibrated and accurate nozzles and equipment.
Lay-by applications can be applied to Carrots previously treated with herbicide(s) registered in/on Carrots. Consult the label(s) of the herbicide(s) for directions for use, rates to be used and precautions or restrictions for use in Carrots and for rotational crops.

Use Restrictions on Carrots Grown For Seed Production

- Do not apply as a broadcast spray over the top of Carrots or crop injury may result.
- Do not apply lay-by applications by chemigation or by air.
- Pre-Harvest Interval (PHI): Do not apply within 60 days of Carrot seed harvest.
- Do not feed forage or graze livestock in treated fields.
- Do not harvest Carrots for food or feed use.

Special Use Restriction on Carrots Grown For Seed Production

The pesticide applicator, the producer of the crop and the seed conditioner must be aware that use of this product according to this labeling is deemed a non-feed/non-food use. If the applicator of this pesticide is not the producer, the applicator should provide a copy of this labeling to the producer of the crop. Producers of this crop who use this product or cause the product to be used on a field they operate, should provide a copy of this pesticide label to the seed conditioner.
Consequently, no portion of this Carrot seed crop, including but not limited to green chop, hay, pellets, meal, whole seed, cracked seed, roots, bulbs, foliage and seed screenings, may be used or distributed for food or feed purposes.
Processed Carrot seed from a field treated with this product must bear a specific tag or conspicuous container labeling or if shipped in bulk, on the shipment invoice or bill of lading, with the following statement: "Not for human consumption or animal feed." All seed screenings from seed processing shall be disposed of in such a manner that the screenings cannot be distributed or used for human food or animal feed purposes. The seed conditioner shall keep records of screening disposal for 3 years from the date of disposal and shall furnish the records immediately upon request. Conditioner disposal records shall consist of documentation of on-farm disposal, disposal at a controlled dumpsite, incinerator, composter or other equivalent disposal site and shall include the lot numbers, amount of material disposed of, the grower(s) and the date of disposal.

CORN (Field, Pop, Seed, Sweet)

Additional Weeds Controlled

In addition to the weeds listed in the *"WEEDS CONTROLLED"* table, this product will control the following weeds in Corn with CULTI-SPRAY application: Wild proso millet and Shattercane.

Methods of Application, Timing and Rates

- Apply this product ground, air or chemigation.
- Apply this product in conventional, minimum or no-till as a pre-emergence, post-emergence or post-emergence incorporated (CULTI-SPRAY) application in Field corn.
- Apply this product in conventional tillage as a pre-emergence or post-emergence application in Popcorn, Seed corn or Sweet corn.

Note: Regardless of tillage system, plant Corn at least 1.5 inches deep and completely cover with soil.
In conventional tillage systems, plant into a seedbed that is firm and free of clods and trash. Use only where adequate tillage is practiced to provide good soil coverage of the Corn seed.
In no-till systems, utilize a no-till planter that is capable of planting through crop residue. The use of no-till planters under conditions that do not allow good soil coverage of the Corn seed can result in reduced crop stand or injury if this product contacts the germinating Corn seed. Check equipment to ensure good seed coverage.
Treatments of this product alone or this product in tank-mix combination(s) are most effective in controlling weeds when adequate rainfall or overhead irrigation is received within 7 days after application. If cultivation is necessary because of soil crusting or weed germination, use shallow tillage and make certain that Corn seeds are below the tilled area.
Pre-emergence: Apply this product after planting but before weeds and crop emerge.
Post-emergence: Apply this product post-mergence until Field corn is 30 inches tall (20 to 24 inches tall for Pop, Seed and Sweet corn) or in the V8 growth stage, whichever is more restrictive. If the Corn canopy prevents applications from reaching the soil, use drop nozzles and apply as directed spray.
Culti-Spray: Apply this product alone or this product plus Atrazine when Field corn is at least 4 inches tall until last cultivation (lay-by). This product plus Atrazine must be applied before Field corn reach 12 inches in height. Observe the maximum allowable rates for Atrazine on the Atrazine label.
Under situations of low rainfall or soil moisture when deep germinating weeds such as Shattercane or Field sandbur are anticipated, mechanical incorporation will provide best results. If cultivation is needed after application and incorporation of this product, the depth of cut should be no deeper than the depth of cut used to incorporate.

Chemigation: This product may be applied through sprinkler irrigation systems. Follow all directions, special instructions and precautions for chemigation found in the *"APPLICATION INSTRUCTIONS"* section.

Use Rates:

Pre-Emergence or Post-Emergence Applications			
Soil Texture	Organic Matter		
	< 1.5% (Qts./Ac.)	1.5 to 3% (Qts./Ac.)	> 3% (Qts./Ac.)
Coarse	0.9 to 1.2	1.2 to 1.8	1.8
Medium	1.2 to 1.8	1.8	1.8 to 2.4
Fine	1.2 to 1.8	1.8 to 2.4	1.8 to 2.4

Culti-Spray Applications - Field Corn Only		
Soil Texture	Southern States* (Qts./Ac.)	Northern States* (Qts./Ac.)
Coarse	0.6 to 0.9	0.9 to 1.2
Medium	0.9 to 1.2	1.2 to 1.8
Fine	0.9 to 1.8	1.2 to 1.8
*See map for specific states in the *"USE AREA"* section.		

Use Restrictions on Corn

- Do not apply this product in reduced, minimum or no-till Sweet corn, Seed corn or Popcorn.
- Do not apply this product in no-till in California.
- Do not apply this product pre-plant incorporated.
- Do not apply this product post-emergence in liquid fertilizer.
- Do not exceed 1 application per crop season at the highest rate per acre for any given soil type and application method.
- Livestock can graze or be fed forage from treated Corn after 21 days following application.

COTTON

Additional Weeds Suppressed

In addition to the weeds listed in the *"WEEDS CONTROLLED"* table, this product will suppress Russian thistle in the state of Arizona.

Methods of Application, Timing and Rates

- Apply this product by ground, air or chemigation in conventional, minimum, stale seedbed or no-till.
- Apply this product as a pre-plant surface, pre-plant incorporated, pre-emergence or lay-by application in Cotton. Pre-plant surface, pre-emergence and lay-by treatments are most effective in controlling weeds when adequate rainfall or overhead irrigation is received within 7 days after application. A shallow cultivation is recommended if soil crusting or soil compaction occurs. If weeds begin to germinate or adequate moisture is not received within 7 days after application, use shallow tillage (rotary hoe or light harrow) and make sure Cotton seeds are below tilled area. The use of a post-emergence herbicide treatment may be required to control weed escapes at-planting or following Cotton emergence.

Pre-plant Surface: Apply this product up to 15 days prior to planting. Apply tank-mixes of this product and sequential programs as specified under the *"TANK-MIXING INFORMATION"* section.

Pre-plant Incorporated: Apply this product up to 60 days prior to planting and incorporate within 7 days of application. Apply tank-mixes of this product and sequential programs as specified under the *"TANK-MIXING INFORMATION"* section.

Pre-emergence: Apply this product at-planting or up to 2 days after planting. Apply to a seedbed that is firm and free of clods. Apply tank-mixes of this product and sequential programs as specified under the *"TANK-MIXING INFORMATION"* section.

Pre-plant Incorporated Followed by Pre-emergence Applications: Apply this product up to 60 days prior to planting and incorporate within 7 days of application. Make overlay application of this product at-planting or up to 2 days after planting. Total amount of this product applied per acre cannot exceed the highest labeled rate for a given soil type. Pre-plant incorporated and pre-emergence applications of this product may be applied with the labeled tank-mix herbicide(s).

Lay-by Application (At last cultivation): Apply this product directly to the soil between rows as a directed spray following the last normal cultivation (lay-by). Lay-by applications can be applied in Cotton previously treated with this product or any herbicide(s) registered for use in Cotton. Consult the labels of those herbicide(s) for use directions, rates to be used, precautions or restrictions for use in Cotton and restrictions for rotational crops. The total amount of this product applied per acre per season cannot exceed the highest labeled rate for a given soil type.

Do not apply as a broadcast spray over the top of Cotton or serious crop injury can result. Avoid contact of spray to the non-woody portion of Cotton stems and to Cotton foliage or serious crop injury can result. To reduce the potential for crop injury caused by herbicide contact with Cotton foliage and stems, use protective shields when conditions favor spray drift.

Glyphosate-containing products may be applied with this product at lay-by in Cotton with the Glyphosate tolerant gene. DO NOT apply Glyphosate-containing products at lay-by on non-Glyphosate tolerant Cotton. Do not apply this product and Glyphosate tank-mix as a broadcast spray over the top of Cotton or crop injury may result.

Chemigation: This product may be applied through sprinkler irrigation systems. Follow all directions, special instructions and precautions for chemigation under the *"APPLICATION INSTRUCTIONS"* section.

Fall Application: This product may be applied to control weeds in Cotton in the Fall after October 15 (up to 140 days prior to planting Cotton) in Arizona, California, Louisiana, Mississippi, New Mexico, Oklahoma and Texas. Apply this product at the broadcast rate of 1.2 quarts per acre on *Coarse* or *Medium soils* and 1.8 quarts per acre on *Fine soils*.

Use Rates:

Soil Texture	Conventional or Minimal Tillage (Qts./Ac.)	No-Till** (Qts./Ac.)
Coarse	0.6 to 1.2*	0.9 to 1.2
Medium	0.9 to 1.2	1.2 to 1.8
Fine	1.2 to 1.8	1.8 to 2.4
* Do not exceed 0.9 qt. per acre on Coarse textured soils in California. ** Not for use on soils with more than 3% organic matter.		

Use Restrictions on Cotton

- Do not apply this product in no-till in California.
- Pre-Harvest Interval (PHI) is 60 days between last application of this product and Cotton harvest.
- Do not exceed the highest seasonal rate of this product per acre for any given soil type as specified in the *"Use Rates"* table.
- Do not feed forage or graze livestock in treated Cotton fields.

EDIBLE BEANS [Chickpeas (Garbanzo Beans), Dry, Lima, Snap, Southern Peas (Cowpeas) and Sweet Lupine]

Methods of Application, Timing and Rates

- Apply this product in the Fall pre-plant surface or pre-plant incorporated in Chickpeas (Garbanzo beans), Dry beans, Lima beans, Snap beans and Southern peas (Cowpeas).
- Apply this product in the Fall pre-plant surface or pre-plant incorporated or pre-emergence in Sweet lupines.

Pre-plant Incorporated: Apply up to 60 days prior to planting and incorporate within 7 days of application.

Pre-emergence: Apply only to Sweet lupines at-planting or up to 2 days after planting. Apply to a seedbed that is firm and free of clods.

Use Rates:

Soil Texture	Southern States* (Qts./Ac.)	Northern States*	
		≤ 3% Organic Matter (Qts./Ac.)	> 3% Organic Matter (Qts./Ac.)
Coarse	0.9	1.2	1.2
Medium	1.2	1.5	1.8
Fine	1.8	1.8	1.8
*See map for specific states in the *"USE AREA"* section.			

Fall Applications: Fall pre-plant surface and pre-plant incorporated applications may be made in Idaho, Minnesota, Montana, North Dakota, Oregon, South Dakota, Washington and Wyoming only. Rainfall or irrigation is required for incorporation and activation. Unpredictable weed control can be expected since factors such as length of time between application and planting as well as uncontrollable weather factors will determine herbicide activity and longevity.

Apply this product and incorporate (rainfall, irrigation or mechanically) in late Fall prior to planting Dry beans (including Black turtle, Cranberry, Great northern, Navy, Red kidney and Small white type), Edible beans [Chickpeas (Garbanzo beans)], Lima beans, Snap beans, Southern peas (Cowpeas) and Sweet lupines the following Spring. Apply this product in the late Fall when soil temperatures are 45°F or below but before the ground freezes.

DO NOT apply when air temperature is below 45°F.

Pre-plant Surface and Pre-plant Incorporated (Idaho, Minnesota, Montana, North Dakota, Oregon, South Dakota, Washington and Wyoming Only)

Use Rates:

Soil Texture	Broadcast Rate (Qts./Ac.)	
	≤ 3% Organic Matter	> 3% Organic Matter
Coarse	0.6 to 1.2	1.2
Medium	0.9 to 1.5	1.5 to 1.8
Fine	1.2 to 1.8	1.8

Use Restrictions on Edible Beans

- Do not apply this product more than once per cropping season.
- Do not apply in any type of irrigation system.
- Do not feed Lupine hay and forage or graze livestock in treated Lupine fields.

FORAGE LEGUMES

This product may be used in Forage legumes used as a cover crop in the Federal set-aside or Conservation Reserve Program (CRP) areas. Some stand reduction of the Legume cover crops may occur with this use. Consult local county extension service or the local ASC committee for recommended cover crops.

If loss of cover crop occurs due to adverse weather conditions, any crop registered for pre-plant incorporated use of this product can be replanted the same year into the soil treated with this product without adverse effects. If replanting is necessary, do not rework the soil deeper than the zone treated with this product. Do not feed or graze Legume cover crops established following application of this product. Destroy ultimately the cover crop residue by tillage or by leaving on the surface to retard erosion or as directed by the local ASC committee.

Methods of Application, Timing and Rates

Apply this product pre-plant incorporated or pre-emergence for weed control in Legume cover crops.

Use Rates:

Pre-Plant Incorporated or Pre-Emergence	
Soil Texture	Broadcast Rate (Qts./Ac.)
Coarse	0.6 to 0.9
Medium	0.9 to 1.2
Fine	1.2 to 1.5

FRUITING VEGETABLES

This product may be applied to the following fruiting vegetables: Eggplant, Groundcherry (*Physalis* spp.), Pepino, Pepper (includes Bell, Chili, Cooking, Pimento, Sweet), Tomatillo, Tomato.

Methods of Application, Timing and Rates

- Apply this product uniformly by ground or air only.
- Apply this product as a broadcast pre-plant incorporated or as a broadcast pre-plant surface prior to transplanting fruiting vegetables or as a post-directed application to transplanted or established direct-seeded fruiting vegetables.

Do not apply prior to direct-seeded fruiting vegetables. Do not apply post-emergence over the top of or to foliage of fruiting vegetables as severe injury may occur.

This product can be applied as a post-directed spray on the soil at the base of the plant, beneath the plants and between rows. Avoid direct contact with foliage or stems. Be sure roots of transplants are established. Following the post-directed spray and when sufficient rainfall or irrigation does not occur to activate the herbicide, mechanically incorporate at the time of blocking and thinning or at "lay-by." Apply this product prior to weed emergence. Emerged weed will not be controlled by this treatment.

Use Rates:

Soil Texture	Broadcast Rate (Qts./Ac.)
Coarse	0.6 to 0.9
Medium	0.9 to 1.2
Fine	0.9 to 1.8

Use Restrictions on Fruiting Vegetables

- Do not apply more than 1.8 quarts of this product per acre per season.
- Pre-Harvest Interval (PHI): Do not apply within 70 days of harvest.
- Do not allow the soil treated with this product to come in contact with transplant area.
- Do not apply if row is to be covered later with plastic.

GARLIC

Methods of Application, Timing and Rates

- Apply this product by ground, air or chemigation.
- Apply this product pre-emergence, post-emergence or split application.

Pre-emergence: Apply after planting but before crop and weeds emerge.

Post-emergence: Apply at the 1st to 5th true leaf growth stage.

Split Applications: Apply at both pre-emergence and post-emergence timings.

Chemigation: This product may be applied through sprinkler irrigation systems. Apply between the 2nd and 9th true leaf stage (2nd to 6th true leaf stage in California). Do not irrigate in excess of one-half inch of water. Follow all directions, special instructions and precautions for chemigation under the *"APPLICATION INSTRUCTIONS"* section.

Use Rates:

Soil Texture	Broadcast Rate (Qts./Ac.)
Coarse	0.9
Medium	1.2
Fine	1.8

Use Restrictions on Garlic

- Do not exceed 1.8 quarts of this product per acre per crop (except Idaho, Oregon and Washington). In Idaho, Oregon and Washington, do not exceed 2.4 quarts of this product per acre per crop for Dodder control.
- Pre-Harvest Interval (PHI): Do not apply within 60 days of harvest in California and within 45 days of harvest in all other states.
- Do not feed or graze these crops.

GRAIN SORGHUM

Additional Weeds Controlled

In addition to the weeds listed in the *"WEEDS CONTROLLED"* table, this product will control the following weeds in Grain sorghum as a CULTI-SPRAY application: Wild proso millet and Shattercane.

Methods of Application, Timing and Rates

- Apply this product uniformly in water by ground equipment or by aircraft.
- Apply this product as a post-emergence incorporated (CULTI-SPRAY) in Grain sorghum in all states.
- Apply this product early post-emergence in Grain sorghum grown in states east of the Mississippi River and in Arkansas, Louisiana, the Missouri "Bootheel" and Eastern Texas.

Culti-Spray: Treatments of this product can be applied from the 4-inch growth stage to as late as the last cultivation (lay-by) of Grain sorghum. See specific directions for CULTI-SPRAY application under the *"TIMING OF APPLICATION"* section.

Early Post-emergence: For use only in states east of the Mississippi River plus Arkansas, Louisiana, the "Bootheel" of Missouri and Eastern Texas. The seedbed should be firm and free of clods and trash. Use only where adequate tillage is practiced to provide good seed coverage. Plant Grain sorghum at least 1.5 inches deep to ensure good seed coverage.

Use Rates:

Culti-Spray Application		
Soil Texture	Southern States* (Qts./Ac.)	Northern States* (Qts./Ac.)
Coarse	0.9	1.2
Medium	1.2	1.8
Fine	1.8	1.8
*See map for specific states in the *"USE AREA"* section.		

Early Post-Emergence Application	
Soil Texture	This Product (Qts./Ac.)
Coarse	DO NOT USE
Medium, Fine	1.2

Use Restrictions on Grain Sorghum

- Do not apply this product pre-plant incorporated or pre-emergence as serious crop injury can result.
- Do not apply this product in Grain sorghum more than once per crop season.
- Do not apply this product as a CULTI-SPRAY treatment in Grain sorghum planted in double row beds.
- Do not replant Grain sorghum if crop loss occurs.
- Do not apply in liquid fertilizer.
- Livestock can graze or be fed forage from Grain sorghum fields treated by this product after 21 days following application.

GREEN ONIONS (Green Eschalots or Green Shallots, Japanese Bunching Onions, Leeks, Scallions or Spring Onions)

Methods of Application, Timing and Rates

- Apply this product by ground, air or chemigation.
- Apply this product pre-emergence, post-emergence or split application.

Pre-emergence or Post-emergence: Uniformly apply 1.2 quarts of this product per acre as a broadcast spray to the soil surface as pre-emergence spray or as a post-emergence spray to the crop at the 2 to 3 true leaf stage at least 30 days before harvest.

If this product is to be applied sequentially both as a pre-emergence and post-emergence spray, the pre-emergence spray must be applied 30 days prior to the post-emergence spray.

Chemigation: This product may be applied through sprinkler irrigation systems. Apply at 2 to 3 true leaf stage at least 30 days before harvest. Do not irrigate in excess of one-half inch of water. Follow all directions, special instructions and precautions for chemigation under the *"APPLICATION INSTRUCTIONS"* section.

Use Restrictions on Green Onions

- Do not apply more than 1.2 quarts of this product per acre per application.
- Do not apply more than 2.4 quarts of this product per acre per season.
- Pre-Harvest Interval (PHI): Do not apply within 30 days of harvest.
- Do not feed forage or graze livestock in treated fields.

LENTILS AND PEAS (Dry, Dwarf, Edible Pod, English, Garden, Green, Pigeon) (Except CA)

Methods of Application, Timing and Rates

Apply this product pre-plant surface or pre-plant incorporated in Lentils and Peas.

Pre-plant Incorporated: Apply this product 60 days prior to planting up to immediately before planting. After application, rotary hoeing and shallow cultivation/tillage can be practiced without reducing weed control. Avoid tillage that will bring untreated soil to the surface.

Note: Any crop registered for a pre-plant incorporated application of this product can be double-cropped after Peas.

Use Rates:

Soil Texture	Broadcast Rate (Qts./Ac.)
Coarse	0.9
Medium	1.2
Fine	1.8

Fall Applications: Fall pre-plant surface and pre-plant incorporated applications may be made in Idaho, Minnesota, Montana, North Dakota, Oregon, South Dakota, Washington and Wyoming only. Rainfall or irrigation is required for incorporation and activation. Unpredictable weed control can be expected since factors such as length of time between application and planting as well as uncontrollable weather factors will determine herbicide activity and longevity.

Apply this product and incorporate (rainfall, irrigation or mechanically) in late Fall prior to planting Lentils or Peas (Dry, Dwarf, Edible pod, English, Garden, Green, Pigeon) the following Spring. Apply this product in the late Fall when soil temperatures are 45°F or below but before the ground freezes.

DO NOT apply when air temperature is below 45°F.

Pre-plant Surface and Pre-plant Incorporated (Idaho, Minnesota, Montana, North Dakota, Oregon, South Dakota, Washington and Wyoming Only)

Use Rates:

Soil Texture	Broadcast Rate (Qts./Ac.)
Coarse	0.6 to 0.9
Medium	0.9 to 1.2
Fine	1.2 to 1.8

Use Restrictions on Lentils and Peas

- Do not use in California.
- Do not use this product pre-emergence in Peas.
- Do not apply this product more than once per cropping season.
- Do not apply to Lentils, Peas, Lentil or Pea forage, Pea silage, Pea hay or Pea straw grown for livestock feed.
- Do not apply in any type of irrigation system.

MINT (Peppermint, Spearmint)

Methods of Application, Timing and Rates

- Apply this product by ground or air.
- Apply this product pre-emergence.

Pre-emergence: Make a single broadcast pre-emergence application of this product to Mint using 0.9 to 2.4 quarts of this product per acre depending on soil texture (see table below) to dormant established Mint before weed emergence. After application of this product, some temporary crop injury may be observed early in the growing season as Mint breaks dormancy and begins to grow.

This product will not cause crop injury when applied according to the label under normal growing conditions.

Non-uniform application may result in injury to crops, poor stands or soil residues. Conversely, uneven application may reduce weed control. Diseases, cold weather, excessive moisture, deep planting, low or high pH, salinity or drought may weaken seedlings and plants and make them more susceptible to herbicidal damage.

Use Rates:

Soil Texture	Broadcast Rate (Qts./Ac.)
Coarse	0.9 to 1.2
Medium	1.2 to 2.4
Fine	1.2 to 2.4

Use Restrictions on Mint

- Do not apply this product to "baby" Mint in the first year of growth and establishment.
- Do not apply to Mint that has broken dormancy or crop injury may result. Application to Mint that is near dormancy break can result in crop injury. Risk of crop injury increases the closer application is to Mint dormancy break.
- Do not apply to Mint stands that have been weakened by age, disease, cold weather, excessive moisture or other factors that reduce crop vigor. Mint growing under stress is more susceptible to herbicidal damage.
- Do not apply more than 2.4 quarts of this product per acre per season.
- Pre-Harvest Interval (PHI): Do not apply within 90 days of harvest.
- Do not allow livestock to graze on treated spent hay or feed treated spent hay to livestock.
- Do not apply this product on Mint through any type of irrigation system.
- Do not use in California except as directed in supplemental labeling.

NONBEARING FRUIT AND NUT TREES AND NONBEARING VINEYARDS

Methods of Application, Timing and Rates

- Apply this product as pre-plant incorporated, pre-plant surface, surface incorporated or pre-emergence weed control in several nonbearing Fruit and Nut trees and nonbearing Vineyards. This product may be used before or after transplanting the following nonbearing crops:

Almonds	Lemons	Plums
Apples	Nectarines	Prunes
Apricots	Oranges	Tangelo
Cherries	Peaches	Tangerine
Citrus	Pears	Walnut (English)
Grapes	Pecans	
Grapefruit	Pistachio	

Apply the spray directly to the ground beneath the trees or vines. Do not apply over the top of trees or vines with leaves or buds. Contacting the leaves, shoots or buds with the spray mixture may cause malformed plant tissues. Do not apply to newly seeded nursery stock.

For newly transplanted and 1 year old Grapevines:

i) Apply only to dormant Grapevines.
ii) Do not apply if buds have started to swell. Application after buds have started to swell may result in leaf distortion.
iii) Do not apply to newly transplanted trees or vines until ground has settled and no cracks are present.

- Apply this product by ground, air, chemigation or by flooded basin irrigation systems.
- Apply this product either in a single application or sequentially with an interval of 30 days or more.
- Apply this product at 2.4 to 4.8 quarts per acre per application depending on the desired length of control (see *"Use Rate"* table below) but not to exceed a total of 4.8 quarts per acre per year in Pome, Stone and other Fruit trees. In Citrus, Grapevines and Nut trees, do not exceed a total of 7.3 quarts per acre per year.

Pre-plant Surface: Prior to transplanting, apply uniformly with ground or aerial equipment. Avoid root contact with treated soil when placing transplants into the hole or injury may occur.

Pre-plant Incorporated: Apply uniformly this product prior to transplanting but before weeds emerge. Incorporate this product to a depth of 1 to 2 inches. Application and incorporation must be made prior to transplanting to avoid mechanical injury to the crop. Avoid root contact with treated soil when placing transplants into the hole or injury may occur.

Pre-emergence (Post-plant): Applications may be made in a band or broadcast.

Chemigation: This product may be applied through sprinkler irrigation systems. Follow all directions, special instructions and precautions for chemigation under the *"APPLICATION INSTRUCTIONS"* section. Do not apply irrigation water treated with this product over the top of trees or vines with leaves or buds.

Flooded Basin Irrigation Systems: This product may be applied in flooded basin irrigation systems. Follow all directions, special instructions and precautions for flooded basin irrigation systems under the *"APPLICATION INSTRUCTIONS"* section.

Use Rates:

Short-term control	2.4 qts. / ac.
Long-term control	4.8 qts. / ac.

Use Restrictions on Nonbearing Fruit and Nut Trees and Nonbearing Vineyards

- Do not feed forage or graze livestock in treated fields.
- Do not apply more than 4.8 quarts of this product per acre per year in Pome, Stone and other Fruit trees.
- Do not apply more than 7.3 quarts of this product per acre per year in Citrus, Grapevines and Nut trees.

ONIONS [Direct Seeded and Transplanted Dry Bulb and Shallots (Dry Bulb)]

Methods of Application, Timing and Rates

Apply this product by ground, air or chemigation.

Chemigation: This product may be applied through sprinkler irrigation systems. Apply between the 2nd and 9th true leaf stage (2nd to 6th true leaf stage in California) unless otherwise specified below. Do not irrigate in excess of one-half inch of water. Follow all directions, special instructions and precautions for chemigation under the *"APPLICATION INSTRUCTIONS"* section.

MINERAL SOILS

Methods of Application, Timing and Rates

In all states except California, apply this product as a broadcast treatment when Onions or Shallots have 2 to 9 true leaves.

Use Rates:

Soil Texture	Broadcast Rate (Qts./Ac.)
Coarse	0.9
Medium	1.2
Fine	1.8

State Specific Instructions

California:

This product may only be applied as a single application when Onions or Shallots have 2 to 6 true leaves.

Additional Use in Colorado, Kansas and Nebraska:

This product may be applied sequentially in seeded Onions. Apply first application of this product at loop stage. Apply sequential application of this product early post-emergence (2nd to 9th true leaf stage). Do not exceed the maximum labeled rate for a given soil texture. Do not apply this product at loop stage through the 9th true leaf stage if heavy rains are expected or severe crop injury may result.

Additional Use in Colorado and the High Plains of Texas (Transplanted Onions Only):

Apply and shallow incorporate (less than 2 inches deep) this product into preformed beds prior to transplanting,

Additional Use in Idaho, Oregon and Washington:

Apply this product as a broadcast treatment when Onions or Shallots are between the flag leaf to 9th true leaf stage.

This product may be used at 1.8 to 2.4 quarts per acre for Dodder control on *Medium* and *Fine textured soils*. Do not apply this product using chemigation at the Dodder control rate.

This product may be applied in the Fall or Spring to the furrow area of land bedded in the Fall preparation for planting seed of Dry bulb onions the following Spring. Apply this product as a banded application at rates based on appropriate soil texture. Band width should be approximately one-half the width of the row spacing.

Keep away from the area where Onion seed will be planted. Harrow-off tops of beds following furrow applications of this product prior to planting Onions. For selective weed control in the Onion row, apply this product as banded post-emergence to flag leaf Onions at the labeled rates based on soil texture.

Apply this product only once to the furrow area and once to the Onion row as a post-emergence application.

Additional Use in Michigan:

For *Mineral soils* containing greater than 10% organic matter, follow the directions for *Muck soils* (see *"MUCK SOILS"*).

Use Restrictions on Mineral Soils

- Do not incorporate mechanically except as specified for use on Dry bulb onions in Colorado and the Texas High Plains.
- Do not exceed 1.8 quarts per acre per crop (except Idaho, Oregon and Washington). In Idaho, Oregon and Washington, do not exceed 2.4 quarts per acre per crop.
- Pre-Harvest Interval (PHI): Do not apply within 60 days of harvest in California and within 45 days of harvest in all other states.
- Do not feed or graze these crops.
- Do not apply this product pre-emergence through the loop stage if heavy rains are expected or severe crop injury may result. If irrigating immediately after application of this product at the pre-emergence through loop stage, do not irrigate in excess of one-half inch of water.

MUCK SOILS (Except CA)

Methods of Application, Timing and Rates

Apply this product sequentially on *Muck soils* as follows:

Time of Application and Growth Stage	Rate (Qts./Ac.)
Pre-emergence through loop stage	2.4
Early post-emergence (2nd to 6th true leaf stage)	2.4
Late post-emergence (6th to 9th true leaf stage)	2.4

Use Restrictions on *Muck Soils*

- Do not apply to *Muck soils* in California.
- Pre-Harvest Interval (PHI): Do not apply within 45 days of harvest.
- Do not feed or graze these crops.
- Do not apply more than 7.2 quarts of this product per acre per growing season on *Muck soils*. To maximize crop safety, ensure good soil coverage during planting or transplanting and delay pre-emergence applications to the loop stage, if possible.
- Do not apply this product pre-emergence through the loop stage if heavy rains are expected or severe crop injury may result. If irrigating immediately after application of this product at the pre-emergence through loop stage, do not irrigate in excess of one-half inch of water.
- Do not plant Spinach, Sugar beets, Red beets, Winter barley or Winter wheat as rotational crops on *Muck soils* for 12 months from the time of last application if more than 1.8 quarts of this product per acre is applied to the Onion crop.
- If loss of Onion crop occurs, do not replant any crop other than Onions in *Muck soil* during the same cropping year and do not work the soil deeper than 2 inches.

PEANUTS (Except CA)

Methods of Application, Timing and Rates

- Apply this product by ground, air or chemigation.
- Apply this product pre-plant incorporated.
- Apply this product pre-emergence to Peanuts grown under overhead irrigation.

Pre-plant Incorporated: Apply this product up to 60 days prior to planting and incorporate within 7 days after applications.

Pre-emergence: Apply this product at-planting or up to 2 days after planting and before crop emergence. To prevent decreased crop pegging, adequate incorporation must be achieved by applying a minimum of three-fourths inch of overhead irrigation or rainfall within 48 hours of application.

Chemigation: This product may be applied through sprinkler irrigation systems. Follow all directions, special instructions and precautions for chemigation under the *"APPLICATION INSTRUCTIONS"* section.

Use Rates:

Region	Rate (Qts./Ac.)
New Mexico, Oklahoma and Texas	0.6 to 1.2
Other Peanut growing states*	1.2
* For heavy weed infestations especially *Texas panicum*, up to 1.8 qts. of this product per acre can be used in Alabama, Georgia or Florida.	

POTATOES

Additional Weeds Controlled

In addition to the weeds listed in the *"WEEDS CONTROLLED"* table, this product will control the following weeds in Potatoes: Stinging nettle.

Methods of Application, Timing and Rates

- Apply this product by ground, air or chemigation.
- Apply this product pre-emergence, pre-emergence incorporated or early post-emergence.

Pre-emergence: Apply this product after planting but before Potatoes and weeds emerge or after drag-off.

Pre-emergence Incorporated: Apply this product and incorporate after planting but before Potatoes and weeds emerge. Where drag-off is practiced, apply this product and incorporate before, at or after drag-off but before Potatoes and weeds emerge. Incorporate this product within 7 days of application. This product must be thoroughly and uniformly incorporated into the top 1 to 2 inches of soil. Mechanical incorporation is not required if adequate rainfall for good crop and weed emergence occurs or irrigation is received within 7 days after application. Care must be taken so that incorporation equipment does not damage seed pieces or elongating sprouts.

Early Post-emergence: Apply this product from crop emergence to the 6 inch stage of growth. Do not apply this product post-emergence if Potatoes are under stress from cold/wet or hot/dry conditions or crop injury may occur.

Chemigation: This product may be applied through sprinkler irrigation systems. Apply this product pre-emergence after planting, after drag-off or early post-emergence through sprinkler irrigation systems. Follow all directions, special instructions and precautions for chemigation under the *"APPLICATION INSTRUCTIONS"* section.

Use Rates:

Soil Texture	Rate (Qts./Ac.)	
	≤ 3% Organic Matter	> 3% Organic Matter
Coarse	0.9	0.9
Medium	1.2	1.8
Fine	1.8	1.8

Use Restrictions on Potatoes

- Do not apply to Sweet potatoes or Yams.
- Do not apply pre-plant.
- Do not make more than 1 application of this product per season.
- Application of this product on White Rose variety potatoes during or followed by cool and/or wet weather conditions may result in crop injury.

RICE

Additional Weeds Controlled

In addition to the weeds listed in the *"WEEDS CONTROLLED"* table, this product will control the following weeds in Rice: Junglerice and Sprangletop.

Methods of Application, Timing and Rates

This product may be applied as a pre-flood, pre-emergence in dry-seeded or drilled Rice or as a delayed pre-emergence application in drilled dry-seeded Rice or as an early post-emergence in dry-seeded Rice. Treatments may be applied to conventional, reduced or minimum tillage and no-till (stale seedbed) Rice. The seedbed should be firm and free of clods and must be prepared to allow for good seed coverage. The use of a planter under conditions that do not allow good soil coverage of the Rice seed can result in reduced stand or stunting if this product contacts germinating Rice seed.

Pre-Flood, Pre-emergence: This product may be applied for pre-emergence weed control as a pre-flood, pre-rice germination herbicide in lightly incorporated dry-seeded Rice or on drilled Rice.

Seeding Directions

For all Rice seed incorporation methods, seed must be incorporated shallowly or no more than 1 inch below soil surface. Seed left on the surface may be injured or killed by this product. **However, to ensure that seed is not covered too deeply, 15 to 20% of seed total has to be visible at surface.** Increase seeding rates by a percentage corresponding to the amount of seed left on the surface. Adjust seeding ratios to meet individual practices, incorporation depths and field conditions. **For Example:** Target seeding rate is 150 pounds per acre. If approximately 15% of seed is left on soil surface, seeding rate should then be increased 22.5 pounds per acre to 177.5 pounds per acre.

Seeding depths can be affected by soil textures, tillage practices, irrigation and methods of mechanical incorporation. Seed that is incorporated either mechanically and/or by irrigation flush must remain at a shallow depth of no more than 1 inch below the soil surface. Fields where Rice seed is incorporated too deeply will experience reduced crop stands.

Following are examples of typical implements that can be used for Rice seed incorporation: Rice roller/ridger, ring roller, light harrow or flat roller. Regardless of the implement or method of incorporation used, seed incorporation must be less than 1 inch below the soil surface.

After Rice seed is incorporated, uniformly apply to soil surface as broadcast spray the tank-mixture of this product at 1.2 quarts of this product per acre plus FirstChoice® SafeGuard™ spray adjuvant at 0.8 quart per acre. Use of this product without tank-mixing with FirstChoice SafeGuard spray adjuvant can result in crop injury and loss of Rice stand.

After herbicide application, flush field with irrigation water with method best employed to facilitate a thorough soaking of field and a rapid drain. Recirculate and contain in the field of initial application tail water (runoff water) from flood irrigation that contains this product or use only on adjacent crops for which this product or other Pendimethalin based products is registered for use.

Rice seed covered with water for longer than 8 days may result in reduced stand and weed control.

Delayed Pre-emergence (Except CA): Apply this product alone or with tank-mix partner for delayed pre-emergence weed control in grain-drilled, dry-seeded Rice. Apply this product alone or in tank-mixture to levees after the levees are pulled and planted. Exposed seeds that come in contact with this product may be injured. Apply only when growth conditions favor vigorous Rice growth. The seedbed should have adequate moisture for seed germination.

Uniformly apply the specified rate of this product after Rice planting and before Rice and weed emergence (spiking). Apply after the Rice seed has absorbed water and germinated and after the soil has been previously sealed over the seed by at least 1 inch of rainfall or by irrigation (flush). If the soil has not been sealed by rain or flush, apply when 80% of germinated seeds have a primary root (radicle) or shoot at least one-half inch long. If there is insufficient moisture, flush before application of this product to supply moisture for root (radicle) initiation and for vigorous Rice and weed growth.

If applied to soil prior to these conditions or to cracked soil, stand reduction or stunting of Rice may occur. Under some conditions, use of gibberellic acid-treated seed, heavy rainfall after application or flushing after application may result in herbicide injury to Rice. Rice can overcome moderate injury with appropriate cultural practices.

Due to the residual activity of this product, this treatment may be applied if Rice is too small to maintain a flood on the field for weed control. However, proper water management practices must be followed for normal Rice growth and activity of this product.

Early Post-emergence: Apply this product as a tank-mix partner. Base applications on weed and crop size guidelines of the tank-mix partner. Do not apply to fields with standing water. If necessary, fields may be flushed prior to treatment to produce vigorous Rice and weed growth. Since soil and weeds must be completely exposed to spray coverage, no flood water should be on the field at the time of application. Cloddy soil, standing water (puddles) at the time of application or cracks in the soil that form after application may result in reduced weed control.

Because of residual activity of this product, this treatment may be applied if Rice is too small to maintain a flood on the field for weed control. However, proper water management practices must be followed for normal Rice growth and activity of this product.

Since the residual activity of this product is activated by moisture, this product is most effective in controlling emerging weeds when adequate rainfall or irrigation (flush) is received within 7 days after application.

Use Rates:

Delayed Pre-Emergence Applications	
Soil Texture	**Rate (Qts./Ac.)**
Sand, Loamy sand	DO NOT USE
Sandy loam	0.9
Loam, Silt loam, Silt, Sandy clay loam	1.2
Silty clay loam, Clay loam, Sandy clay, Silty clay, Clay	1.2

Early Post-Emergence Application	
Soil Texture	**Rate (Qts./Ac.)**
Coarse	0.9
Medium	1.2
Fine	1.2

Use Restrictions on Rice

- Do not apply this product as a pre-flood, pre-emergence treatment in Rice unless tank-mixed with FirstChoice SafeGuard spray adjuvant.
- Do not apply this product through any type of irrigation system.
- Do not apply in liquid fertilizer.
- Do not use on water-seeded Rice except as specified in other labeling.
- Do not apply to Rice fields if fields are used for fish production, especially catfish or crayfish farming.
- Do not use water containing residues of this product from Rice cultivation to irrigate food or feed crops that are not registered for use with this product.

- In case of a crop failure due to weather conditions or disease following treatment with this product alone or in a tank-mixture, only drilled dry-seeded Rice may be immediately replanted. However, the grower assumes all risks and consequences associated with replanting of Rice because there is the potential for stand reduction or stunting. A 10% percent increase in seeding rate is suggested. Replant seed below the herbicide layer because reduced stand or stunting may occur if this product contacts germinating Rice seed. Do not replant with gibberellic acid-treated seed. Do not reapply this product alone or in a tank-mixture.
- Do not apply this product and then flush for germination.
- Do not apply to stressed Rice. Stress factors include cold or hot temperature extremes, excessive moisture or drought, problem soils, poor field drainage or deep water after application.
- Do not apply early pre-emergence or pre-plant incorporated as severe Rice injury is possible.
- Do not feed forage or graze livestock in treated fields.

SOYBEANS (Except CA)

Additional Weeds Controlled

In addition to the weeds listed in the *"WEEDS CONTROLLED"* table, this product will control or reduce competition from the following weeds in Soybeans: Itchgrass and Red rice. (See *"Use Rates"* below for specific rates for these weeds.)

Methods of Application, Timing and Rates

Apply this product in conventional, minimum or no-till as a Fall surface, Fall incorporated, pre-plant surface, pre-plant incorporated or pre-emergence application in Soybeans.

Fall Applications: This product may be surface applied or incorporated in the Fall, after Fall harvest and prior to ground freeze in states North of Interstate-80 and the entire states of Iowa, Illinois, Indiana, Kansas, Kentucky, Missouri, Nebraska, Ohio, Oklahoma and Texas. Fall applications of this product will not provide season-long weed control.

Pre-plant Surface: Apply this product up to 15 days prior to planting. This product may be applied up to 45 days prior to planting when used in a tank-mix or applied sequentially with Glyphosate plus Imazethapyr, Imazamox or Imazethapyr. Apply tank-mixes of this product and sequential programs as specified under the tank-mix section.

Pre-plant Incorporated: Apply this product up to 60 days prior to planting and incorporate within 7 days after application.

Pre-emergence: Apply this product at-planting or up to 2 days after planting. Apply to a firm seedbed free of clods. Do not make applications of this product pre-emergence North of Interstate-80 except in the states of Indiana, Michigan and Ohio or as specified in the supplemental labeling.

Use Rates:

Fall Surface, Fall Incorporated, Pre-Plant Surface or Pre-Plant Incorporated Applications		
Soil Texture	Rate (Qts./Ac.)	
	≤ 3% Organic Matter	> 3% Organic Matter
Coarse	0.9	1.2
Medium	1.5*	1.8
Fine**	1.8	1.8

* Do not exceed 1.0 qt. of this product per acre for Southern states. See map for specific states in the *"USE AREA"* section.

** For heavy Clay soils, apply this product at the broadcast rate of 1.8 qts. of this product per ac.

Pre-Emergence Applications		
Soil Texture	Rate (Qts./Ac.)	
	≤ 3% Organic Matter	> 3% Organic Matter
Coarse	0.9	0.9
Medium	1.2	1.2
Fine	1.2	1.5

Pre-Plant Incorporated Applications for Red Rice Control and Itchgrass Suppression	
Soil Texture	Rate (Qts./Ac.)
	Up to 3% Organic Matter*
Coarse	1.8
Medium	1.8
Fine	2.4

* This use is not for soils with more than 3% organic matter.

Use Restrictions on Soybeans

- Do not apply post-emergence on Soybeans or serious crop injury can result.
- Do not use this product in Soybeans in California.
- Pre-Harvest Interval (PHI): Do not apply within 85 days of harvest.
- Do not exceed 1 application per crop season at the highest rate per acre for any given soil type and application method.
- Livestock can graze or be fed forage from treated Soybean fields.

STRAWBERRIES

Methods of Application, Timing and Rates

- Apply this product by ground, air or chemigation.
- Stunting, reduced growth, or reduction in daughter plants may occur with this use. Uniformly apply 0.9 to 1.8 quarts of this product per acre as a broadcast spray to the soil surface at pre-transplant time. A second application of 0.9 to 1.8 quarts of this product per acre may be applied in a band to the soil between crop rows 35 days before harvest but DO NOT CONCENTRATE THE RATE per acre into the treated area. Do no not allow spray to contact Strawberry plants. The second application rate is based on per unit of treated area.

Chemigation: This product may be applied through sprinkler irrigation systems. Follow all directions, special instructions and precautions for chemigation under the *"APPLICATION INSTRUCTIONS"* section. Do not allow irrigation water treated with this product to contact Strawberry plants.

Use Rates:

Soil Texture	Broadcast Rate (Qts./Ac.)
Coarse	0.9
Medium	1.2 to 1.5
Fine	1.5 to 1.8

Use Restrictions on Strawberries

- Do not apply more than 1.8 quarts of this product per acre per application.
- Do not apply more than 3.6 quarts of this product per acre per season.
- Pre-Harvest Interval (PHI): Do not apply within 35 days of harvest.
- Do not feed forage or graze livestock in treated fields.
- Do not apply if row is to be covered later with plastic.

SUGARCANE

Methods of Application, Timing and Rates

- Apply this product pre-emergence through lay-by to plant or ratoon Sugarcane.
- Applications may be made band or broadcast. Although there may be adequate crop tolerance for post-emergence applications at lay-by, spray must be directed under the Sugarcane canopy to obtain effective weed control.
- This product must be thoroughly and uniformly incorporated into the soil with either (a) mechanical incorporation equipment as outlined below or (b) with rainfall or irrigation, if rainfall or irrigation is adequate for good crop and weed emergence and received within 7 days after application. If rainfall or irrigation is not obtained, incorporate this product mechanically.

Mechanical Incorporation: Apply this product to loosened beds and incorporate into the top 1 to 2 inches of soil within 7 days after application.

Use Rates:

Use Area	Broadcast Rate* (Qts./Ac.)
All states except Hawaii	2.4 to 3.6
Muck soil (Florida only)	2.4 to 4.85
Hawaii	2.4 to 4.85

* Use the high rate if: i) Clay soils. ii) No mechanical incorporation is planned. iii) Heavy weed populations are anticipated. iv) Itchgrass infestation is anticipated. v) Shaving is planned.

Use Restrictions on Sugarcane

- Do not exceed 7.2 quarts of this product per acre in one growing season.
- Do not use less than 11 gallons of water as a carrier when applying this product for weed control.
- Ratoon sugarcane must be lightly shaved in early Spring to remove the old stubble before incorporation over the line of Sugarcane if possible. Carefully adjust equipment to incorporate without causing excessive damage to emerging shoots.
- Do not make aerial applications at close-in because complete and uniform coverage cannot be obtained.
- Do not apply through any type of irrigation system.
- Pre-Harvest Interval (PHI): Do not apply within 90 days of harvest.
- Do not graze treated fields or feed treated forage or fodder to livestock.

SUNFLOWER

Methods of Application, Timing and Rates

- Apply this product pre-plant incorporated in all states.
- Fall pre-plant incorporated applications may be made in Minnesota, North Dakota and South Dakota.
- Apply this product pre-emergence in conventional tillage Sunflower except in California.

Note: Plant Sunflower 1.5 to 2 inches deep and completely cover with soil.

Pre-plant Incorporated (Spring): Apply up to 60 days prior to planting and incorporate within 7 days after application.

Pre-plant Incorporated (Fall Applications in Minnesota, North Dakota and South Dakota): Apply this product and immediately incorporate in late Fall prior to planting Sunflower the following Spring. Apply this product in the late Fall when soil temperatures are 45°F or below but before the ground freezes. Do not apply when air temperature is below 45°F. Prior to planting Sunflower in the Spring, fields treated with this product should receive at least one shallow additional incorporation. Spring incorporation should be at an angle to the last tillage operation.

Pre-emergence: Apply this product at-planting or up to 2 days after planting. Pre-emergence applications of this product to Sunflowers may increase the likelihood of crop injury especially when Sunflowers are grown in stress situations such as compacted soils. Decreased herbicide performance compared to pre-plant incorporated applications may also result from a pre-emergence application. If dry conditions with limited precipitation exist or unseasonably cool temperatures following planting are forecasted, apply this product prior to planting and mechanically incorporate with tillage.

Use Rates:

Pre-Plant Incorporated (Spring) or Pre-Emergence (Conventional Tillage)			
Soil Texture	Southern States*	Northern States	
	Rate (Qts./Acre)	Rate (Qts./Ac.)	
		≤ 3% Organic Matter	> 3% Organic Matter
Coarse	0.9	1.2	1.2
Medium	1.2	1.5	1.8
Fine	1.8	1.8	1.8
*See map of specific states under the *"USE AREA"* section.			

Pre-Plant Incorporated (Fall) Application*		
Soil Texture	Rate (Qts./Ac.)	
	≤ 3% Organic Matter	> 3% Organic Matter
Coarse	1.5	1.5
Medium	1.8	2.1
Fine	2.1	2.1
*For use in Minnesota, North Dakota and South Dakota only.		

SUNFLOWER (No-Till) (Except CA)

Methods of Application, Timing and Rates

Apply this product at 2.8 quarts per acre up to 30 days before planting (pre-plant) up to immediately after planting (pre-emergence).

This product is most effective in controlling weeds when adequate rainfall or overhead irrigation is received within 7 days after application.

Use Restrictions (All Tillage Types)

- Do not apply this product post-emergence.
- Do not feed forage or graze livestock in treated Sunflower fields.
- Do not use in California.

TOBACCO

Methods of Application, Timing and Rates

Apply this product pre-plant incorporated or as a lay-by application in transplanted Tobacco.

Pre-plant Incorporated: Apply this product with ground sprayer up to 60 days prior to transplanting Tobacco and incorporate within 7 days after application.

Applied according to directions and under normal growing conditions, this product will not harm transplanted Tobacco. Under stress conditions for plant growth such as cold/wet or hot/dry weather, this product can produce a temporary retardation of Tobacco development.

Lay-by: This product may be applied as a directed spray following the last normal cultivation (lay-by), usually 4 to 6 weeks after transplanting Tobacco. Apply this product in a 16 to 24 inch band between the crop rows. The spray should not contact Tobacco plants.

Use Rates:

Pre-Plant Incorporated Application		
Use Area	Soil Texture	Rate (Qts./Ac.)
Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia	Coarse	1.2
	Medium: Sandy clay loam, Loam	1.2
	Medium: Silt loam, Silt	1.5
	Fine	1.5
Other states	Coarse	1.2
	Medium	1.8
	Fine	1.8

Lay-by Application	
Soil Texture	Rate (Qts./Ac.)
Coarse	0.9
Medium	1.2
Fine	1.2

Use Restrictions on Tobacco

Do not apply as a broadcast spray as contact may cause malformed Tobacco leaves.

WHEAT

Methods of Application, Timing and Rates

- This product may be applied by ground or air.
- This product may be applied pre-emergence, delayed pre-emergence or post-emergence to Wheat for weed control in Fall, Winter or Spring seeded Wheat.

Apply to a seedbed that is firm and free of clods and trash. Prepare the seedbed to ensure good seed coverage by the soil and seed-to-soil contact. Use high quality seed. When applications of this product are intended to be made pre-emergence or delayed pre-emergence, plant seed at least 1 inch deep to avoid possible crop injury, but not too deep for proper germination. When applications of this product are intended to be made post-emergence, plant seed at least 0.5 inch to 1.0 inch to avoid crop injury.

Uniformly apply this product as a pre-emergence, delayed pre-emergence (after Wheat seed has germinated) or post-emergence treatment from the 1st leaf stage of Wheat until before the flag leaf is visible/emerged for weed control. Apply prior to weed emergence. Emerged weeds will not be controlled by this product. Adequate rainfall or irrigation within 7 days after application will provide the most consistent weed control.

For control of established weeds, this product may be tank-mixed with any post-emergence herbicide registered for use in Wheat. This product will provide residual control of the weeds listed in this label. If compatibility is not known, always perform a mixing test to check the compatibility of this product with other potential tank-mix partner(s).

Use Rates:

Soil Texture	Southern States* Rate (Qts./Ac.)	Northern States* Rate (Qts./Ac.)
Coarse	0.9 to 1.2	0.9
Medium	0.9 to 1.8	1.5
Fine	1.2 to 1.8	1.2 to 1.8
*See map of specific states under the *"USE AREA"* section.		

Use Restrictions on Wheat

- Do not apply more than 1.8 quarts of this product per acre per season.
- If loss of grain crop occurs, any crop registered for this product pre-plant incorporated use may be replanted the same year without adverse effects. Do not replant Wheat.
- Pre-Harvest Interval (PHI): Do not apply this product within 60 days of harvest of Wheat grain or straw.
- Pre-Harvest Interval (PHI): Do not apply this product within 28 days of harvest of Wheat hay.
- Pre-Harvest Interval (PHI): Do not apply this product within 11 days of harvest of Wheat forage.

TURFGRASSES, INDUSTRIAL (UNIMPROVED) TURF, ORNAMENTALS, LANDSCAPES AND GROUND MAINTENANCE, NON-CROPLAND INCLUDING TREE PLANTATIONS AND TOTAL VEGETATION CONTROL

USE RESTRICTIONS

- Do not apply this product through any type of irrigation system.
- Do not apply this product in greenhouses, shade houses or other enclosed structures. Not for use for commercial seed production.
- Do not exceed a maximum of 4.8 pints per acre per application for use on residential turf grass such as residences, parks, schools, and playgrounds.
- Do not exceed a maximum of 7.2 pints per acre per application for use on commercial turfgrass.

WEEDS CONTROLLED

This product is used for pre-emergence control of the weeds listed below. This product will not control established weeds. If weeds should develop prior to activation of herbicide, shallow cultivate to destroy existing weeds or where practical, remove by hand. When cultivating for any reason, it should be shallow. This product may be used in conjunction with herbicides registered for post-emergence use [i.e., Glyphosate (e.g., Imitator®, Roundup®) or Glufosinate (e.g., Finale®)] for the control of established weeds. Do not apply sprays containing Glyphosate (e.g., Imitator, Roundup) or Glufosinate (e.g., Finale) over-the-top of desirable plants. Application of this product may be followed by any registered herbicide to control weeds not listed on this label.

Efficacy of this product will be improved if the application is followed by one-half inch of rainfall or its equivalent in sprinkler irrigation. Erratic weed control may result if this product is not activated by rainfall or irrigation within 30 days.

Common Name	Scientific Name
Barnyardgrass	*Echinochloa crus-galli*
Bluegrass, Annual	*Poa annua*
Burweed, Lawn	*Soliva pterosperma*
Carpetweed	*Mollugo verticillata*
Chickweed, Common	*Stellaria media*
Chickweed, Mouseear	*Cerastium vulgatum*
Clover, Hop	*Trifolium procumbens*
Crabgrass	*Digitaria* spp.
Crowfootgrass	*Dactyloctenium aegyptium*
Cudweed	*Gnaphalium* spp.
Evening primrose	*Oenothera biennis*
Fiddleneck	*Amsinckia intermedia*
Filaree	*Erodium* spp.
Foxtail, Giant	*Setaria faberi*
Foxtail, Green	*Setaria viridis*
Foxtail, Yellow	*Setaria glauca*
Goosegrass	*Eleusine indica*
Henbit	*Lamium amplexicaule*
Itchgrass	*Rottboellia exaltata*
Johnsongrass (from seed)	*Sorghum halepense*
Junglerice	*Echinochloa colona*
Knotweed, Prostrate	*Polygonum aviculare*
Kochia	*Kochia scoparia*
Lambsquarters	*Chenopodium album*
Lovegrass (from seed)	*Eragrostis* spp.
Panicum, Browntop	*Panicum fasciculatum*
Panicum, Fall	*Panicum dichotomiflorum*
Panicum, Texas	*Panicum texanum*
Pigweed	*Amaranthus* spp.
Puncturevine	*Tribulus terrestris*
Purslane	*Portulaca oleracea*
Pusley, Florida	*Richardia scabra*
Rocket, London	*Sisymbrium irio*
Sandbur, Field	*Cenchrus incertus*
Shepherdspurse	*Capsella bursa-pastoris*
Signalgrass	*Brachiaria platyphylla*
Smartweed, Pennsylvania	*Polygonum pensylvanicum*
Speedwell, Corn	*Veronica arvensis*
Sprangletop, Mexican	*Leptochloa uninervia*
Sprangletop, Red	*Leptochloa filiformis*

(Continued)

(Cont.)

Common Name	Scientific Name
Spurge, Annual	*Euphorbia* spp.
Spurge, Prostrate	*Euphorbia humistrata*
Velvetleaf (Buttonweed)	*Abutilon theophrasti*
Witchgrass	*Panicum capillare*
Woodsorrel, Yellow	*Oxalis stricta*
Woolly cupgrass	*Eriochloa villosa*

USE SITES

This product is a selective soil applied herbicide for pre-emergence control of most annual grasses and certain broadleaf weeds as they germinate in any Turfgrass sites (lawns, sod, turf areas) such as grounds or lawns around residential and commercial establishments, airports, athletic fields, cemeteries, golf courses, houses of worship, military and other institutions, multifamily dwellings, parks, picnic grounds, prairiegrass areas, roadsides, schools and sod farms. This product can also be used in and around field, liner and container grown ornamental nurseries; established landscape ornamentals and ornamental gardens; listed groundcovers; nonbearing fruit and nut trees; Conifers and hardwood seedling nurseries; and for tree plantation site preparation and maintenance. Also, this product can be applied for general grounds maintenance around areas such as alleyways, bike and jogging paths, buildings, driveways and roadsides, markers and fence lines, mulch beds, parking lots, stone gardens and gravel yards, vacant lots and other similar areas. It may be used under asphalt or concrete treatments as part of a site preparation program. This product is also used for pre-emergence control of most annual grasses and certain broadleaf weeds as they germinate in any noncropland area such as bridge abutments and approaches, delineators, fence rows, highway guardrails, highway and pipeline rights-of-way, paved or gravel surfaces, petroleum tank farms, pumping installations, railroad, sign posts, storage areas, utility, utility substations, and windbreaks and shelterbelts; and other similar areas where weed control is desired.

This product will not control established weeds. Established weeds should be controlled before applying this product or by using this product in conjunction with an appropriate post-emergence herbicide. Unusually cold, excessively wet, or hot and dry conditions that delay germination or extend germination over a long period of time can reduce weed control.

One-half inch of rainfall or its equivalent in sprinkler irrigation following application of this product or tank-mix combinations of this product improves weed control. Erratic weed control may result in the absence of rainfall or irrigation within 30 days of application of this product.

Follow label directions of this product or tank-mix combinations of this product carefully to avoid crop injury. Over-application can result in crop stand loss, crop injury or excessive soil residues. Uneven application, improper soil incorporation or soil incorporation deeper than what is directed can decrease weed control and/or cause crop injury. Seedling diseases, cold weather, excessive moisture, shallow or deep planting, low or high soil pH, high soil salt concentration or drought can weaken seedlings and plants and increase the possibility of crop damage and/or reduce crop yields from this product.

This product may cause temporary discoloration of sprayed surfaces. Rinse immediately to avoid staining. Spray colorants or dyes can be added to alter the color of the spray solution to match the treated surfaces.

MIXING INSTRUCTIONS

Ground Driven Sprayer

1. Fill tank one-half to three-quarters full with clean water.
2. Add this product to the partially filled tank while agitating and then fill the remainder of the tank with water.
3. Maintain continuous agitation while adding this product and until spraying is completed. If the spray mixture is allowed to settle for any period of time, thorough agitation is essential before spraying is resumed. Continue agitation while spraying.
4. If this product is to be used in tank-mixtures with other registered herbicides, then follow directions on the labels of those products which recommend tank-mixing.

Backpack Sprayer

1. Begin with a clean spray tank.
2. Fill the spray tank one-half full with clean water and add the required amount of this product to the sprayer.
3. Cap sprayer and agitate to ensure mixing.
4. Uncap sprayer and finish filling tank to desired level.
5. Cap sprayer and agitate once again.

During application it is desirable to agitate the mixture on occasion to ensure mixing. If the spray mixture is allowed to settle for any period of time, thorough agitation is essential before spraying is resumed.

Liquid Fertilizers

If compatibility is not known, always test small quantities using a simple jar test before mixing. Add the required amount of this product to half-filled spray tank while agitating, then add the fertilizer product. Complete filling spray tank to desired level.

Dry Bulk Fertilizers

This product may be impregnated on dry bulk fertilizers.

For additional mixing instructions, refer to the section *"TANK-MIXING INFORMATION"* found at the beginning of this label.

SPRAYING INSTRUCTIONS

Apply with properly calibrated ground equipment in at least 40 gallons of water per acre to provide uniform spray distribution. Low pressure (i.e., 20 to 40 psi) sprayers are recommended. Maintain continuous agitation during spraying with good mechanical or bypass agitation. Check sprayer routinely for proper calibration. Avoid overlaps that will increase rates above those recommended. Avoid application when winds may cause drift. Avoid unintentional contact of spray solution with driveways, stone, wood or other porous surfaces. Rinse immediately to avoid staining.

TURFGRASSES

Use this product for pre-emergence control of grasses and certain broadleaf weed species as they germinate in any Turfgrass site (Golf courses, Lawns, Sod farms and other Turf areas) and landscape ornamental maintenance areas. Examples of such sites include, but are not limited to: grounds or lawns around Residential and Commercial establishments, Multifamily dwellings, Military and other institutions, Parks, Airports, Roadsides, Schools, Picnic grounds, Athletic fields, Houses of worship, Cemeteries, Golf courses; Prairie grass areas and Sod farms.

Efficacy of this product will be improved if the application is followed by one-half inch of rainfall or its equivalent in sprinkler irrigation. If this product is not activated by rainfall or irrigation within 30 days, erratic weed control may result.

To prevent establishment of weeds along the edges of treated area, it may be necessary to overlap the spray 3 to 6 inches onto sidewalks or driveways, etc., to ensure effective application rates in these especially vulnerable sites. Where temporary discoloration of pavement is to be avoided, do not rub or scrub surface. Rinse area immediately using a heavy spray of water to avoid staining. Treated Turfgrass should be dry before entering to avoid staining onto non-treated surfaces.

TYPES OF TURFGRASSES	WEEDS CONTROLLED	RATES OF THIS PRODUCT	
		Qts./Ac.	Ozs./1000 Sq. Ft.
Cool Season Grasses: Fescue (Fine) Fescue (Tall) Kentucky bluegrass Perennial ryegrass ***(Continued)***	Barnyardgrass, Crabgrass, Evening primrose, Fall panicum, Foxtail, Hop clover, Knotweed, Oxalis, *Poa annua*, Prostrate spurge, Purslane	1.8 to 2.4	1.3 to 1.8
	USE INSTRUCTIONS: Use as initial application prior to weed germination in Spring. For extended weed control or where weed infestation is expected to be heavy, repeat application using 1.25 to 1.8 qts./ac. (1 to 1.3 ozs. per 1000 sq. ft.) after 5 to 8 weeks.		

(Continued)

(Cont.)

TYPES OF TURFGRASSES	WEEDS CONTROLLED	RATES OF THIS PRODUCT	
		Qts./Ac.	Ozs./1000 Sq. Ft.
(Cont.) **Cool Season Grasses:** Fescue (Fine) Fescue (Tall) Kentucky bluegrass Perennial ryegrass	**For Residential Turf* Uses Only:** Goosegrass	1.8 to 2.4	1.3 to 1.8
	USE INSTRUCTIONS: Use as initial application prior to weed germination in Spring. If the lower rate was used initially or for extended control, repeat application at 1.8 qts./ac. (1.3 ozs./1000 sq. ft.). Do not exceed a maximum of 2.4 qts./ac. per application for use on residential Turfgrass. ***Note:** Residential turf is defined as Turf in any residential situation as well as Home lawns, Schools, Parks and Playgrounds.		
	For Commercial or Other Non-Residential Turf: Goosegrass	1.8 to 3.6	1.3 to 2.6
	USE INSTRUCTIONS: Use as initial application prior to weed germination in Spring. If the lower rate was used initially or for extended control, repeat application at 1.8 qts./ac. (1.3 ozs./1000 sq. ft.). Do not exceed a maximum of 3.6 qts./ac. per application for use on commercial or other non-residential Turfgrass.		
	Chickweed, Corn speedwell, Cudweed, Henbit, Lawn burweed, *Poa annua*	1.8 to 2.4	1.3 to 1.8
	USE INSTRUCTIONS: Apply in late Summer or early Fall prior to weed germination.		
Warm Season Grasses: Bahiagrass Bermudagrass Buffalograss Centipedegrass Fescue (Tall) St. Augustinegrass Zoysiagrass	**For Residential Turf* Uses Only:** Barnyardgrass, Crabgrass, Evening primrose, Fall panicum, Foxtail, Hop clover, Knotweed, Oxalis, *Poa annua,* Prostrate spurge, Purslane	1.8 to 2.4	1.3 to 1.8
	USE INSTRUCTIONS: Use as initial application prior to weed germination in Spring. Repeat application at 1.25 to 1.8 qts./ac. (1 to 1.3 ozs. per 1000 sq. ft.) after 5 to 8 weeks if necessary. Do not exceed a maximum of 2.4 qts./ac. per application for use on residential Turfgrass. ***Note:** Residential turf is defined as turf in any residential situation as well as Home lawns, Schools, Parks and Playgrounds.		
	Goosegrass	1.8	1.3
	USE INSTRUCTIONS: Apply prior to weed germination in Spring. Make a second application 6 to 8 weeks later. For extended control, an additional application of 1.8 qts./ac. (1.3 ozs./1000 sq. ft.) may be made 8 weeks after the second application.		
	Chickweed, Corn speedwell, Cudweed, Henbit, Lawn burweed, *Poa annua*	1.3 to 2.4	1.3 to 1.8
	USE INSTRUCTIONS: Apply in late Summer or early Fall prior to weed germination.		

To prevent establishment of weeds along the edges of lawns, it may be necessary to overlap the spray 3 to 6 inches onto sidewalks or driveways, etc. Rinse pavement immediately to avoid temporary discoloration.

THIS PRODUCT IN TANK-MIXTURE

To control emerged weeds in Turfgrasses, this product can be mixed with post-emergence herbicides. To control emerged annual grass, this product can be mixed with Fenoxaprop (e.g., Acclaim® Extra) or MSMA (e.g., MSMA 6 Plus) whereas broadleaved weeds can be controlled using 2,4-D + Mecoprop + Dicamba (e.g., Trimec®), Three-Way™, 2,4-D (e.g., De-Amine®) and other similar products. If compatibility is not known, conduct a simple jar test before tank-mixing to insure compatibility of herbicides.

It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank-mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank-mixture.

USE PRECAUTIONS FOR TURFGRASS

- Use on well established Turfgrass with a dense and uniform stand.
- On newly planted areas, application should not be made until the Turfgrass has filled in and has been mowed at least four times.
- On Turf that has been thinned or damaged due to Winter injury, excessive moisture, etc., allow Turf to recover prior to application.
- Applications made to overseeded warm-season Turfgrasses may cause thinning or injury of the overseeded species.
- Do not use on greens or injury may occur.
- Delay reseeding or Winter overseeding of treated Turfgrass for at least 3 months following the last application of this product
- Delay sprigging Turfgrass for 5 months after application of this product.

INDUSTRIAL (UNIMPROVED) TURF

(Rights-of-Way, Roadsides, Construction Sites, Parks, Substations, Lots or Similar Areas)

Industrial or unimproved Turf areas often have a different spectrum of weeds to be controlled than those found in fine Turf. This product will control annual grasses and broadleaf weeds mentioned in *"TURFGRASSES"* section of this label as well as the following weeds that might germinate in established grasses.

Annual spurge	London rocket
Browntop panicum	Lovegrass
Carpetweed	Mexican sprangletop
Crowfootgrass	Pennsylvania smartweed
Fiddleneck	Pigweed
Field sandbur	Puncturevine
Filaree	Red sprangletop
Florida pusley	Shepherdspurse
Itchgrass	Signalgrass
Johnsongrass (from seed)	Texas panicum
Junglerice	Velvetleaf
Kochia	Witchgrass
Lambsquarters	Woolly cupgrass

Apply before weeds germinate. To control established weeds, 2,4-D (e.g., De-Amine) MSMA (e.g., MSMA 6 Plus) or similar post-emergence herbicides may be tank-mixed with this product. Apply according to label instructions for the respective products and follow the most restrictive label.

ORNAMENTALS

This product can be applied for pre-emergence weed control around and over the top of the established plants listed below. However, not all varieties or strains of the plants listed have been tested. Unintentional consequences such as crop injury may result because of certain environmental or growing conditions, manner of use or application. Therefore, before treating a large number of plants, spray a few plants and observe for plant damage prior to full scale application.

GROUNDCOVERS	
Common Name	**Scientific Name**
Ajuga	*Ajuga reptans*
Capeweed	*Arctotheca calendula*
Cinquefoil, Spring	*Potentilla verna*
Daisy, Trailing African	*Osteospermum fruticosum*
Gazania	*Gazania splendens*
Iceplant, Large Leaf	*Carpobrotus edulis*
Ivy, English	*Hedera helix*
Ivy, Geranium	*Pelargonium peltatum*
Jasmine, Asiatic	*Trachelospermum asiaticum*
Jasmine, Primrose	*Jasminum mesnyn*
Mondograss	*Ophiopogon japonica*
Myoporum	*Myoporum parviflolium*
Pachysandra	*Pachysandra terminalis*
Potentilla	*Potentilla fruticosa*
Rose-of-Sharon	*Hypericum calycinum*
Wintercreeper	*Euonymous fortunei*

ORNAMENTAL GRASSES	
Common Name	**Scientific Name**
Beach grass	*Ammophila breviligulata*
Fescue, Blue	*Festuca ovina*
Fescue, Sheep	*Festuca ovina*
Fountain grass	*Pennisetum setaceum*
Pampas grass	*Cortaderia selloana*
Reed canary grass	*Phalaris arundinacea*
Reed, Giant	*Arundo* spp.
Ribbon grass	*Phalaris arundinacea*
Tufted hair grass	*Deschampsia caespitosa*

ORNAMENTAL SHRUBS	
Common Name	**Scientific Name**
Abelia, Glossy	*Abelia grandiflora*
Aucuba, Gold	*Aucuba japonica*
Azalea	*Rhododendron spp.*
Bamboo, Heavenly	*Nandina domestica*
Barberry	*Berberis gladwynensis*
Barberry, Japanese	*Berberis thunbergii*
Blue indigo bush	*Dalea gregii*
Bottlebrush, Lemon	*Callistemon citrinus*
Boxwood, Common	*Buxus sempervirens*
Boxwood, Japanese	*Buxus microphylla*
Camellia	*Camellia japonica*
Cape jasmine	*Gardenia jasminoides*
Cordyline	*Cordyline spp.*
Correa	*Correa spp.*
Cotoneaster	*Cotoneaster apiculatus*
Cotoneaster, Bearberry	*Cotoneaster dammeri*
Cotoneaster, Rock	*Cotoneaster horizontalis*
Cypress, Italian	*Cupressus sempervirens*
Cypress, Leyland	*Cupressocyparis leylandii*
Deutzia, Slender	*Deutzia gracilis*
Dogwood, Red twig	*Cornus sericea*
Elaeagnus	*Elaeagnus ebbingei*
Escallonia	*Escallonia fradesii*
Euonymus	*Euonymus fortunei*
Euonymus, Golden	*Euonymus japonica*
Euonymus, Winged	*Euonymus alata*
Firethorn	*Pyracantha coccinea*
Forsythia, Border	*Forsythia intermedia*
Fragrant olive	*Osmanthus fragrans*
Fuschia, California	*Zauschineria californica*
Gardenia	*Gardenia jasminoides*
Hawthorne, Indian	*Raphiolepis indica*
Hibiscus	*Hibiscus syriacus*
Holly, Chinese	*Ilex cornuta*
Holly, Japanese	*Ilex crenata*
Holly, Fosters	*Ilex attenuata 'Fosteri'*
Holly, Savannah	*Ilex attenuata*
Holly, Yaupon	*Ilex vomitoria*

(Continued)

(Cont.)

ORNAMENTAL SHRUBS	
Common Name	**Scientific Name**
Honeysuckle, Bush	*Diervilla lonicera*
Juniper	*Juniperus* spp.
Juniper, Chinese	*Juniperus chinensis v. pfitzer*
Juniper, Shore	*Juniperus conferta*
Juniper, Trailing	*Juniperus horizontalis*
Laurel, Cherry	*Prunus laurocerasus*
Laurel, Mountain	*Kalmia latifolia*
Laurel, Otto luyken	*Prunus laurocerasus*
Laurel, Schipka	*Prunus schipkanesis*
Laurustinus	*Viburnum tinus*
Lavender, English	*Lavandula angustifolia*
Leucothoe	*Leucothoe fontanesiana*
Leucothoe, Coast	*Leucothoe axillaris*
Lilac, Cut-leaf	*Syringa laciniata*
Lily-of-the-Nile	*Agapanthus africanus*
Mahonia	*Mahoria aquifolium*
Mock orange	*Pittosporum tobira*
Myrtle, Compact	*Myrtus communis*
Myrtle, Wax	*Myrica cerifera*
Nandina	*Nandina domestica*
Oleander	*Nerium oleander*
Oregon grape	*Mahonia aquifolium*
Osmanthus	*Osmanthus fragrans*
Palm, European fan	*Chamaerops humillis*
Palm, Mediterranean fan	*Chamaerops* spp.
Phlox, Prickly	*Leptodactylon californicum*
Photinia, Fraser	*Photinia X Fraseri*
Pieris, Japanese	*Pieris japonica*
Pine, Mugo	*Pinus mugo*
Plum, Natal	*Carissa grandiflora*
Privet, California	*Ligustrum ovalifolium*
Privet, Glossy	*Ligustrum lucidum*
Privet, Variegated	*Ligustrum sinensis*
Privet, Waxleaf	*Ligustrum japonicum*
Pyracantha	*Pyracantha coccinea*
Quince, Flowering	*Chaenomeles japonica*
Ranger, Texas	*Leucophyllum frutescens*
Redroot	*Ceanothus* spp.
Rhododendron	*Rhododendron* spp.
Robira	*Pittosporum tobiri*
Spice plant	*Illicium parviflorum*
Spiraea	*Spiraea vanhouttei*
Spiraea, Anthony waterer	*Spiraea X bumalda*
Spiraea, Japanese	*Spirea japonica*
Sweet bay	*Laurus nobilis*
Trumpet bush	*Tecoma stans*
Verbena, Lemon	Aloysia triphylla
Viburnum	*Viburnum suspensum*
Vitex	*Vitex* spp.
Weigela	*Weigela florida*
Wild lilac	*Ceanothus* spp.
Xylosma	*Xylosma congestum*
Yellowbells	*Tecoma stans*
Yew*	*Taxus media*
Yew, Japanese*	*Taxus cuspidata*
Yew, Southern	*Podocarpus macrophyllus*
Yucca, Adam's	*Yucca filamentosa*
Yucca, Weeping	*Yucca pendula*

* Applications should not be made during Spring growth or injury to terminals may occur.

ORNAMENTAL TREES	
Common Name	**Scientific Name**
Alder, European black	*Alnus glutinosa*
Apple	*Malus* spp.
Arborvitae, American	*Thuja occidentalis*
Arbutus	*Arbutus* spp.
Ash, Red	*Fraxinus pennsylvanica*

(Continued)

(Cont.)

ORNAMENTAL TREES	
Common Name	**Scientific Name**
Ash, White	*Fraxinus americana*
Aspen, Bigtooth	*Populus grandidentata*
Aspen, Quaking	*Populus tremuloides*
Basswood	*Tilia* spp.
Birch, European weeping	*Betula pendula*
Birch, River	*Betula nigra*
Buckeye, Red	*Aesculus pavia*
Cedar, White	*Thuja occidentalis*
Chamaecyparis, Boulevard	*Chamaecyparis pisifera*
Cherry, Black	*Prunus serotina*
Cherry, Choke	*Prunus virginiana*
Cherry, Kwanzan	*Prunus serrulata*
Cherry, Nanking	*Prunus tomentosa*
Cottonwood	*Populus deltoides*
Crabapple	*Malus* spp.
Crepe Myrtle	*Lagerstroemia indica*
Cryptomeria, Japanese cedar	*Cryptomeria japonica*
Cypress, Bald	*Taxodium distichum*
Cypress, Leyland	*Cupressocyparis leylandii*
Dogwood, Flowering	*Cornus florida*
Dogwood, Korean	*Cornus kousa*
Dogwood, Silky	*Cornus amomum*
Dogwood, Shrub	*Cornus* spp.
Elm	*Ulmus japonica*
Fir, Balsam	*Abies balsamae*
Fir, Douglas	*Pseudotsuga menziesii*
Fir, Fraser	*Abies fraseri*
Fir, White	*Abies concolor*
Franklinia	*Franklinia* spp.
Ginkgo	*Ginkgo biloba*
Gum, Black	*Nyssa sylvatica*
Gum, Sour	*Nyssa sylvatica*
Haw, Black	*Viburnum prunifolium*
Hawthorn	*Crataegus* spp.
Hemlock, Canada	*Tsuga canadensis*
Hemlock, Eastern	*Tsuga canadensis*
Holly, American	*Ilex opaca*
Honeylocust	*Gleditsia triacanthos*
Lilac, Common	*Syringa vulgaris*
Lilac, Japanese tree	*Syringa reticulata*
Linden	*Tilia* spp.
Magnolia, Saucer	*Magnolia soulangiana*
Magnolia, Southern	*Magnolia grandiflora*
Magnolia, Star	*Magnolia stellata*
Maidenhair tree	*Ginkgo biloba*
Maple, Japanese	*Acer palmatum*
Maple, Norway	*Acer plantanoides*
Maple, Red	*Acer rubrum*
Maple, Sugar	*Acer saccharum*
Nannyberry, Rusty	*Viburnum rufidulum*
Oak, Chinquapin	*Quercus muehlenbergii*
Oak, Live	*Quercus virginiana*
Oak, Pin	*Quercus palustris*
Oak, Red	*Quercus rubra*
Oak, Swamp chestnut	*Quercus michauxii*
Oak, Water	*Quercus nigra*
Oak, White	*Quercus alba*
Oak, Willow	*Quercus phellos*
Olive	*Olea europaea*
Palm date	*Phoenix* spp.
Palm, Fan	*Washingtonia* spp.
Palm, Pindo	*Butia* spp.
Palm, Washington	*Washingtonia* spp.
Peach	*Prunus persica*
Pear, Bradford	*Pyrus calleryana 'bradford'*
Pecan	*Carya illinoensis*
Pine, Austrian	*Pinus nigra*

(Continued)

(Cont.)

ORNAMENTAL TREES	
Common Name	**Scientific Name**
Pine, Italian stone	*Pinus pinea*
Pine, Loblolly	*Pinus taeda*
Pine, Monterey	*Pinus radiata*
Pine, Red	*Pinus resinosa*
Pine, Scotch	*Pinus sylvestris*
Pine, Slash	*Pinus elliottii*
Pine, Virginia	*Pinus virginiana*
Pine, White	*Pinus strobus*
Plum, Purple leaf	*Prunus cerasifera*
Poplar, Black	*Populus nigra*
Redcedar, Eastern	*Juniperus virginiana*
Redcedar, Western	*Thuja plicata*
Red ironbark	*Eucalyptus sideroxylon 'rosea'*
Redwood, Dawn	*Metasequoia glytostroboides*
Sequoia, Giant	*Sequoiadendron giganteum*
Serviceberry	*Amelanchier laevis*
Sourwood	*Oxydendrum arboreum*
Spruce, Colorado blue	*Picea pungens*
Spruce, Dwarf Alberta	*Picea glauca 'albertiana'*
Spruce, Norway	*Picea abies*
Spruce, White	*Picea glauca*
Sweetgum	*Liquidambar styraciflua*
Sycamore	*Platanus occidentalis*
Trachycarpus	*Trachycarpus* spp.
Tulip tree	*Liriodendron tulipifera*
Walnut, Black	*Juglans nigra*
Willow, Weeping	*Salix babylonica*
Yellowwood	*Cladrastis lutea*

PERENNIALS	
Common Name	**Scientific Name**
Bleeding heart	*Dicentra spectabilis*
Calla lily	*Zantedeschia aethiopica*
Canna, Common garden	*Canna generalis 'Lucifer'*
Chincherinchee	*Ornithogalum thyrsoides*
Crinum Lily	*Crinum* spp.
Fern, Asparagus	*Asparagus officinalis*
Fern, Leatherleaf	*Rumohra adiantiformis*
Freesia	*Freesia x hybrida*
Heather, Dwarf	*Calluna vulgaris*
Hosta	*Hosta* spp.
Lily	*Lillium* spp.
Liriope, Creeping	*Liriope spicata*
Liriope, Variegated	*Liriope muscari*
Montbretia	*Crocosmia crocosmiiflora*
Orchid, Peacock	*Acidanthera bicolor*
Peony, Chinese	*Paeonia lactiflora*
Wisteria	*Wisteria* spp.
Zephyr lily	*Zephyranthes* spp.

This product may be used on plant species not listed on this label. The suitability for such uses should be determined by treating a small number of such plants at the labeled rate. Treated plants should be evaluated 1 to 2 months following treatment for possible injury. The user assumes responsibility for any crop damage or other liability.
DO NOT treat plants grown for food or feed. Do not use treated plants for food or feed.

APPLICATION RATES

Apply this product for pre-emergence weed control using broadcast spray equipment using the following rates:

APPLICATION RATES		
Duration of Control*	**This Product (Qts./Ac.)**	**This Product (Fl. Ozs./1000 Sq. Ft.)**
Short term (2 to 4 months)	2.4	1.8
Long term (6 to 8 months)	4.8	3.6

For Hand-held Spray Equipment

Refer to the *"APPLICATION RATES"* table to determine the amount of this product to be applied per 1000 square feet. The amount of water to be used for the application should be sufficient for thorough coverage without runoff. Calibration of backpack or other handheld equipment will vary with each operator. Determine the amount of water needed to treat 1000 square feet before mixing the spray solution. Refer to *"MIXING INSTRUCTIONS"* section of this label.
The efficacy of this product will improve if the application is followed by one-half inch of rainfall or its equivalent in sprinkler irrigation. Erratic weed control will result if this product is not activated by rainfall or irrigation within 30 days.

THIS PRODUCT IN TANK-MIXTURE FOR ORNAMENTALS

This product can be tank-mixed with Fluazifop (e.g., Ornamec®), Glufosinate (e.g., Finale), Glyphosate (e.g., Imitator, Roundup), Izoxaben (e.g., Gallery®), Sethoxydim (e.g., Segment®), Simazine (e.g., Simazine 4L) and other similar products to control emerged weeds in Ornamentals. Do not apply tank-mixtures containing Glufosinate or Glyphosate over the top of ornamental plants. If compatibility is not known, conduct a simple jar test before tank-mixing to insure compatibility of herbicides.
It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank-mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank-mixture.

USE PRECAUTIONS

1. Apply this product to established plantings.
2. When making applications to established liners or transplants, direct sprays to the soil.
3. Delay application to seedbeds, transplant beds or liners until plants have become well rooted. Allow soil or planting mixes to settle firmly following transplanting before applying this product. Do not allow direct contact of this product with roots.
4. On established rootstock, application of this product can be made before budding/grafting the plants.
5. Plant only those plant species listed on this label into soil treated the previous season with this product to avoid plant injury.
6. For container grown Ornamentals, delay first application of this product to bareroot liners 2 to 4 weeks after transplanting.
7. It is recommended that treated plants be evaluated for 1 to 2 months prior to making application to a large number of plants. The user assumes responsibility for any crop damage or other liability.

USE RESTRICTIONS FOR ORNAMENTALS

1. Do not apply this product in Greenhouses, Shadehouses or other enclosed structures.
2. Do not make applications to grafted (or budded) liners at any time.
3. Do not make over the top applications to liners or transplants.
4. Do not apply this product to liners or transplants during budbreak or at time of first flush of new growth.
5. Do not allow spray to cover or penetrate foliage and/or buds or injury is likely to occur.

LANDSCAPE AND GROUND MAINTENANCE

This product can be incorporated into landscape and ground maintenance programs to provide extended pre-emergence control of most annual grasses and certain broadleaf weeds. Areas to be treated, such as fence lines and borders, mulch beds, parking areas and roadsides, around statuary or monuments and similar areas should be free of emerged weeds before application. To remove emerged weeds, either cultivate or tank-mix this product with a post-emergence herbicide labeled for such use.
Refer to the *"APPLICATION RATES"* table under the *"ORNAMENTALS"* section of this label for use rates. Avoid unintentional contact of spray solution of this product to stone, wood or other porous surfaces as staining may occur. To avoid staining, rinse immediately.

NON-CROPLAND INCLUDING TREE PLANTATIONS

This product can be used for maintenance of grounds in Non-cropland areas; pre-emergence control of the weed species listed in and around established Tree plantations (including Christmas trees); Pulpwood and Fiber farms; in and around established Ornamentals planted in Non-cropland areas such as Highway Rights-of-Way and Utility substations.
This product may be used for hardwood and Conifer regeneration on conservation reserve program land or similar areas.
Refer to the *"APPLICATION RATES"* table under the *"ORNAMENTALS"* section of this label for use rates. This product may be applied at planting or to established trees. When making an application at planting, it is important that slit closure be achieved to avoid direct contact of tree roots with this product or this product being washed into the root zone via the open slit or root stunting may occur.

For post-emergence use, tank-mix combination of this product with Glufosinate (e.g., Finale), Glyphosate (e.g., Imitator, Roundup) or other labeled herbicides are recommended. Refer to approved labeling for species recommendations. Rates for the tank-mix compounds should be determined from the product labels of both this product and partner herbicides prior to use.

Precaution must be exercised to prevent combination sprays from direct contact with desirable foliage or injury may result. This product plus Diuron (e.g., Diuron 4L) or Simazine (e.g., Simazine 4L) combinations will broaden weed control spectrum, however, use of combinations may restrict this product usage in sensitive areas. Refer to manufacturers' labels for specific use directions, precautions, and limitations before use and follow those that are most restrictive.

TOTAL VEGETATION CONTROL

This product tank-mixed with Diuron (e.g., Diuron 4L), Glufosinate (e.g., Finale), Glyphosate (e.g., Imitator, Roundup), Imazapyr (e.g., Arsenal®, Sahara®), Imazapic (e.g., Plateau®), Sulfometuron (e.g., Oust®) or other products can provide bare ground or total vegetation control. This product can be used to provide greater plant selectivity in areas where such action may be desired. Such sites might have roots of landscape vegetation, ornamentals, or desirable trees encroaching into the treated zone. Refer to tank-mix partner labels regarding effects on desirable plants. Do not tank-mix with Arsenal, Sahara or Plateau in California.

Applications may be made to existing weeds controlled by the partner herbicide. Determine the rates from the product labels prior to use. Follow the most restrictive label instructions.

It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank-mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank-mixture.

For Kochia: Combine this product with Diuron (e.g., Diuron 4L) or Imazapyr (e.g., Arsenal, Sahara) if control has been a problem for other herbicides. Refer to the *"APPLICATION RATES"* table under the *"ORNAMENTALS"* section of this label for use rates.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

PESTICIDE STORAGE: Do not store below 40°F. Extended storage at temperatures below 40°F can result in the formation of crystals on the bottom of container. If crystallization does occur, store the container on its side at room temperature (70°F) and rock occasionally until crystals redissolve.

PESTICIDE DISPOSAL: To avoid waste, use all materials in this container by application according to label directions. If wastes cannot be avoided, offer remaining product to a waste disposal facility or pesticide disposal program (often, such programs are run by state or local governments or by industry).

CONTAINER HANDLING:

Nonrefillable Container (rigid material; less than 5 gallons): Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container one-fourth full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Dispose of empty container in a sanitary landfill or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Nonrefillable Container (rigid material; 5 gallons up to < 250 gallons): Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill container one-fourth full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Dispose of empty container in a sanitary landfill or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

(Continued)

STORAGE AND DISPOSAL *(Cont.)*

Refillable Container (≥ 250 gallons & Bulk): Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10% full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

WARRANTY—CONDITIONS OF SALE

OUR DIRECTIONS FOR USE of this product are based upon tests believed reliable. Follow directions carefully. Timing and method of application, weather and crop conditions, mixtures with other chemicals not specifically recommended and other influencing factors in the use of this product are beyond the control of the Seller. To the extent consistent with applicable law, Buyer assumes all risks of use, storage and handling of this material not in strict accordance with directions given herewith. To the extent consistent with applicable law, in no case shall the Manufacturer or the Seller be liable for consequential, special or indirect damages resulting from the use or handling of this product when such use and/or handling is not in strict accordance with directions given herewith. To the extent consistent with applicable law, Manufacturer makes no other warranties or representations of any kind, expressed or implied, concerning the product, including no implied warranty of merchantability or fitness for any particular purpose, and no such warranty shall be implied by law. The foregoing is a condition of sale by the Seller and is accepted as such by the Buyer.

IMAZAPIC | GROUP 2 | HERBICIDE

Propose

For Use on Conservation Reserve Program (CRP) Land, Paved Surfaces, and Pasture and Rangeland.

ACTIVE INGREDIENT:	**WT. BY %**
Ammonium salt of Imazapic: [(±)-2-[4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo-1*H*-imidazol-2-yl]-5-methyl-3-pyridinecarboxylic acid]*	23.6%
OTHER INGREDIENTS:	76.4%
TOTAL:	**100.0%**

Contains 2 pounds of active ingredient as the free acid per 1 gallon.

*Equivalent to 22.2% (±)-2-[4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo-1*H*-imidazol-2-yl]-5-methyl-3-pyridinecarboxylic acid

KEEP OUT OF REACH OF CHILDREN

CAUTION/PRECAUCIÓN

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.
(If you do not understand this label, find someone to explain it to you in detail.)

See label booklet for complete First Aid, Precautionary Statements, Directions For Use, and Storage and Disposal.

Manufactured For:

Sharda USA LLC (S U)

7217 Lancaster Pike, Suite A
Hockessin, Delaware 19707

EPA Reg. No. 83529-169

EPA Est. No. DI 05905-IA-001; SC 39578-TX-001; MA 83411-MN-001; GH 70815-GA-002

The EPA Establishment Number is identified by the circled letters above that match the first two letters in the batch number.

Net Contents: 1 Gallon

FIRST AID	
IF SWALLOWED:	• Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • **DO NOT** induce vomiting unless told to do so by a poison control center or doctor. • **DO NOT** give anything by mouth to an unconscious person.
IF ON SKIN OR CLOTHING:	• Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15 - 20 minutes. • Call a poison control center or doctor for treatment advice.
IF IN EYES:	• Hold eye open and rinse slowly and gently with water for 15 - 20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
HOTLINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For emergency information concerning this product, call your poison control center at **1-800-222-1222**. For general information on this product, contact the National Pesticides Information Center (NPIC) at **1-800-858-7378**, Monday through Friday, 8 AM to 12 PM PST, or at http://npic.orst.edu.	

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

Harmful if swallowed. Harmful if absorbed through skin. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, polyvinyl chloride ≥ 14 mils, or viton ≥ 14 mils
- Shoes plus socks

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

USER SAFETY RECOMMENDATIONS

Users should:

- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

DO NOT apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. **DO NOT** contaminate water when cleaning equipment or disposing of equipment wash waters or rinsate.

Non-Target Organism Advisory Statement

This product is toxic to plants and may adversely impact the forage and habitat of non-target organisms, including pollinators, in areas adjacent to the treated site. Protect the forage and habitat of non-target organisms by following label directions intended to minimize spray drift.

Groundwater Advisory Statement

This chemical has properties and characteristics associated with chemicals detected in groundwater. This chemical may leach into groundwater if used in areas where soils are permeable, particularly where the water table is shallow.

Surface Water Advisory Statement

This product may impact surface water quality due to runoff of rainwater. This is especially true for poorly draining soils and soils with shallow ground water. This product is classified as having high potential for reaching surface water via runoff for several months or more after application. A level, well-maintained vegetative buffer strip between areas to which this product is applied and surface water features including ponds, streams, and springs will reduce the potential loading of imazapic from runoff water and sediment. Runoff of this product will be reduced by avoiding applications when rainfall or irrigation is expected to occur within 48 hours.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

DO NOT apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers can be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

DO NOT enter or allow worker entry into treated areas during the restricted-entry interval (REI) of **12 hours**.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, including plants, soil, or water, is:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, polyvinyl chloride ≥ 14 mils, or viton ≥ 14 mils
- Shoes plus socks

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are not within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

Non-crop weed control is not within the scope of the Worker Protection Standard. See the definition on this label of non-crop sites.

DO NOT enter treated areas without protective clothing until sprays have dried.

RESISTANCE MANAGEMENT

IMAZAPIC	GROUP	2	HERBICIDE

Propose contains imazapic and is classified in the imidazolinone chemical class as a Group 2 herbicide, acetolactate synthase (ALS) or acetohydroxy acid synthase (AHAS) inhibitor. Herbicide resistance is defined as the inherited ability of a plant to survive and reproduce following exposure to a dose of herbicide normally lethal to the wild type. In a plant, resistance may be naturally occurring or induced by such techniques as genetic engineering or selection of variants produced by tissue culture or mutagenesis. Any weed population may contain or develop plants that are naturally resistant to **Propose** and other Group 2 herbicides. Weed species with acquired resistance to Group 2 herbicides may eventually dominate the weed population if Group 2 herbicides are used repeatedly in the same field or in successive years as the primary method of control for targeted species. This may result in partial or total loss of control of those species by **Propose** or other Group 2 herbicides.

To delay herbicide resistance, consider the below best practices for resistance management:

- Plant into weed-free fields and keep fields as weed-free as possible.
- To the extent possible, use a diversified approach toward weed management. Whenever possible, incorporate multiple weed-control practices including mechanical cultivation, biological management practices, and crop rotation.
- Fields with difficult to control weeds must be rotated to crops that allow the use of herbicides with alternative mechanisms of action or different management practices.
- To the extent possible, **DO NOT** allow weed escapes to produce seeds, roots, or tubers. Manage weed seeds at harvest and post-harvest to prevent a buildup of the weed seed-bank.
- Prevent field-to-field and within-field movement of weed seed or vegetative propagules. Thoroughly clean plant residues from equipment before leaving fields.
- Prevent an influx of weeds into the field by managing field borders.
- Identify weeds present in the field through scouting and field history and understand their biology. The weed-control program must consider all of the weeds present.
- Difficult to control weeds may require sequential applications of herbicides with differing mechanisms of action.
- Apply this herbicide at the correct timing and rate needed to control the most difficult weed in the field.
- Use a broad-spectrum soil-applied herbicide with a mechanism of action that differs from this product as a foundation in a weed-control program. **DO NOT** use more than 1 application of this or any other herbicide with the same mechanism of action within a single growing season unless mixed with an herbicide with another mechanism of action with an overlapping spectrum for the difficult-to-control weeds.
- If resistance is suspected, treat weed escapes with an herbicide with a different MOA or use non-chemical methods to remove escapes.

- Monitor treated weed populations for loss of field efficacy.
- Scout field(s) before and after application.
- Report lack of performance to Sharda USA LLC or their representative.

Indicators of possible herbicide resistance include: (1) failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds; (2) a spreading patch of non-controlled plants of a particular weed species; (3) surviving plants mixed with controlled individuals of the same species.

Contact your local sales representative, extension agent, or certified crop advisors to find out if suspected resistant weeds to this MOA have been found in your region. If resistant biotypes of target weeds have been reported, use the application rates of this product specified for your local conditions. Tank mix products so that there are multiple effective mechanisms of action for each target weed.

MANDATORY SPRAY DRIFT MANAGEMENT

Aerial Applications:

- **DO NOT** release spray at a height greater than 10 feet above the ground or vegetative canopy, unless a greater application height is necessary for pilot safety.
- For applications prior to the emergence of target weeds, applicators are required to use a coarse or coarser droplet size (ASABE S572.1).
- For all other applications, applicators are required to use a medium or coarser droplet size (ASABE S572.1).
- Applicators must use 1/2 swath displacement upwind at the downwind edge of the application site.
- **DO NOT** apply when wind speeds exceed 15 miles per hour at the application site. If the windspeed is greater than 10 mph, the boom length must be 65% of less of the wingspan for fixed wing aircraft and 75% or less of the rotor diameter for helicopters. Otherwise, the boom length must be 75% or less of the wingspan for fixed-wing aircraft and 90% or less of the rotor diameter for helicopters.
- **DO NOT** apply during temperature inversions.

Ground Boom Applications:

- User must apply with the release height specified by the manufacturer, but no more than 3 ft. above the ground or existing terrestrial vegetation unless making a turf, pasture, or rangeland application, in which case applicators may apply with a nozzle height no more than 4 ft. above the ground.
- For applications prior to the emergence of target weeds, applicators are required to sue a coarse or coarser droplet size (ASABE S572.1).
- For all other applications, applicators are required to use a medium or coarser droplet size (ASABE S572.1).
- **DO NOT** apply when wind speeds exceed 15 miles per hour at the application site.
- **DO NOT** apply during temperature inversions.

Boomless Ground Applications:

- Applicators are required to use a medium or coarser droplet size (ASABE S572.1) for all applications.
- **DO NOT** apply when wind speeds exceed 15 miles per hour at the application site.
- **DO NOT** apply during temperature inversions.

SPRAY DRIFT ADVISORIES

THE APPLICATOR IS RESPONSIBLE FOR AVOIDING OFF-SITE SPRAY DRIFT. BE AWARE OF NEARBY NON-TARGET SITES AND ENVIRONMENTAL CONDITIONS.

IMPORTANCE OF DROPLET SIZE

An effective way to reduce spray drift is to apply large droplets. Use the largest droplets that provide target pest control. While applying larger droplets will reduce spray drift, the potential for drift will be greater if applications are made improperly or under unfavorable environmental conditions.

Controlling Droplet Size - Ground Boom

- **Volume** - Increasing the spray volume so that larger droplets are produced will reduce spray drift. Use the highest practical spray volume for the application. If a greater spray volume is needed, consider using a nozzle with a higher flow rate.
- **Pressure** - Use the lowest spray pressure specified for the nozzle to produce the target spray volume and droplet size.
- **Spray Nozzle** - Use a spray nozzle that is designed for the intended application. Consider using nozzle designed to reduce drift.

Controlling Droplet Size - Aircraft

- **Adjust Nozzles** - Follow nozzle manufacturers specifications for setting up nozzles. To reduce fine droplets, orient nozzles parallel with the airflow in flight.

BOOM HEIGHT - Ground Boom

For ground equipment, the boom must remain level with the application site and have minimal balance.

RELEASE HEIGHT - Aircraft

Higher release heights increase the potential for spray drift.

SHIELDED SPRAYERS

Shielding the boom or individual nozzles can reduce spray drift. Consider using shielded sprayers. Verify that the shields are not interfering with the uniform deposition of the spray on the target area.

TEMPERATURE AND HUMIDITY

When making applications in hot and dry conditions, use larger droplets to reduce the effects of evaporation.

TEMPERATURE INVERSIONS

Drift potential is high during a temperature inversion. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. The presence of an inversion can be indicated by ground fog or by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing. Avoid applications during temperature inversions.

WIND

Drift potential increases with wind speed. AVOID APPLICATIONS DURING GUSTY WIND CONDITIONS. Applicators need to be familiar with local wind patterns and terrain that could affect spray drift.

Boomless Ground Applications: Setting nozzles at the lowest effective height will help to reduce the potential for spray drift.

Handheld Technology Applications: Take precautions to minimize spray drift.

NON-CROP AND CONSERVATION RESERVE PROGRAM (CRP) USES

PRODUCT INFORMATION

For weed control and/or turf height suppression, mix **Propose** with water and an adjuvant and spray it on specified noncropland areas including those that may be grazed or cut for hay, on Federal Conservation Reserve Program (CRP) land, rangeland (refer to the **Rangeland Use Instructions** section), and pastures.

Propose can be Applied to the Following Non-Cropland Use Sites: Rights-Of-Way (Railroad, Utility, Pipeline, and Highway), Railroad Crossings, Utility Plant Sites, Petroleum Tank Farms, Pumping Installations, Non-Agricultural Fence Rows, Storage Areas, Non-Irrigation Ditch Banks, Prairie Sites, Airports, and Turf Areas (On Industrial, Golf Courses, Recreation, and Non-Residential Sites).

Propose can be used for weed control in order to release certain legumes, wildflowers, crown vetch, native prairiegrass, wheatgrass, "wildtype" common Kentucky bluegrass, smooth bromegrass, bahiagrass, bermudagrass, and other grasses.

For weed control during the establishment of native prairiegrass and other grasses, use **Propose** as described in the **REVEGETATION WITH PRAIRIEGRASSES AND OTHER FORAGE GRASSES** section.

Propose kills plants because the herbicide inhibits the activity of the enzyme acetohydroxy acid synthase (AHAS or ALS). Plant leaves, stems and roots readily absorb **Propose** and translocate it throughout the plant where it accumulates in the meristematic tissue. Treated plants stop growing soon afterwards. Chlorosis appears first in the newest leaves, and tissue death spreads from these points. It may require several days to several weeks for susceptible weeds to die. Knowing about the activity on the AHAS or ALS enzyme is important because some naturally occurring weed biotypes of labeled weeds may not be controlled by **Propose** or other herbicides with the same inhibiting mode of action. If resistant weed biotypes are present in the field, tank mix **Propose** and other herbicides with the same mode of action or apply sequentially with a registered herbicide with a different mode of action.

Soil moisture is critical for optimum **Propose** weed control. With adequate soil moisture, **Propose** will provide residual control of susceptible germinating weeds. Control of established weeds is dependent on the weed species and depth of the root system. **Propose** is rainfast within 1 hour after application.

Propose can be applied pre-emergence or post-emergence to control annual and perennial grasses, broadleaf weeds and vine species and provide control of labeled weeds which germinate in the treated area. Direct application of **Propose** to the foliage of certain brush species and ornamentals could lead to injury. The best weed control is achieved when **Propose** is applied as a post-emergence application, especially on perennial species. Since **Propose** must be taken up by the plant and translocated to the meristematic tissue before it becomes effective, weeds must be actively growing at the time of post-emergence applications. Include an adjuvant in all spray solutions (see the **SPRAY ADJUVANTS FOR POST-EMERGENCE APPLICATIONS** section). Applications can be made as broadcast treatments with ground spray equipment or as spot treatments with backpack sprayers.

Even though **Propose** can be applied in the dormant or growing season, the weeds need to be actively growing for maximum control.

Propose can cause injury to desirable grass species if the application is made to grasses that are under stress due to disease, insect damage and/or other causes. Some yellowing of desirable grasses may occur after an application of **Propose** made during the growing season. This is dependent upon weather conditions and is usually short lived (2 - 4 weeks). **DO NOT** treat newly seeded or sprigged grass stands with **Propose** unless approved on this label (see the **REVEGETATION WITH PRAIRIEGRASSES AND OTHER FORAGE GRASSES** section) or authorized by Sharda USA LLC in a supplemental label.

Restrictions:

- **DO NOT** apply **Propose** to residential lawns.
- Desirable trees and ornamental plants can be injured if rinsate from spray equipment used to apply **Propose** is allowed to wash or move into contact with plant roots.
- **DO NOT** apply **Propose** to the inside of irrigation ditches.
- **Propose** can be applied to non-irrigation ditches and low-lying areas as long as the water has drained.

Restrictions - Weed Control, Native Grass Establishment, and Turf Growth, Suppression on Pastures, Rangeland, and Non-Crop Areas:

- **DO NOT** use **Propose** on food or feed crops except as specified on this or supplemental labeling provided by Sharda USA LLC.
- **DO NOT** cut treated area for hay within 7 days after application.
- **DO NOT** use organophosphate insecticides on newly seeded areas treated with **Propose** unless severe injury or loss of stand can be resisted.
- **DO NOT** apply this product through any type of irrigation system.
- **DO NOT** apply more than 12 fl. oz. (0.19 lb. ae) of **Propose** per acre per year.
- **DO NOT** apply more than 12 fl. oz. (0.19 lb. ae) of **Propose** per acre per application.
- **DO NOT** apply more than 2 applications per year when using reduced rates.
- Minimum Retreatment Interval: 7 days.
- When tank mixing with other products, read and carefully follow all applicable use directions, precautions, restrictions, and limitations on the respective product labels. In interpreting the labels of tank mixed products, the most restrictive label limitations must apply.

Precautions - Weed Control, Native Grass Establishment, and Turf Growth, Suppression on Pastures, Rangeland, and Non-Crop Areas:

- When making new plantings of prairiegrass or wildflowers, carryover from persistent herbicides including sulfonylurea, imidazolinone, triazine, substituted urea, dinitroaniline, and other herbicides applied the previous year may result in compounded injury or death of desirable vegetation when treated with **Propose**.
- When making applications around desirable trees or ornamental plants, test small areas to determine the resistance of a particular species to soil and/or foliar applications of **Propose**. See section entitled **RESISTANCE OF TREES AND BRUSH TO PROPOSE**.

APPLICATION INSTRUCTIONS

Ground Application

Make a broadcast application of **Propose** in a minimum of 2 gals. of spray per acre using ground application equipment. Calibrate the sprayer to deliver the specified spray volume and pressure at the spray boom height to ensure proper coverage of foliage and/or soil surface. The actual minimum spray volume per acre is determined by the spray equipment used. Adequate spray coverage of weed foliage post-emergence or soil surface pre-emergence is important for maximum weed control. A complete and even distribution of spray is necessary. Avoid overlaps when spraying. When applications are made using less than 10 gals. of spray mixture per acre, use special application equipment designed to make low volume applications. Use a spray pressure of 20 - 40 PSI.

Aerial Application

Use 2 or more gallons of spray mix per acre. The actual minimum spray volume per acre is determined by the spray equipment used. Use adequate spray volume to provide accurate and uniform distribution of spray particles over the treated area and to avoid spray drift. Refer to the section entitled **SPRAY DRIFT MANAGEMENT** for additional precautions and restrictions. When making aerial applications, be especially careful to eliminate spray drift. Fixed wing aircraft and helicopters can be used to apply **Propose**. Ensure appropriate buffer zones are maintained when using fixed wing aircraft.

Spot Treatment Application

In preparing the spray solution, mix thoroughly in water 0.25% - 1.5% (0.3 - 1.9 oz./gal. solution) (0.005 - 0.03 lb. ae/gal. solution) **Propose** plus an adjuvant (see the **SPRAY ADJUVANTS FOR POST-EMERGENCE APPLICATIONS** section). Use a methylated seed oil at 1% v/v as the spray adjuvant except when treating seedling prairiegrasses and wildflowers. When making spot applications, spray coverage must be sufficient to moisten the leaves but not to the point of runoff. Make sure the mixing container is opaque to sunlight or otherwise treated to shield for UV light. **Propose** breaks down when mixed with water and exposed to sunlight. Mixtures of **Propose** must be used within 2 days of being prepared to prevent breakdown of the a.i. and maintain maximum effectiveness. See section on desired species and **DO NOT** exceed the specified application rate per acre. Also see the sections entitled **WEEDS CONTROLLED** and **SPECIAL WEED CONTROL**.

All Applications

DO NOT apply during windy or dusty conditions unless applications are being made with a drift control agent and/or an enclosed shielded spray system. **DO NOT** apply if rainfall is threatening. Rainfall within 1 hour of an **Propose** application may reduce weed control. Uniformly apply specified rate and include a spray adjuvant (see the **SPRAY ADJUVANTS FOR POST-EMERGENCE APPLICATIONS** section). A foam reducing agent can be added at the specified rate if needed. Aerial applications to target species growing under the canopy of trees and brush may not receive sufficient coverage for effective control. For Fall applications, delaying aerial application until trees and brush have dropped their leaves can improve coverage. See **SPECIAL WEED CONTROL** and **RESISTANCE OF TREES AND BRUSH TO PROPOSE** sections for additional details. Avoid overlapping sprays.

Immediately and thoroughly clean all spray equipment, as prolonged exposure of this product to uncoated steel (except stainless steel) surfaces can cause corrosion and failure of the exposed part.

MIXING INSTRUCTIONS

Mixing with Water

Fill the spray tank at least one-half full of clean water. With the pump and agitator running, add the specified amount of **Propose** using a calibrated measuring device. Fill the tank with the remaining water adding the surfactant near the end of the filling process. Add an antifoaming product if it is needed. Maintain agitation while spraying.

Mixing with Other Herbicide(s)

Propose can be tank-mixed with other herbicide(s) if the use is not prohibited by the label of the other herbicide(s). Read each label carefully and follow all label instructions regarding use rates, application methods, timing, restrictions, precautions, and weeds controlled. The most restrictive label is the one that must be followed. **DO NOT** tank-mix **Propose** with any product that does not permit tank-mixing. **DO NOT** exceed specified label rates. Fill the spray tank at least one-half full of clean water. With the pump and agitator running, add the specified amount of **Propose** using a calibrated measuring device. Add the tank-mix herbicide, fill the tank with the remaining water adding the nonionic surfactant, organosilicate adjuvant or crop oil concentrate near the end of the filling

process. Add an antifoaming product if it is needed. Maintain agitation while spraying. When mixing **Propose** with other tank-mix partners, always follow the following mixing sequence: add wettable powders, dispersible granules, or other dry formulations first, emulsifiable concentrates next, then **Propose** next, and spray adjuvants next.

SPRAY ADJUVANTS FOR POST-EMERGENCE APPLICATIONS

To achieve control of weeds when **Propose** is applied post-emergence, a spray adjuvant must be added. Adjuvants vary in their contents and by selecting the correct adjuvant phytotoxicity to desirable vegetation can be reduced or eliminated. Use low phytotoxic adjuvants. Adjuvants containing high amounts of alcohols, paraffin-based petroleum oils and other compounds which can increase phytotoxicity must be avoided.

- **Methylated Seed Oils (MSO) or Vegetable Oil Concentrate:** The preferred spray adjuvant for use with **Propose** is a methylated vegetable-based seed oil concentrate containing 5% - 20% surfactant and the remainder methylated seed oil (MSO). For MSO, use a rate of 1.5 - 2 pints per acre. Best results are achieved when MSOs are applied with **Propose** in total spray volumes of 30 gals. per acre or less. The advantage of using the MSO decreases as the spray volume increases to higher volumes. If spray volumes above 30 gals. per acre are used, mix the MSO with **Propose** at a rate of 1% of the total spray volume. As an alternative, a non-ionic surfactant, as described below could be used when **Propose** is applied at spray volumes above 30 gals. per acre. MSOs have been shown to aid in the deposition and uptake of **Propose** in hard-to-control perennials, in weeds with waxy leaf surfaces and in weeds under stressed conditions. **DO NOT** use a MSO on newly emerged seedling prairiegrass or wildflowers as injury could occur.
- **Nonionic Surfactants (NIS):** Use a NIS at 0.25% v/v (i.e., 1 qt./100 gals.) or higher in the spray solution. For best results, use an NIS containing 60% surfactant in the formulated product and having a hydrophilic to lipophilic balance ratio (HLB) between 12 and 17. **DO NOT** use alcohols, fatty acids, oils, ethylene glycol, or diethylene glycol to meet these requirements. In bermudagrass pastures and hay meadows best results will be achieved if a NIS is used with **Propose**.
- **Silicone-Based Surfactants:** Use caution if a silicone-based surfactant is used. Although a silicone-based surfactant may allow greater spreading on the leaf surface when compared to a conventional NIS, it may dry too quickly and limit the herbicide's uptake into the plant, or at higher spray volumes it may result in greater spray "runoff" from the plant. Review the specific rate instructions on the manufacturer's label.
- **Fertilizer/Surfactant Blends:** Use of a nitrogen-based fertilizer in combination with the specified rate of a NIS or MSO has been shown to improve the uptake of **Propose** in plants with waxy leaf surfaces. A rate of 2 - 3 pts. per acre of fertilizers including 28% N, 32% N, 10-34-0, or ammonium sulfate in combination with the specified rates of NIS or MSO will aid in the burndown control with **Propose**. Injury to desired plant species and newly emerged seedling prairiegrass and wildflowers may also be increased with the use of a fertilizer in combination with **Propose**. Weed control will likely be poor if **Propose** is applied in combination with a fertilizer without a NIS or MSO. No additional spray adjuvant is required if the fertilizer is the spray carrier for **Propose**.

TANK MIXES

It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

For added control of late season annual grasses and certain broadleaf weeds in non-crop areas, tank-mix **Propose** with Pendulum® herbicide. **Propose** can be mixed with other herbicides for additional control in non-crop areas including Accord™, Roundup™ Pro, glyphosate, Arsenal® or Imazapyr 2SL herbicide, Sahara® DG or Mohave™ 70 EG herbicide, diuron, Campaign™, Finale™, Garlon™ 3A or Triclopyr 3SL, MSMA, Vanquish™, Oust™ (or SFM 75), Escort™ (or 60% Metsulfuron-methyl), Tordon™ (or Picloram 22K), or

other labeled products. To test for the compatibility of any other herbicides not listed with **Propose**, use a jar test. Mixing **Propose** with 2,4-D or other phenoxy-type herbicides could lead to reduced control of perennial grass weeds.

DO NOT tank mix **Propose** with organophosphate insecticides or use in the same year when using **Propose** on newly planted areas. Tank mix instructions for **Propose** use on bermudagrass pastures is found in the **DIRECTIONS FOR USE IN BERMUDAGRASS PASTURES AND HAY MEADOWS** section. When tank-mixing, always consult manufacturer's labeling for rates and weeds controlled. Always follow the more restrictive label when using **Propose** with a tank-mix partner.

FOR WEED CONTROL IN PASTURE AND RANGELAND

To control weeds in pasture and rangeland, apply a broadcast treatment of **Propose** at 2 - 12 fl. oz. per acre (0.03 - 0.19 lb. ae). For spot treatments, use **Propose** at 0.25% - 1% solution with 1% methylated seed oil. Specific use directions are found below.

Rangeland Use Instructions

Apply **Propose** to rangeland for the control of undesirable (non-native, invasive, and noxious) plant species in order to:

1. Aid in the establishment of desirable rangeland plant species;
2. Aid in establishment of desirable rangeland vegetation after a fire;
3. Aid in the reduction of vegetation that would fuel a wildfire;
4. Aid in the release of existing desirable rangeland vegetation from the competitive pressure of undesirable plant species; and
5. Aid in habitat improvement for wildlife.

Protection of threatened and endangered plants is important when applying **Propose** to rangeland. Therefore, Federal agencies must follow NEPA regulations to ensure protection of threatened or endangered plants, State agencies must work with the Fish and Wildlife Service or the Service's designated State conservation agency to ensure protection of threatened or endangered plants, and other organizations or individuals must operate under Habitat Conservation Plan if threatened or endangered plants are known to be present on the land to be treated.

DO NOT apply **Propose** to rangeland until specific weeds appear. A single application of **Propose** can be used to control annual weeds including cheatgrass, downy brome and medusahead rye as long as it is used in conjunction with available IPM practices. For rangeland applications to control cheatgrass, medusahead, annual mustards, etc., apply **Propose** pre-emergence or early post-emergence prior to planting. For best results for cheatgrass control, make a late Summer or Fall application of **Propose** before cheatgrass emerges and prior to planting desirable species. **Propose** can be used in this same manner as a site preparation before planting sagebrush seedlings. If making an application of **Propose** in the Spring when planting a resistant grass species, use a rate of 2 - 4 fl. oz. (0.03 - 0.06 lb. ae) per acre. Rates above 4 fl. oz. (0.06 lb. ae) per acre may result in thinning or loss of stand, especially in seedling sideoats, blue grama or buffalograss. Perennial weeds like leafy spurge, Dalmatian toadflax, and Russian knapweed can be controlled in most cases with a single broadcast application of **Propose**. Spot treatments with **Propose** may be necessary to control any weeds not controlled by the broadcast application. Long term weed control in rangeland is best achieved when **Propose** is used in conjunction with land management practices that promote growth and sustainability of desired plant species.

DIRECTIONS FOR USE IN BERMUDAGRASS PASTURES AND HAY MEADOWS

For control of Winter and Summer annual and perennial grasses in bermudagrass pastures and hay meadows, use a post-emergence application of **Propose** at 4 - 12 fl. oz. (0.06 - 0.19 lb. ae) per acre. Specific rate and timing instructions are provided below. Use of **Propose** is acceptable on common and coastal varieties of bermudagrass including, but not restricted to Tifton 44, 78, and 85,

Alicia, and Russell. It is possible that bermudagrass growth may be suppressed for 30 - 45 days depending on growth conditions after application. Be aware that Jiggs bermudagrass is more sensitive to **Propose** than other bermudagrass types. If these growth responses are not acceptable, **DO NOT** use **Propose** on bermudagrass.

Complete spray coverage is necessary to achieve the desired level of weed control. Be sure to use a sprayer that is calibrated to deliver the specified spray volume and pressure at the spray boom height to ensure complete coverage. Decreased weed control could result if boomless or flood type nozzles are used.

Use Restrictions:

- **DO NOT** apply to drought stressed bermudagrass.
- **DO NOT** apply during transitions from dormancy to full green-up.
- **DO NOT** apply to newly aerated fields for 30 days after aerations.
- **DO NOT** use for the establishment of sprigged or seeded bermudagrass.
- **DO NOT** use on World Feeder varieties of bermudagrass.

Spring Applications and Bermudagrass Resistance

Bermudagrass growth can be suppressed if **Propose** is applied before the bermudagrass has reached 100% green-up. If **Propose** is applied when the bermudagrass is in the transition from Winter dormancy to 100% green-up, green-up and growth will be delayed. Carefully inspect the new bermudagrass growth in the field to be sure all stolons have begun to grow. Application of **Propose** to a field that appears green, but where some to many stolons have not begun to grow, will still cause significant reductions in bermudagrass growth and development. It is important to delay application of **Propose** until 100% green-up has been achieved.

Rate instructions

Make a post-emergent application of **Propose** at 4 - 6 fl. oz. (0.06 - 0.09 lb. ae) per acre to control most annual and some perennial weeds in bermudagrass pastures and hay meadows. Use the lower rate against target weeds that are small and the higher rate against target weeds that are older, larger or have been cut multiple times. Specific rate instructions are given in the table below.

Post-Emergence Control of Summer Annual and Perennial Grass Weeds

When bermudagrass has reached complete green-up and target weeds are at the growth stage desired, apply **Propose** according to the rates and growth stages in the table below. Bermudagrass green-up and subsequent growth will be delayed if **Propose** is applied too early during the transition between dormancy and full green-up. Some bermudagrass yellowing and stolon internode shortening can occur with specified rates of **Propose**. Bermudagrass recovery will be shortened if **Propose** is applied with a nitrogen fertilizer (32-0-0 or 28-0-0) used as the spray carrier.

After complete bermudagrass green-up, apply **Propose** post-emergence at 4 - 6 fl. oz. (0.06 - 0.09 lb. ae) per acre for control of Summer annual grasses (2- to 4-leaf stage). Use higher rates of 6 - 8 fl. oz. (0.09 - 0.13 lb. ae) per acre when target weeds are at or above the boot stage. Always use a surfactant with **Propose** except when the spray carrier is liquid fertilizer. Some pre-emergence control of some annual grasses will be obtained when **Propose** is applied post-emergence to target weeds.

Summer perennial grasses are controlled when **Propose** is applied after complete bermudagrass green-up at the rate of 6 - 12 fl. oz. (0.09 - 0.19 lb. ae) per acre. If higher rates are necessary to control target weeds, make a Fall application of **Propose** before a killing frost occurs. If a Fall application is planned and the bermudagrass is cut for hay, be sure the target weeds have adequate regrowth before making an application of **Propose**. Always use a surfactant with **Propose** except when the spray carrier is liquid fertilizer.

Propose Rates for Post-Emergent Summer Annual Grass Control*		
Common Name (Scientific Name)	**Weed Height (Inches)****	**Rate per Acre**
Barnyardgrass *(Echinochloa crus-galli)*	<4	4 fl. oz. (0.06 lb. ae)
	>4	6 fl. oz. (0.09 lb. ae)
Crabgrass, Large *(Digitaria sanguinalis)*	<4	4 fl. oz. (0.06 lb. ae)
	>4	6 fl. oz. (0.09 lb. ae)
Crabgrass, Smooth *(Digitaria ischaemum)*	<4	4 fl. oz. (0.06 lb. ae)
	>4	6 fl. oz. (0.09 lb. ae)
Crabgrass, Southern *(Digitaria ciliaris)*	<4	4 fl. oz. (0.06 lb. ae)
	>4	6 fl. oz. (0.09 lb. ae)
Foxtail, Giant *(Setaria faberi)*	–	6 fl. oz. (0.09 lb. ae)
Foxtail, Green *(Setaria viridis)*	<4	4 fl. oz. (0.06 lb. ae)
	>4	6 fl. oz. (0.09 lb. ae)
Foxtail, Yellow *(Setaria glauca)*	<4	4 fl. oz. (0.06 lb. ae)
	>4	6 fl. oz. (0.09 lb. ae)
Jewgrass, Annual *(Microstegium vimineum)*	<4	4 fl. oz. (0.06 lb. ae)
	>4	6 fl. oz. (0.09 lb. ae)
Panicum, Fall *(Panicum dichotomiflorum)*	–	6 fl. oz. (0.09 lb. ae)
Panicum, Texas *(Panicum texanum)*	–	6 fl. oz. (0.09 lb. ae)
Sandbur *(Cenchrus* spp.*)*	<4	4 fl. oz. (0.06 lb. ae)
	>4	6 fl. oz. (0.09 lb. ae)
Signalgrass, Broadleaf *(Brachiaria platyphylla)*	<4	4 fl. oz. (0.06 lb. ae)
	>4	6 fl. oz. (0.09 lb. ae)

*Be sure bermudagrass has completely greened up as an application of **Propose** could delay green-up and subsequent growth if application is made too early before full green-up. If delayed green-up will be an issue, **DO NOT** apply **Propose**.

**Use the higher rate when the Summer annual grasses are older, larger, or have been subjected to multiple cuttings.

(continued)

Propose Rates for Post-Emergent Summer Perennial Grass Control*		
Common Name (Scientific Name)	**Weed Height (Inches)****	**Rate per Acre**
Bahiagrass *(Paspalum notatum)*	4 - 8	6 - 8 fl. oz. (0.09 - 0.13 lb. ae)
Dallisgrass[1] *(Paspalum dilatatum)*	4 - 8	8 - 12 fl. oz. (0.13 - 0.19 lb. ae)
Johnsongrass *(Sorghum halepense)*	18 - 24	8 fl. oz. (0.13 lb. ae)
	>24	12 fl. oz. (0.19 lb. ae)
Nutsedge *(Cyperus* spp.*)*	<4	4 fl. oz. (0.06 lb. ae)
	>4	6 fl. oz. (0.09 lb. ae)
Smutgrass[1] *(Sporobolus indicus)*	4 - 8	8 - 12 fl. oz. (0.13 - 0.19 lb. ae)
Vaseygrass *(Paspalum urvillei)*	4 - 8	6 - 8 fl. oz. (0.09 - 0.13 lb. ae)

*Be sure bermudagrass has completely greened up as an application of **Propose** could delay green-up and subsequent growth if application is made too early before full green-up. If delayed green-up will be an issue, **DO NOT** apply **Propose**.

**Use the higher rate when the Summer annual grasses are older, larger, or have been subjected to multiple cuttings.

[1]Suppression.

Post-Emergent Control of Winter Annual and Perennial Grass Weeds

When bermudagrass is dormant, make a post-emergent application of **Propose** at a rate of 6 - 12 fl. oz. (0.09 - 0.19 lb. ae) per acre. Be sure there is no green tissue at the root crown or on stolons because an application of **Propose** to green tissue may delay bermudagrass green-up and subsequent growth. In the deep south where mild Winters often occur, bermudagrass may not go completely dormant. Consequently, avoid making an application of **Propose** if delayed green-up will be an issue. Control of larger Winter annual and cool season perennial grasses will be improved if **Propose** is applied with Roundup Ultra™ or glyphosate equivalent. Always use a surfactant with **Propose** except when the spray carrier is liquid fertilizer.

Propose Rates for Post-Emergent Winter Annual and Cool Season Perennial Grass Control		
Common Name (Scientific Name)	**Weed Height (Inches)**	**Rate per Acre**
Barley, Little *(Hordeum pusillum)*	<6	4 fl. oz. (0.06 lb. ae)
	>6	6 fl. oz. (0.09 lb. ae)
Fescue, Tall *(Festuca arundinacea)*	–	12 fl. oz. (0.19 lb. ae)
Oats, Wild *(Avena fatua)*	<6	6 fl. oz. (0.09 lb. ae)
	>6	10 fl. oz. (0.16 lb. ae)

(continued)

Propose Rates for Post-Emergent Winter Annual and Cool Season Perennial Grass Control *(continued)*		
Common Name (Scientific Name)	**Weed Height (Inches)**	**Rate per Acre**
Ryegrass, Annual* *(Lolium multiflorum)*	<6	6 fl. oz. (0.09 lb. ae)
	>6	10 fl. oz. (0.16 lb. ae)
*Because AHAS and ALS resistant annual ryegrass occurs throughout the southeast, tank mix Roundup Ultra or glyphosate equivalent with **Propose** when making applications to control annual ryegrass.		

Spray Adjuvants

To promote the growth and recovery of bermudagrass, add 10 - 20 gals. per acre of liquid fertilizer (32-0-0 or 28-0-0) as the spray carrier with **Propose**. **DO NOT** add additional spray adjuvant when liquid fertilizer is used as the spray carrier. For additional spray adjuvant directions, refer to the **SPRAY ADJUVANTS FOR POST-EMERGENCE APPLICATIONS** section. **DO NOT** use crop oil concentrates (COC) as a spray adjuvant with **Propose**.

Tank Mixtures

It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

Propose can be tank mixed with a number of broadleaf herbicides for broadleaf weed control. **Propose** can be tank mixed with Weedmaster®, Grazon™, Triclopyr 4E (or Remedy™), Redeem™, 60% Metsulfuron-methyl (or Ally™), 2-4,D, and Roundup Ultra or glyphosate equivalent. Applications with tank mixes of 2,4-D that exceed 1 lb. a.i. per acre and applications with tank mixes of triclopyr amine, including Triclopyr 3SL, that exceed 1.5 lbs. a.i. per acre can reduce efficacy on target grass weed species.

FOR USE ON FEDERAL CONSERVATION RESERVE PROGRAM (CRP) LAND

Use **Propose** at rates up to 12 fl. oz. (0.19 lb. ae) per acre per year for control of weeds on Federal Conservation Reserve Program (CRP) land. Specific instructions for each intended use can be found elsewhere in this label. Minimum plant-back intervals vary with the rates of **Propose** used. See the minimum plant-back intervals provided below.

Rotational Crop Restrictions

The following rotational crops can be planted after applying **Propose**. Planting rotational crops earlier than the specified interval may result in crop injury.

Rotational Crops	Propose Use Rate per Acre		
	≤4 fl. oz. (0.06 lb. ae)	5 - 8 fl. oz. (0.08 - 0.13 lb. ae)	9 - 12 fl. oz. (0.14 - 0.19 lb. ae)
	Minimum Plant-Back Interval (After Propose Application)		
Bahiagrass, CLEARFIELD® Corn Hybrids, Peanuts, Rye, and Wheat	12 Months	12 Months	12 Months
Snapbeans, Southern Peas, Soybeans, and Tobacco	12 Months	14 Months	18 Months
Barley, Cotton*, Grain Sorghum, and Oats	18 Months	22 Months	24 Months
Field Corn** and All crops not otherwise listed or included for use on this label.	26 Months	30 Months	36 Months
Canola**, Potatoes**, Red Table Beets**, and Sugar Beets**	40 Months	44 Months	48 Months

*__For Arizona, New Mexico, Oklahoma, and Texas only:__ In these states, cotton can be planted 18 - 24 months after **Propose** application unless drought conditions develop in the year of application. If less than 15" of rainfall or irrigation are received from the time of **Propose** application and November 1st of the same year, **DO NOT** rotate to cotton at 18 - 24 months after application. If such drought conditions develop, wait to plant cotton until 26, 30, and 40 months after **Propose** application at the rates provided in the above table.

**A field bioassay of the intended rotational crop must be completed for these selected crops and for all other crops not otherwise listed or included on this label after the minimum plant back interval has elapsed. The field bioassay consists of planting a test strip across the previously treated field and grown to maturity. Be sure the test strip is planted in low areas as well as high spots and on different soil types and soil pH levels across the field. The intended rotational crop may planted the following year if there is no crop injury in the test strip.

It is impossible to eliminate all risks associated with the use of **Propose**; therefore, plant-back crop injury is always possible even when label rates and use directions are followed. If crop injury is a concern after using **Propose**, then a field bioassay with the desired crop prior to planting.

FOR FOLIAR AND SEEDHEAD SUPPRESSION OF BAHIAGRASS, COOL SEASON GRASSES, AND SUPPRESSION OF SOME ANNUAL WEEDS

Bahiagrass

In unimproved areas, apply **Propose** at 2 - 6 fl. oz. (0.03 - 0.09 lb. ae) per acre to suppress growth and seedhead development in bahiagrass. For best results, apply **Propose** after green-up. Use the lower rate of 2 fl. oz. (0.03 lb. ae) per acre in North and South Carolina because higher rates may result in turf thinning. Temporary turf discoloration may occur depending on the rate of **Propose** used as well as other factors including surfactant type and environmental conditions. Severe injury may occur if **Propose** is applied to turf under any type of stress. If applied before mowing, remember that new growth will be suppressed so adjust the mower height to leave adequate existing foliage. If applied after mowing, adjust the mower to leave existing foliage or wait for re-growth before making the application. **DO NOT** use a methylated seed oil adjuvant with **Propose**.

Propose Rate	Phytotoxicity	Length of Suppression
2 fl. oz. (0.03 lb. ae)	None to low	Partial to season long
3 - 6 fl. oz. (0.05 - 0.09 lb. ae)	Low to moderate	Season long

Use 8 fl. oz. (0.13 lb. ae) of **Propose** for control of Winter annual weeds. Make the application when weeds are actively growing but while the bahiagrass is still dormant. A subsequent application of **Propose** at 3 - 4 fl. oz. (0.05 - 0.06 lb. ae) per acre can be made in the Spring after bahiagrass green-up for the suppression of seedheads and foliage.

Cool Season Grasses - KY31 Tall Fescue and "Wildtype Common" Kentucky Bluegrass

For foliar and seedhead suppression of these cool season grasses, apply **Propose** at 2 - 4 fl. oz. (0.03 lb. - 0.06 lb. ae) per acre. **DO NOT** use a methylated seed oil adjuvant with **Propose** on these grasses. Use of an adjuvant with the lower rate will enhance performance; however use of a surfactant with the higher rate (4 fl. oz.) could cause excessive injury or mortality of tall fescue. Application of **Propose** to turf types of tall fescue and Kentucky bluegrass could result in severe injury or stand loss.

Wheatgrass

Propose can be applied for foliar and seedhead suppression of crested wheatgrass and intermediate wheatgrass. Use 6 - 10 fl. oz. (0.09 - 0.16 lb. ae) per acre for crested wheatgrass and 6 - 12 fl. oz. (0.09 - 0.19 lb. ae) per acre for intermediate wheatgrass. Although other wheatgrass species may be suppressed, it is best to determine effectiveness by first applying **Propose** to a limited area. Use of 2,4-D or products containing 2,4-D in a tank-mix with **Propose** may decrease the desired effectiveness. The potential of turf injury may be reduced when **Propose** is tank mixed with Garlon 3A (Triclopyr 3SL or Triclopyr 4EC), Tordon (Picloram 22K), Transline™, and Vanquish. Severe injury may occur if **Propose** is applied to turf under stress.

FOR THE CONTROL OF UNDESIRABLE WEEDS IN BERMUDAGRASS NOT BEING GROWN FOR FORAGE OR HAY

Propose will control Summer and Winter annual weeds as well as some perennial weeds in bermudagrass turf found along roadsides, utility rights-of-way, railroad crossings, at airports, in non-irrigation ditches. Resistance to **Propose** varies with different bermudagrass types. Therefore, some foliar, stolon and seedhead suppression may occur depending on turf type, application timing and herbicide rate. When applying **Propose** to bermudagrass turf it is important to:

1. Make application only after full bermudagrass green-up otherwise a delay in green-up may occur.
2. Add a surfactant.
3. **DO NOT** apply to bermudagrass under stress.
4. Allow time for bermudagrass foliage re-growth after mowing before making an application because some internode suppression (from simultaneously mow/spray operations) may prevent bermudagrass from quickly recovering from mowing.

Winter Annual Weed Control

Make application prior to Winter weed germination or while Winter weeds are actively growing. Use **Propose** at 4 - 12 fl. oz. (0.06 - 0.19 lb. ae) per acre. A delay in bermudagrass green-up can occur if **Propose** is applied too early in the Spring.

Summer Annual Weeds

For best results, make application pre-emergence or early post-emergence before weeds have reached a height of 6". Use **Propose** at 4 - 12 fl. oz. (0.06 - 0.19 lb. ae) per acre. Control of larger weeds may be possible depending on growing conditions, species susceptibility, adjuvant selection and tank-mix partner.

Perennial Weeds

Use **Propose** at 8 - 12 fl. oz. (0.13 - 0.19 lb. ae) per acre post-emergence after weeds are large enough for herbicide uptake. For control of a specific weed species, see the **SPECIAL WEED CONTROL** section. Increased control of perennial weeds can achieved by tank mixing **Propose** with Accord or Roundup Pro.

Bahiagrass Control

Make a post-emergence application of **Propose** at 8 - 12 fl. oz. (0.13 - 0.19 lb. ae) per acre. For control of a specific weed species, see the **SPECIAL WEED CONTROL** part of the label. Increased control of perennial weeds can achieved by tank mixing **Propose** with Accord or Roundup Pro.

PROPOSE RATES AND TIMINGS FOR SPECIFIC BERMUDAGRASS TYPES WITH REGARD TO WEED CONTROL AND TURF RESISTANCE

Common Bermudagrass

Common bermudagrass is very resistant to **Propose**. The weed control spectrum can be improved with tank-mixes of **Propose** with Roundup Pro, Accord, or glyphosate; however, these tank-mixes may also increase turf phytotoxicity by causing stolen internode shortening and seedhead suppression for the first 8 weeks after application.

Established Coastal Bermudagrass

The use of 2 - 12 fl. oz. (0.03 - 0.19 lb. ae) per acre of **Propose** on coastal bermudagrass will control labeled weeds and provide foliar and seedhead suppression. **DO NOT** use **Propose** on World Feeder varieties of bermudagrass. Activity of **Propose** increases as the rate increases. Beware that applying a tank-mix combination of **Propose** and Roundup Pro, Accord, or glyphosate on coastal bermudagrass may result in death or excessive injury.

Turf Type Bermudagrass

Resistance to **Propose** varies in turf type bermudagrass varieties. At rates of 2 - 6 fl. oz. (0.03 - 0.09 lb. ae) per acre, **Propose** will provide some annual weed control and foliar and seedhead suppression. Application of **Propose** at rates above 6 fl. oz. per acre could result in excessive injury or death.

FOR THE CONTROL OF UNDESIRABLE WEEDS IN UNIMPROVED CENTIPEDE GRASS

To control annual broadleaf and grass weeds in unimproved centipede grass, apply **Propose** at 4 - 8 fl. oz. (0.06 - 0.13 lb. ae) per acre with a surfactant. Make the application after the centipede grass has reached full green-up and **DO NOT** apply to grass that is under stress. Be sure to allow time for centipede grass foliage regrowth after mowing before making an application because some internode suppression (from simultaneously mow/spray operations) may prevent the centipede grass from quickly recovering from mowing.

FOR CONTROL OF UNDESIRABLE WEEDS IN SMOOTH BROMEGRASS, WILDTYPE COMMON KENTUCKY BLUEGRASS AND WHEATGRASSES

Smooth Bromegrass and “Wildtype” Common Kentucky Bluegrass

For control of labeled grass and broadleaf weeds as well as growth suppression (refer to the **WEEDS CONTROLLED** and **SPECIAL WEED CONTROL** sections), apply **Propose** at 4 - 8 fl. oz. (0.06 - 0.13 lb. ae) per acre in the Spring after these grasses have reached 100% green-up. A delay in green-up may occur if application is made before full green-up. Higher rates of 8 - 12 fl. oz. (0.13 - 0.19 lb. ae) per acre can be applied in the Spring; however, excessive growth suppression can result. A Fall application

of **Propose** at 8 - 12 fl. oz. (0.13 - 0.19 lb. ae) per acre can be made to control perennial weeds (see the **SPECIAL WEED CONTROL** section). Treatment of smooth bromegrass with **Propose** may result in foliar height and seedhead suppression.

Wheatgrass

For control of labeled grass and broadleaf weeds apply **Propose** at 4 - 12 fl. oz. (0.06 - 0.19 lb. ae) per acre. Foliar height and seedheads may be suppressed when wheatgrass is treated with **Propose**.

FOR CONTROL OF UNDESIRABLE WEEDS IN FORAGE LEGUMES INCLUDING CROWN VETCH

Newly Seeded Crown Vetch

To aid in stand establishment and reduce weed competition, apply **Propose** at 4 fl. oz. (0.06 lb. ae) per acre to newly seeded beds.

Established Crown Vetch in Non-Cropland Areas

For control of labeled grass and broadleaf weeds (see the **WEEDS CONTROLLED** and **SPECIAL WEED CONTROL** sections for specific rates), apply **Propose** at 8 - 12 fl. oz. (0.13 - 0.19 lb. ae) per acre to established crown vetch beds. Depending on time of application, some internode shortening and minor tip chlorosis may occur after application of **Propose**.

To avoid potential injury, apply **Propose** during Winter dormancy or in the early Spring. If applied after May, **Propose** may cause increased injury or defoliation of crown vetch. Injury will be increased if a surfactant including a crop oil concentrate or d-Limonene based product is used. If applied during the Fall when crown vetch is actively growing, **Propose** may cause severe injury or stand loss.

FOR USE IN REVEGETATION WITH PRAIRIEGRASSES AND OTHER FORAGE GRASSES

Propose controls many annual and perennial grass and broadleaf weeds when applied at 2 - 12 fl. oz. (0.03 - 0.19 lb. ae) per acre in newly established and existing stands of prairiegrasses (see below for details and resistant species) grown in such areas as pasture, rangeland (refer to the **Rangeland Use Instructions** section), Federal Conservation Reserve Program (CRP) land and noncropland areas including roadsides, industrial sites, prairie restoration sites, drainage ditch bank and other similar locations. Note that some local ecotypes or varieties of prairiegrasses may be suppressed by **Propose**. Poor stands may also result from other factors including poor soil, cool temperatures, poor seedling vigor, excessive moisture, dry weather after emergence and others. Herbicide residue, poor soils and other stress factors can also lead to poor seedling vigor, increased injury, and possible mortality. To the extent consistent with applicable law, Sharda USA LLC cannot be held responsible for such unforeseen factors. If resistance is not known, be sure to try **Propose** on a small area first. **Propose** reduces weed competition and allows grass seedlings to become established. Perennial noxious weeds in established grass stands may also be controlled with **Propose** if the application is made post-emergence as a foliar treatment.

Important Considerations:

- Always add an adjuvant with **Propose**.
- On established grass stands, use a methylated seed oil.
- Use a nonionic surfactant on newly emerged seedling grasses.
- Use of a liquid fertilizer as a carrier will reduce grass resistance and must not be used on newly emerged seedling grasses.

Stand Establishment

Since newly emerged grasses can be sensitive to **Propose** and/or the adjuvant used, best results in establishing mixed grass stands are attained when the application is made at planting before grass seedlings emerge. If grasses have started to emerge, the application of **Propose** must be delayed until the grasses have reached the 5-leaf stage. Use only a nonionic surfactant or silicone-based surfactant with **Propose** on seedling grasses. **DO NOT** use a methylated seed oil at this timing as some injury could result. Annual weeds are controlled by **Propose** applied either pre-emergence or early post-emergence (see the **WEEDS CONTROLLED** section for maximum height of weeds for control). Rates and timing are discussed in the section below. Some stand thinning may result from a post-emergence application of **Propose** because seedling grasses have varying resistance to spray adjuvants. If the seedling grasses have reached the 5-leaf stage, they are more resistant to different spray adjuvants. Herbicide-carry-over can be a problem if grasses are planted into a field that was row cropped the previous year (see the **DIRECTIONS FOR USE** section).

Rates and Control

Propose will provide control and/or suppression of many annual grass and broadleaf weeds. Apply 2 - 6 fl. oz. (0.03 - 0.09 lb. ae) per acre for annual weed control in fields cropped the previous year and/or fields where grass/forb mixtures are planted. In dry climates of the northernmost United States and for late season plantings into clean seedbeds, use lower rates. Use **Propose** as low as 2 fl. oz. (0.03 lb. ae) per acre when soil pH is greater than 7, there is a low CEC (cation exchange capacity), or in a course texture soil with low clay or organic matter content. Use higher rates when there is high organic matter, high rainfall, heavy weed infestation and heavy plant residue and a long growing season (southern portions of Illinois, Indiana, Missouri, and Ohio, etc.). When controlling giant ragweed, or providing control/suppression of perennial weeds, use **Propose** at 8 - 12 fl. oz. (0.13 - 0.19 lb. ae) per acre. These high rates may, however, result in stunting or stand thinning. The length and amount of suppression will be related to soil type, environmental conditions, weed pressure, and chemical residue. Additional details are provided below for specific grass timings and resistances.

Established Stands

Application of **Propose** as an early post-emergence treatment to annual grasses and broadleaf weeds will provide the best results. See the **SPECIAL WEED CONTROL** section for instructions for control of perennial weeds. Some foliar and/or seedhead height suppression may result in established grass stands when the high rates of **Propose** are used. This is especially likely when there is few weeds, little rainfall, light soils, and short growing seasons. Reserve lower rates for use on light weed infestations or when desirable wildflowers and legumes, including crown vetch, are mixed in the grass stands (the **WILDFLOWER ESTABLISHMENT AND MAINTENANCE** section provides rate resistance information). Higher rates will broaden and lengthen the spectrum of weeds controlled.

Buffalograss

In newly sprigged buffalograss, apply **Propose** at 2 - 4 fl. oz. (0.03 - 0.06 lb. ae) per acre for control or suppression of labeled weeds and to aid in stand establishment. Make the application immediately after planting to new growth or seedlings. Severe injury or death may occur when **Propose** is applied to new growth and small seedlings. It is best to wait to apply **Propose** to newly emerged buffalograss until the grass has at least 5 true-leaves. It is also important to use only a nonionic or silicone-based surfactant and not to use a methylated seed oil. In established stands, apply **Propose** at 2 - 8 fl. oz. (0.03 - 0.13 lb. ae) per acre. The higher rates may result in some turf discoloration and stunting. An application of **Propose** to dormant buffalograss will control Winter annual weeds. Note that some buffalograss types may show different resistance to **Propose**. Turf type buffalograss, for instance, may show a different resistance to **Propose** than the wild type buffalograss. Some turf types may resist low rates of **Propose** applied at seeding. The seed dealer will provide details.

Sideoats and Blue Grama

DO NOT apply **Propose** to monoculture stands of sideoats and blue grama if stand thinning or stand loss cannot be resisted. Once new seedlings of sideoats and blue grama have emerged and reached the 5-leaf stage, an application of **Propose** at 2 - 4 fl. oz. (0.03 - 0.06 lb. ae) per acre plus an adjuvant will aid in stand establishment. Stand thinning may occur if **Propose** is applied at 4 fl. oz. (0.06 lb. ae) per acre with methylated seed oil as the adjuvant. Satisfactory weed control in early Summer plantings of sideoats and blue grama may result when lower rates of **Propose** are used, especially in the states of Wisconsin, Michigan, Minnesota, South Dakota, North Dakota, Kansas, Oklahoma, Texas, and Nebraska, and other states where growing degree days are short. Although sideoats and blue grama have shown resistance to **Propose** at 2 - 4 fl. oz. (0.03 - 0.06 lb. ae) per acre when applied pre-emergence at planting, some stand thinning may occur. In established stands of sideoats and blue grama, apply **Propose** at 4 - 10 fl. oz. (0.06 - 0.16 lb. ae) per acre. **Propose** can be applied up to 12 fl. oz. (0.19 lb. ae) per acre; however, depending on soil type, variety, environmental conditions, surfactant choice, etc., this may result in foliar and/or seedhead suppression, or in the injury of the sideoats or blue grama.

Switchgrass *(Panicum virgatum)*

DO NOT use **Propose** for the establishment of pure switchgrass stands as severe injury or death can result. It can, however, be applied at 2 - 4 fl. oz. (0.03 - 0.06 lb. ae) per acre if switchgrass is planted in a mixed stand with resistant species. Even then, some stand thinning or loss of stand may result. If reclaiming a mature switchgrass stand from certain perennial weeds like tall fescue, leafy spurge and Johnsongrass, etc., use **Propose** at rates of 10 - 12 fl. oz. (0.16 - 0.19 lb. ae) per acre. Beware, however, that severe stunting and injury will occur. **DO NOT** apply **Propose** to switchgrass if severe injury cannot be resisted.

Eastern Gamagrass

Apply **Propose** at 2 - 6 fl. oz. (0.03 - 0.09 lb. ae) per acre at planting prior to eastern gamagrass emergence only if some stand thinning or loss can be resisted. Stand thinning and stunting will most likely result. Stand mortality could result if there are adverse conditions, poor soils or added stress to the eastern gamagrass. On established eastern gamagrass, apply **Propose** at 2 - 8 fl. oz. (0.03 - 0.13 lb. ae) per acre while the eastern gamagrass is dormant. Injury in the form of stunting will occur as the rate of **Propose** is increased. If applied during or after green-up, **Propose** may result in foliar and/or seedhead suppression and possible mortality of weak plants.

Big Bluestem, Little Bluestem, and Indiangrass

To control labeled weeds in these grasses at planting, or any time thereafter (including emerged seedings and dormant or actively growing perennial stands), **Propose** can be applied at the rate of 2 - 12 fl. oz. (0.03 - 0.19 lb. ae) per acre. See the **WEEDS CONTROLLED** section for the desired rate. Use lower rates in Wisconsin, Michigan, Minnesota, South Dakota, North Dakota, Kansas, Oklahoma, Texas, and Nebraska. Use higher rates in areas of where there is more rainfall and a longer growing season.

Tall Fescue Control

Tall fescue can be controlled in established stands of, or in seed bed preparations for, big bluestem, little bluestem, and Indiangrass when **Propose** is applied at 12 fl. oz. (0.19 lb. ae) per acre in combination with methylated seed oil at 2 pts. per acre. Control may be aided with the addition of nitrogen fertilizer (see the **SPRAY ADJUVANTS FOR POST-EMERGENCE APPLICATIONS** section). Best results will be obtained if the tall fescue is actively growing. Application to tall fescue after it has reached the boot stage or Summer dormancy will result in poor control. Tank-mix combinations with **Propose** could result in improved control of existing tall fescue as well as new germinating seedlings. Best results will result from a Fall application of **Propose** at 6 - 12 fl. oz. (0.09 - 0.19 lb. ae) per acre plus Accord or Roundup Pro.

To control older, more mature fescue stands in the Spring, use **Propose** at the higher end of the 6 - 12 fl. oz. (0.09 - 0.19 lb. ae) per acre rate range plus a tank-mix with Accord or Roundup Pro. If planting forbs, use the lower end of the 6 - 12 fl. oz. (0.09 - 0.19 lb. ae) per acre rate range of **Propose** plus a tank-mix with a glyphosate product. If **Propose** is used at 8 fl. oz. (0.13 lb. ae) per acre with a glyphosate product in the Fall, apply only 4 fl. oz. (0.06 lb. ae) of **Propose** per acre in the Spring at planting for annual weed and seedling fescue control. Where permitted, burning the fescue stand the following Spring prior to green-up can help provide a better seedbed for planting and aid in control of seedling tall fescue. Several Summer mowings of the fescue will weaken the root system and make the fescue more susceptible to herbicides. At least 10" of fescue re-growth is necessary following the last mowing before applying either the **Propose** or glyphosate products. Both require adequate foliage present for uptake and maximum control.

Resistant Grass Species[1]

Prairiegrass	Propose Rate per Acre**	
Common Name (Scientific Name)	**New Seeding**	**Established**
Bluegrass, Kentucky *(Poa pratensis)*	–	2 - 12*** fl. oz. (0.03 - 0.19 lb. ae)
Bluegrass, Sandberg's *(Poa sandbergii)*	–	2 - 12 fl. oz. (0.03 - 0.19 lb. ae)
Bluestem, Big *(Andropogon gerardii)*	2 - 12 fl. oz. (0.03 - 0.19 lb. ae)	2 - 12 fl. oz. (0.03 - 0.19 lb. ae)
Bluestem, Bushy *(Andropogon glomeratus)*	–[2]	2 - 12 fl. oz. (0.03 - 0.19 lb. ae)
Bluestem, King Ranch *(Bothriochloa ischaemum)*	–	2 - 12 fl. oz. (0.03 - 0.19 lb. ae)
Bluestem, Little *(Schizachyrium scoparium)*	2 - 12 fl. oz. (0.03 - 0.19 lb. ae)	2 - 12 fl. oz. (0.03 - 0.19 lb. ae)
Bluestem, Silver Beard *(Bothriochloa saccharoides)*	–	2 - 12 fl. oz. (0.03 - 0.19 lb. ae)
Bromegrass, Smooth *(Bromus inermis)*	–	2 - 12 fl. oz. (0.03 - 0.19 lb. ae)
Broomsedge *(Andropogon virginicus)*	–	2 - 12 fl. oz. (0.03 - 0.19 lb. ae)
Buffalograss *(Buchloe dactyloides)*	2 - 4 fl. oz. (0.03 - 0.06 lb. ae)	2 - 8 fl. oz. (0.03 - 0.13 lb. ae)
Fingergrass, Rhodes grass *(Chloris* spp.*)*	–	2 - 12 fl. oz. (0.03 - 0.19 lb. ae)
Gamagrass, Eastern *(Tripsacum dactyloides)*	2 - 6* fl. oz. (0.03 - 0.09 lb. ae)	2 - 8 fl. oz. (0.03 - 0.13 lb. ae)
Grama, Blue *(Bouteloua gracilis)*	2 - 8* fl. oz. (0.03 - 0.13 lb. ae)	2 - 8 fl. oz. (0.03 - 0.13 lb. ae)
Grama, Sideoats *(Bouteloua curtipendula)*	2 - 8* fl. oz. (0.03 - 0.13 lb. ae)	2 - 8 fl. oz. (0.03 - 0.13 lb. ae)

[1]See individual grass sections for application timing.

[2]Resistance unknown.

***Propose** pre-emergence applications to newly seeded sideoats, blue grama, and Eastern gamagrass may result in thinning or loss of stand.

**High rates may result in stunting and growth suppression.

***Some bluegrass varieties are sensitive to **Propose**. Drought can delay recovery and may result in overgrazing of treated area.

(continued)

Resistant Grass Species[1] *(continued)*

Prairiegrass	Propose Rate per Acre**	
Common Name (Scientific Name)	**New Seeding**	**Established**
Indiangrass *(Sorghastrum nutans)*	2 - 12 fl. oz. (0.03 - 0.19 lb. ae)	2 - 12 fl. oz. (0.03 - 0.19 lb. ae)
Needle-and-thread *(Stipa comata)*	–	2 - 12 fl. oz. (0.03 - 0.19 lb. ae)
Needlegrass *(Stipa* spp.*)*	–	2 - 12 fl. oz. (0.03 - 0.19 lb. ae)
Sandreed, Prairie *(Calamovilfa longifolia)*	–	2 - 12 fl. oz. (0.03 - 0.19 lb. ae)
Squirreltail, Bottlebrush *(Sitanion hystrix)*	–	2 - 12 fl. oz. (0.03 - 0.19 lb. ae)
Threeawn, Kearny (Plains) *(Aristida longespica)*	–	2 - 12 fl. oz. (0.03 - 0.19 lb. ae)
Threeawn, Prairie *(Aristida oligantha)*	–	2 - 12 fl. oz. (0.03 - 0.19 lb. ae)
Wheatgrasses *(Agropyron* spp.*)*	–	2 - 12 fl. oz. (0.03 - 0.19 lb. ae)
Wild Ryegrass, Russian *(Elymus junceus)*	2 - 6** fl. oz. (0.03 - 0.19 lb. ae)	2 - 12 fl. oz. (0.03 - 0.19 lb. ae)

[1]See individual grass sections for application timing.

**High rates may result in stunting and growth suppression.

Resistance of Established Grasses to 8 - 12 fl. oz. (0.13 - 0.19 lb. ae) of Propose applied in the Fall

Grass Species*	Resistant	Suppressed**	Not Resistant	Resistance Unknown
Bermudagrass	X			
Bluegrass, Kentucky		X		
Bluegrass, Sandberg's	X			
Bluestem, Big	X			
Bluestem, Bushy	X			
Bluestem, King Ranch	X			
Bluestem, Little	X			
Bluestem, Silver Beard	X			
Brome, Downey			X	

*Species with an X in more than one column means resistance will vary depending on variety, use rate, and environmental conditions.

**Suppression may be expressed as reduction in number of seedheads, seedhead height suppression or foliage height reduction, however, full recovery of the grass can be expected.

(continued)

Resistance of Established Grasses to 8 - 12 fl. oz. (0.13 - 0.19 lb. ae) of Propose applied in the Fall *(continued)*

Grass Species*	Resistant	Suppressed**	Not Resistant	Resistance Unknown
Bromegrass, Meadow		X	X	
Bromegrass, Smooth		X		
Broomsedge	X			
Buffalograss	X	X		
Canarygrass, Reed		X	X	
Cheatgrass			X	
Cordgrass, Prairie		X		
Creeping Foxtail, Garrison				X
Dropseed, Prairie				X
Fescue, Idaho	X			
Fescue, Tall			X	
Gamagrass, Eastern		X		
Grama, Blue	X	X		
Grama, Sideoats	X	X		
Indiangrass	X			
Medusahead			X	
Needle-and-thread	X			
Needlegrass, Green	X			
Orchardgrass		X		
Quackgrass		X		
Redtop		X	X	
Rhodes Grass/Fingergrass	X			
Ryegrass, Annual or Italian			X	
Ryegrass, Perennial		X	X	

*Species with an X in more than one column means resistance will vary depending on variety, use rate, and environmental conditions.

**Suppression may be expressed as reduction in number of seedheads, seedhead height suppression or foliage height reduction, however, full recovery of the grass can be expected.

(continued)

Resistance of Established Grasses to 8 - 12 fl. oz. (0.13 - 0.19 lb. ae) of Propose applied in the Fall *(continued)*

Grass Species*	Resistant	Suppressed**	Not Resistant	Resistance Unknown
Sandreed, Prairie	X			
Squirreltail, Bottlebrush	X			
Switchgrass		X	X	
Threeawn, Prairie	X			
Timothy			X	
Wheatgrass, Bluebunch	X	X		
Wheatgrass, Crested	X	X		
Wheatgrass, Intermediate	X	X		
Wheatgrass, Pubescent	X	X		
Wheatgrass, Siberian	X			
Wheatgrass, Slender	X	X		
Wheatgrass, Streambank	X	X		
Wheatgrass, Western	X	X		
Wild Ryegrass, Basin	X			
Wild Ryegrass, Canada		X		
Wild Ryegrass, Russian	X			
Wild Ryegrass, Virginia		X		

*Species with an X in more than one column means resistance will vary depending on variety, use rate, and environmental conditions.

**Suppression may be expressed as reduction in number of seedheads, seedhead height suppression or foliage height reduction, however, full recovery of the grass can be expected.

WILDFLOWER ESTABLISHMENT AND MAINTENANCE

Resistance among wildflowers to **Propose** varies considerably because there are so many different genotypes, ecotypes and varieties and susceptibilities depending on soil types and environmental conditions. **DO NOT** use **Propose** unless some stand thinning or mortality of wildflowers can be resisted. The least amount of injury to resistant species from a pre-emergence application of **Propose** will result from the low rate of 2 fl. oz. (0.03 lb. ae) per acre. Because the use of **Propose** applied post-emergence can result in injury or death of some wildflower genotypes, use only as a last resort when the wildflower stand is threatened by weed competition. Certain spray adjuvants used with **Propose** can also increase injury and stand loss in wildflowers. Most legumes listed in the resistance table are resistant to **Propose** at 4 fl. oz. (0.06 lb. ae) per acre, however some stand thinning can occur. The specifications given in the tables below are for mixed grass/wildflower stands. Use on a monoculture stand could result in poor control and plant injury. Test a small area of the monoculture stand for injury before applying **Propose** to a larger area of a monoculture stand.

For Prairiegrass/Wildflower Mixtures

If wildflower injury (stand thinning, height suppression, etc.) can be resisted, apply **Propose** at the rate specified to achieve the weed control desired. **DO NOT** exceed the resistance rate given in the table below. Pre-emergence applications of **Propose** can reduce or eliminate wildflower injury. To minimize injury to resistant species, apply **Propose** at 2 - 4 fl. oz. (0.03 - 0.06 lb. ae) per acre. In low rainfall areas and areas where conditions are cool and dry, use the 2 fl. oz. (0.03 lb. ae) per acre rate of **Propose**. If a post-emergence application of **Propose** is to be made to established prairiegrass/wildflower mixtures, use the lowest rates allowed to achieve the weed control desired (see the **WEEDS CONTROLLED** section). Post-emergence application can result in stand thinning or death due to the great variation in seed sources, varieties, and genotypes of wildflowers. Test a small area to determine resistance before making a full application to a large area. The rates listed below are for those species in which acceptable resistance has been confirmed on the varieties/genotypes being treated.

Increased wildflower injury can result from an application of **Propose** in conjunction with an organophosphate insecticide.

Seedling Wildflower and Legume Resistance to Propose (4 fl. oz. (0.06 lb. ae) per acre)* in Mixed Grass/Forb Stands

Common Name	Scientific Name	Pre-Emergence	Post-Emergence
Alfalfa	*Medicago sativa*	No	Yes
Aster, New England	*Aster novae angliae*	No	Yes
Aster, Prairie	*Aster tanacetifolia*	No	Yes
Baby Blue Eyes	*Nemophila menziesii*	No	Yes
Beggar Ticks	*Bidens frondosa*	No	Yes
Bird's Eyes	*Gila tricolor*	No	Yes
Bishop's Flower	*Ammi majus*	No	Yes
Blackeyed Susan	*Rudbeckia hirta*	Yes	Yes
Blanketflower	*Gaillardia aristata*	No	Yes
Bundleflower, Illinois	*Desmanthus illinoensis*	Yes	Yes
Catchfly	*Silene armeria*	No	Yes
Chicory	*Cichorium intybus*	Yes	Yes
Clover, Crimson	*Trifolium incarnatum*	Yes	Yes
Clover, White	*Trifolium repens*	No	Yes
Coneflower, Purple	*Echinacea purpurea*	Yes	Yes
Coneflower, Upright Prairie	*Ratibida columnifera*	Yes	Yes
*For legumes, at least 3 true-leaves need to be present at post-emergence application.			

(continued)

Seedling Wildflower and Legume Resistance to Propose (4 fl. oz. (0.06 lb. ae) per acre)* in Mixed Grass/Forb Stands *(continued)*

Common Name	Scientific Name	Pre-Emergence	Post-Emergence
Coreopsis, Dwarf Red Plains	*Coreopsis tinctoria* var. Gay Feather	Yes	Yes
Coreopsis, Lance Leaved	*Coreopsis lanceolata*	Yes	Yes
Coreopsis, Plains	*Coreopsis, tinctoria*	Yes	Yes
Cornflower	*Centaurea cyanus*	No	Yes
Cosmos, Garden	*Cosmos bipinnatus*	Yes	Yes
Cosmos, Yellow	*Cosmos sulphureus*	Yes	Yes
Daisy, Ox-Eye	*Chrysanthemum leucanthemum*	Yes	Yes
Daisy, Shasta	*Chrysanthemum maximum*	Yes	Yes
Five Spot	*Nemophila maculata*	No	Yes
Flax, Blue	*Linum perenne*	No	Yes
Hat, Mexican	*Ratibida columnifera*	Yes	Yes
Indian Blanket	*Gaillardia pulchella*	No	Yes
Indigo, Blue False	*Baptisia australis*	Yes	No
Johnny Jump-Ups	*Viola cornuta*	Yes	Yes
Lemon Mint	*Monarda citriodora*	No	Yes
Lespedeza, Bicolor	*Lespedeza*	Yes	Yes
Lespedeza, Korean	*Lespedeza stipulacea*	No	Yes
Lespedeza, Sericea	*Lespedeza cuneata*	No	Yes
Lupine, Perennial	*Lupinus perennis*	Yes	Yes
Partridgepea	*Cassia fasciculate*	Yes	Yes
Pea, Calico	*Pisum vigna sinensis*	Yes	Yes
Pea, Flat	*Lathyrus sylvestris*	Yes	Yes
Pea, Perennial	*Lathyrus latifolius*	Yes	Yes
Phlox, Drummond	*Phlox drummondii*	Yes	No
*For legumes, at least 3 true-leaves need to be present at post-emergence application.			

(continued)

Seedling Wildflower and Legume Resistance to Propose (4 fl. oz. (0.06 lb. ae) per acre)* in Mixed Grass/Forb Stands *(continued)*

Common Name	Scientific Name	Pre-Emergence	Post-Emergence
Poppy, California	*Eschscholzia californica*	Yes	No
Poppy, Corn	*Papaver rhoeas*	Yes	Yes
Poppy, Red Corn	*Papaver* spp.	Yes	Yes
Prairieclover, Purple	*Dalea purpurea*	Yes	Yes
Prairieclover, White	*Dalea candidum*	Yes	Yes
Tick-Trefoil, Showy	*Desmodium canadense*	No	Yes
Trefoil, Birdsfoot	*Lotus corniculatus*	No	Yes
Vetch, Crown	*Coronilla varia*	Yes	–
Vetch, Hairy	*Vicia villosa*	Yes	–
Yarrow, Gold	*Achillea filipendulina*	No	Yes
*For legumes, at least 3 true-leaves need to be present at post-emergence application.			

Established Wildflower and Legume Resistance to Propose (maximum rate* per acre) in Mixed Grass/Forb Stands

Common Name	Scientific Name	Pre-Emergence	Post-Emergence**
Alfalfa	*Medicago sativa*	12 fl. oz. (0.19 lb. ae)	12 fl. oz. (0.19 lb. ae)
Blackeyed Susan	*Rudbeckia hirta*	8 fl. oz. (0.13 lb. ae)	10 fl. oz. (0.16 lb. ae)
Blanketflower	*Gaillardia aristata*	–	8 fl. oz. (0.13 lb. ae)
Bundleflower, Illinois	*Desmanthus illinoensis*	12 fl. oz. (0.19 lb. ae)	12 fl. oz. (0.19 lb. ae)
Chickory	*Cichorium intybus*	4 fl. oz. (0.06 lb. ae)	6 fl. oz. (0.09 lb. ae)
Coneflower, Purple	*Echinacea purpurea*	8 fl. oz. (0.13 lb. ae)	8 fl. oz. (0.13 lb. ae)
Coneflower, Upright Prairie	*Ratibida columnifera*	6 fl. oz. (0.09 lb. ae)	6 fl. oz. (0.09 lb. ae)
Daisy, Ox-Eye[1]	*Chrysanthemum leucanthemum*	8 fl. oz. (0.13 lb. ae)	8 fl. oz. (0.13 lb. ae)
Daisy, Shasta	*Chrysanthemum maximum*	4 fl. oz. (0.06 lb. ae)	8 fl. oz. (0.13 lb. ae)

*Height suppression or stand reduction may occur at maximum use rate. For legumes, some yellowing and stunting can occur at higher use rates.

**Make early post-emergence application on the flowers to reduce injury and increase flower set.

[1]Will not flower.

(continued)

Established Wildflower and Legume Resistance to Propose (maximum rate* per acre) in Mixed Grass/Forb Stands *(continued)*

Common Name	Scientific Name	Pre-Emergence	Post-Emergence**
Flax, Blue	*Linum perenne*	–	6 fl. oz. (0.09 lb. ae)
Hat, Mexican	*Ratibida columnifera*	6 fl. oz. (0.09 lb. ae)	6 fl. oz. (0.09 lb. ae)
Indian Blanket	*Gaillardia pulchella*	–	6 fl. oz. (0.09 lb. ae)
Johnny Jump-Ups	*Viola cornuta*	8 fl. oz. (0.13 lb. ae)	12 fl. oz. (0.19 lb. ae)
Leadplant	*Amorpha canescens*	8 fl. oz. (0.13 lb. ae)	8 fl. oz. (0.13 lb. ae)
Lespedeza, Bicolor	*Lespedeza*	8 fl. oz. (0.13 lb. ae)	8 fl. oz. (0.13 lb. ae)
Lespedeza, Sericea	*Lespedeza cuneata*	12 fl. oz. (0.19 lb. ae)	12 fl. oz. (0.19 lb. ae)
Lupine, Perennial[2]	*Lupina perennis*	8 fl. oz. (0.13 lb. ae)	12 fl. oz. (0.19 lb. ae)
Milkweed, Common	*Asclepias syriaca*	8 fl. oz. (0.13 lb. ae)	–
Partridgepea	*Cassia fasciculate*	12 fl. oz. (0.19 lb. ae)	12 fl. oz. (0.19 lb. ae)
Pea, Prairie Scurf	*Psoralea esculenta*	8 fl. oz. (0.13 lb. ae)	8 fl. oz. (0.13 lb. ae)
Poorjoe	*Diodia teres*	8 fl. oz. (0.13 lb. ae)	–
Prairieclover, Purple	*Dalea, purpurea*	4 fl. oz. (0.06 lb. ae)	12 fl. oz. (0.19 lb. ae)
Sensitive Vine	*Mimosa strigillosa*	12 fl. oz. (0.19 lb. ae)	12 fl. oz. (0.19 lb. ae)
Sweetclover	*Melilotus* sp.	12 fl. oz. (0.19 lb. ae)	8 fl. oz. (0.13 lb. ae)
Vetch, Crown	*Coronilla varia*	12 fl. oz. (0.19 lb. ae)	12 fl. oz. (0.19 lb. ae)
Violet, Wild	*Viola* spp.	12 fl. oz. (0.19 lb. ae)	12 fl. oz. (0.19 lb. ae)
Yarrow, Gold[1]	*Achillea filipendulina*	8 fl. oz. (0.13 lb. ae)	8 fl. oz. (0.13 lb. ae)

*Height suppression or stand reduction may occur at maximum use rate. For legumes, some yellowing and stunting can occur at higher use rates.

**Make early post-emergence application on the flowers to reduce injury and increase flower set.

[1]Will not flower.

[2]Most native rangeland lupines are resistant to **Propose** at 12 fl. oz. (0.19 lb. ae) per acre post-emergence.

Wildflower Establishment with Propose 4 fl. oz. (0.06 lb. ae) per acre plus Pendulum Herbicide*

Common Name	Scientific Name	Pre-Emergence At-Planting[1]	Post-Emergence to Seedlings[1]
Blackeyed Susan	*Rudbeckia hirta*	Yes	Yes
Blanketflower	*Gaillardia aristata*	No	Yes
Bundleflower, Illinois	*Desmanthus illinoensis*	>50% thinning	Yes
Clover, Crimson	*Trifolium incarnatum*	>50% thinning	Yes
Coneflower, Clasping	*Dracopis amplexicaulis*	Yes	Yes
Coneflower, Upright Prairie	*Ratibida columnifera*	No	OK
Coneflower, Purple	*Echinacea purpurea*	Yes	Yes
Coreopsis, Dwarf Red Plains	*Coreopsis tinctoria* var. Gay Feather	OK stunting	OK stunting
Coreopsis, Plains	*Coreopsis tinctoria*	OK stunting	Yes
Coreopsis, Lance Leaved	*Coreopsis lanceolata*	25% thinning	Yes
Cornflower	*Centaurea cyanus*	No	OK 20% thinning
Cosmos, Garden	*Cosmos bipinnatus*	OK 10% thinning	OK stunting
Cosmos, Yellow	*Cosmos sulphureus*	Yes	Yes
Daisy, Ox-Eye	*Chrysanthemum leucanthemum*	25% thinning	Yes
Daisy, Shasta	*Chrysanthemum maximum*	Marginal-OK-20% thinning	Yes
Lupine, Perennial	*Lupinus perennis*	Yes	550% thinning
Partridgepea	*Cassia fasciculate*	25% thinning	Yes
Poppy, California	*Eschscholzia californica*	Yes	25% injury, stunting, thinning
Yarrow, Gold	*Achillea filipendulina*	OK thinning	OK

*Check product label for rates.

[1]Yes = No injury.

No = Results in no wildflower germination or unacceptable injury to seedling flowers.

OK = Can be used in thinning and/or stunting can be resisted or if establishment is threatened by weed competition.

Beware that the response of wildflowers to **Propose** could vary greatly because of the many species and varieties that exist. Test small areas to determine resistance and whether potential injury is acceptable before treating larger areas.

If **Propose** is to be used on a wildflower species that is not listed in the table below, test a small area with no more than 12 fl. oz. (0.19 lb. ae) per acre per year to determine the injury that may result. Evaluate the wildflowers 1 - 2 months later for possible injury. The user assumes all responsibility for any damage or other liability.

WILDLIFE HABITAT MANAGEMENT

Propose can be used to control exotic and other undesirable vegetation for purposes of wildlife habitat management and enhancement within terrestrial non-crop sites including riparian and tree areas. Applications can be made to control undesirable vegetation prior to the establishment of desirable species and to release desirable species that may be present in the soil, but suppressed by competitive vegetation.

SPECIAL WEED CONTROL

Always add an adjuvant to **Propose** (see the **SPRAY ADJUVANTS FOR POST-EMERGENCE APPLICATIONS** section). Best control of perennial weeds is achieved when **Propose** is mixed with a methylated seed oil. This is especially true when weeds have waxy leaves or with perennials and weeds under stress conditions. Use a methylated seed oil for best results against the weeds listed below because the use of a nonionic or silicone-based surfactant may result in less than acceptable control.

Johnsongrass and Itchgrass

When Johnsongrass and itchgrass have reached the whorl stage and 18" - 24" in height, apply **Propose** at 8 - 12 fl. oz. (0.13 - 0.19 lb. ae) per acre. If treating dense stands, or after these grasses have reached the culm elongation stage, control with **Propose** may be improved with the addition of Accord or Roundup Pro. Use the higher herbicide rates as grass density increases. Sometimes, control of Johnsongrass and itchgrass at stages taller than described above are possible.

Dallisgrass, Bahiagrass, Vaseygrass, *Paspalum* spp., Smutgrass

Make a post-emergence application of **Propose** at 10 - 12 fl. oz. (0.16 - 0.19 lb. ae) per acre after grass has reached full green-up for control of dallisgrass, bahiagrass and smutgrass. Activity against dallisgrass and smutgrass can range from suppression to control depending upon the growth stage and growing conditions at the time of application. To control vaseygrass, make a post-emergence application of **Propose** at the rate of 4 - 6 fl. oz. (0.06 - 0.09 lb. ae) per acre after the grass has reached 100% green-up and is from 3" - 8" in height. Efficacy will be improved with the addition of Accord or Roundup Pro. Use higher herbicide rates as weed growth and density increases. A pre-emergence application of **Propose** plus Pendulum herbicide will provide increased control of these grasses germinating from seed.

Leafy Spurge

Maximum control of leafy spurge can be obtained when **Propose** is applied in late Summer or Fall at 8 - 12 fl. oz. (0.13 - 0.19 lb. ae) per acre in combination with a methylated seed oil at 2 pts. per acre. The timing is August through October, but it can vary due to geography and altitude. Yearly applications will improve the residual control of leafy spurge. In some areas, cool season grasses may be injured by applications of **Propose** at 12 fl. oz. (0.19 lb. ae) per acre in Spring or Fall, or 4 fl. oz. (0.06 lb. ae) applied in the Fall followed by 8 fl. oz. (0.13 lb. ae) per acre in the Spring. Nitrogen fertilizer (see the **SPRAY ADJUVANTS FOR POST-EMERGENCE APPLICATIONS** section) at 2 pts. per acre can increase the control of leafy spurge; however, it may also cause injury to grasses and forbs. Use of **Propose** with a nonionic or silicone-based surfactant will not provide control of leafy spurge. The target timing for Fall applications of **Propose** for control of leafy spurge in North and South Dakota is late August through September. Further south in Nebraska and Iowa the target timing is mid-September through mid-October. Make this application before a killing frost when there is good soil moisture present and the leafy spurge has not lost its milky sap flow. Check for milky sap flow by breaking the leafy spurge main stem and if milky sap flows from the break then **Propose** can still be applied.

Tall Fescue Control

Apply **Propose** at 12 fl. oz. (0.19 lb. ae) per acre plus methylated seed oil at 2 pts. per acre to control tall fescue. Control will be aided by the addition of Accord, glyphosate, or Roundup Pro and/or Nitrogen fertilizer (see the **SPRAY ADJUVANTS FOR POST-EMERGENCE APPLICATIONS** section). Only apply **Propose** when tall fescue is actively growing because application after tall fescue had reached Summer dormancy will result in poor control.

Best control of existing tall fescue and germinating seedlings is obtained when **Propose** is applied in the Fall at 8 - 12 fl. oz. (0.13 - 0.19 lb. ae) per acre plus Accord or Roundup Pro. To control mature fescue stands in the Spring, use **Propose** at the higher end of the 6 - 12 fl. oz. per acre rate range plus a tank-mix with Accord or Roundup Pro. If planting forbs, use the lower end of the 6 - 12 fl. oz. (0.09 - 0.19 lb. ae) per acre rate range of **Propose** plus a tank-mix with a glyphosate product. If **Propose** is used at 8 fl. oz. (0.13 lb. ae) per acre with a glyphosate product in the Fall, apply only 4 fl. oz. (0.06 lb. ae) of **Propose** per acre in the Spring at planting for annual weed and seedling fescue control. Where permitted, burning the fescue stand the following Spring prior to green-up can help provide a better seedbed for planting and aid in control of seedling tall fescue. Several Summer mowings of the fescue will weaken the root system and make the fescue more susceptible to herbicides in the Fall. At least 10" of fescue re-growth is necessary following the last mowing before applying either the **Propose** or glyphosate products. Both require adequate foliage present for uptake and maximum control.

Russian Knapweed

To control Russian knapweed, make a Fall application of **Propose** at 12 fl. oz. (0.19 lb. ae) per acre plus 1 qt. per acre of methylated seed oil during Russian knapweed senescence. Reduced control will result if the application is made before the initiation of senescence. Although control improves as senescence progresses, Russian knapweed control can still be obtained with **Propose** if the application is made after full senescence.

Dalmatian Toadflax

To control Dalmatian Toadflax, make a Fall application of **Propose** at 12 fl. oz. (0.19 lb. ae) per acre plus 1 qt. per acre of methylated seed oil when the top quarter of the plant is necrotic, usually after a hard front (late October through November). Reduced control will result if the application is made before this timing. Good control can be achieved as long as some green stem and/or leaf tissue is remaining. Adding ammonium sulfate at 2 - 3 pts. per acre may improve control.

Resistant Biotypes

Herbicides that have the ALS/AHAS enzyme inhibiting mode of action including **Propose**, Oust and others may not control some weeds listed on this label if resistant biotypes are present. If ALS/AHAS resistant biotypes occur in the area to be sprayed, tank-mix **Propose**, or make sequential applications, with a registered herbicide with a different mode of action.

RESIDUAL BAREGROUND WEED CONTROL

For total vegetation control in sensitive areas and around desirable vegetation, use **Propose** at 12 fl. oz. (0.19 lb. ae) per acre in a tank-mix combination with labeled rates of Pendulum herbicide, Roundup Pro, Escort (or 60% Metsulfuron-methyl), Karmex™, 2,4-D, diuron, Prodiamine 65 WDG (or Endurance™) or other labeled products to provide total vegetation control. Use 2 pts. per acre of methylated seed oil as an adjuvant for maximum control.

To provide total weed control in bare ground areas, apply **Propose** at 12 fl. oz. (0.19 lb. ae) per acre in a tank-mix with Imazapyr 2SL (or Arsenal herbicide), Mohave 70 EG (or Sahara DG herbicide), Bromacil 40/40 (or Krovar™), SFM 75 (or Oust), Picloram 22K (or Tordon), Vanquish, or other labeled products to provide total bare ground weed control. Use 2 pts. per acre of methylated seed oil as an adjuvant for maximum control.

Spot Treatments

For weed control in bare ground or total vegetation, **Propose** can be applied to small areas. In each gallon of water, mix **Propose** at 0.3 - 5.4 fl. oz. (0.005 - 0.08 lb. ae) with 0.25% - 5% v/v methylated seed oil adjuvant.

USE UNDER PAVED SURFACES

Establish the final grade to the soil and then apply **Propose** in sufficient water to obtain uniform wetting of the soil surface and shoulder area. **DO NOT** move the soil after the application. Using clean water and constant agitation, mix **Propose** at the rate of 12 fl. oz. (0.19 lb. ae) per acre. If the soil is not moist before application, weed control can be improved through incorporation of **Propose**. Mechanical incorporation to a depth of 2" with a rototiller or disc is one method. Use of rainfall and/or irrigation (1" per acre) is another good method to incorporate **Propose**. **DO NOT** allow treated soil to wash or move from the treated area.

RESISTANCE OF TREES AND BRUSH TO PROPOSE

When **Propose** is applied in and around desirable tree and brush species, follow these instructions:

1. **Propose** may not be used on nursery, orchard, ornamental plantings, new plantings, seedling trees or fiber farms unless such use is provided in supplemental labeling from Sharda USA LLC.
2. Apply **Propose** to a limited area to determine resistance in the area.
3. Apply **Propose** at rates up to 12 fl. oz. (0.19 lb. ae) per acre to control weeds in roadsides, prairies, and areas used for wildlife cover, erosion control and windbreaks and in and around established trees or pasture or rangeland (refer to the **Rangeland Use Instructions** section).
4. Severe injury or death may result if **Propose** is applied to tree and brush species that are under stress due to drought, insects or other factors that might make the plant more susceptible to injury.
5. Tip chlorosis and minor necrosis may be seen on some species.
6. Use application methods that decrease foliar contact as injury in the form of defoliation and terminal death may occur.
7. A list of resistant tree and brush species to **Propose** when it is applied under the canopy and/or to the foliage are presented below.

If making a Fall application of **Propose**, delay the application until after leaves have begun to senescence or drop to avoid potential foliar injury to tree and brush species. Fall applications can be made to conifer species as they are resistant to **Propose**. Be sure to apply **Propose** in and around tree and brush species at the specified timing for the target weeds.

Brush and Tree Species Resistant to Propose at 12 fl. oz. (0.19 lb. ae) per Acre[1]

Common Name	Scientific Name	Resistance by Application Method Yes = Resistant. No = Not resistant, severe injury or death. ND = Not advised due to insufficient resistance data.	
		Directed Below Foliage	To Foliage
Apple	*Malus sylvestris*	Yes	ND
Ash, Blue	*Fraxinus quadrangulata*	Yes	ND
Ash, Green	*Fraxinus pennsylvanica*	No	No
Azalea	*Rhododendron* spp.	No	No
Basswood	*Tilia heterophylla*	No	No
Boxelder	*Acer negundo*	Yes	Injury*
Buckeye, Ohio	*Aesculus glabra*	Yes	ND
Cedar-Juniper, Western	*Thuja plicata*	Yes	Yes
Cherry, Black[2]	*Prunus serotina*	No	No
Cherry, Choke	*Prunus virginiana*	No	No
Cherry, Sweet[2]	*Prunus avium*	No	ND
Cottonwood	*Populus deltoides*	Yes	Injury*
Cottonwood, Narrow Leaf	*Populus* spp.	Yes	Injury*
Currant species	*Ribes* spp.	Injury*	No
Dogwood, Flowering	*Cornus* spp.	Yes	Yes
Dogwood, Grey	*Cornus racemosa*	Yes	Injury*
Dogwood, Red Twig	*Cornus* spp.	Yes	Yes
Douglas Fir	*Pseudotsuga menziesii*	Yes	Yes**

*Possible defoliation and/or death. Some species may exhibit tip chlorosis and minor necrosis. If spray contacts foliage, then defoliation and terminal death may occur. Injury can be reduced or eliminated if applied in Fall after color change or leaf drop.

**Applications made just before or during candling may cause candle injury or death.

[1]Not intended for nursery, orchard, ornamental plantings, new plantings, or seedling trees.

[2]Not for use on ornamental or fruit bearing trees.

(continued)

Brush and Tree Species Resistant to Propose at 12 fl. oz. (0.19 lb. ae) per Acre[1] *(continued)*

Common Name	Scientific Name	Resistance by Application Method Yes = Resistant. No = Not resistant, severe injury or death. ND = Not advised due to insufficient resistance data.	
		Directed Below Foliage	To Foliage
Elm, American	*Ulmus Americana*	Yes	Yes
Elm, Siberian	*Ulmus pumila*	Yes	No
Elm, Slippery	*Ulmus rubra*	Yes	Yes
Gooseberry	*Ribes* spp.	Injury*	Injury*
Hackberry	*Celtis occidentalis*	Yes	Yes
Hawthorn	*Crataegus* spp.	Yes	Injury*
Juniper, Chinese	*Juniperus chinensis*	Yes	Yes
Juniper, Western	*Juniperus osteosperma*	Yes	Yes
Lilac	*Syringa* spp.	No	No
Linden, American	*Tilia americana*	No	No
Locust, Black	*Robinia pseudoacacia*	Yes	Yes
Locust, Honey	*Gleditsia triacanthos*	Yes	Yes
Maple, Red	*Acer rubrum*	Yes	Yes
Maple, Sugar	*Acer saccharum*	Yes	Yes
Mulberry, Red	*Morus rubra*	Yes	ND
Mulberry, White	*Morus alba*	Yes	ND
Oak, Black	*Quercus velutina*	Yes	ND
Oak, Live	*Quercus virginiana*	Yes	Yes
Oak, Southern Red	*Quercus falcata*	Yes	ND
Oak, White	*Quercus alba*	Yes	ND

*Possible defoliation and/or death. Some species may exhibit tip chlorosis and minor necrosis. If spray contacts foliage, then defoliation and terminal death may occur. Injury can be reduced or eliminated if applied in Fall after color change or leaf drop.

[1]Not intended for nursery, orchard, ornamental plantings, new plantings, or seedling trees.

(continued)

Brush and Tree Species Resistant to Propose at 12 fl. oz. (0.19 lb. ae) per Acre[1] *(continued)*

Common Name	Scientific Name	Resistance by Application Method Yes = Resistant. No = Not resistant, severe injury or death. ND = Not advised due to insufficient resistance data.	
		Directed Below Foliage	To Foliage
Olive, Russian	*Elaeagnus angustifolia*	Yes	No
Osage Orange	*Maclura pomifera*	Yes	ND
Peach (var. Elberta)[2]	*Prunus persica*	Yes	ND
Photinia, Red Tip	*Photinia fraseri*	Yes	Yes
Pine, Lodgepole	*Pinus Contorta*	Yes	Injury**
Pine, White**	*Pinus strobes*	Yes	Yes
Pittosporum, Japanese	*Pittosporum tobira*	Yes	Yes
Plum species	*Prunus* spp.	Yes	No
Poplar, Yellow (Tulip)	*Liriodendron tulipifera*	Yes	ND
Privet, Common	*Ligustrum vulgare*	Yes	Yes
Rabbitbrush species	*Chrysothamnus* spp.	Yes	Yes
Redbud	*Cercis canadensis*	Yes	Yes
Redcedar, Eastern	*Juniperus virginiana*	Yes	Yes
Rose, Multiflora	*Rosa multiflora*	Yes*	No
Sage, Big	*Artemisia tridentata*	Yes	Yes
Sage, Fringe	*Artemisia frigida*	Yes	Yes
Sage, Silver	*Artemisia cana*	Yes	Yes
Sagebrush, Big	*Artemisia tridentata*	Yes	Yes
Sagebrush, Fringed	*Artemisia frigida*	Yes	Yes

*Possible defoliation and/or death. Some species may exhibit tip chlorosis and minor necrosis. If spray contacts foliage, then defoliation and terminal death may occur. Injury can be reduced or eliminated if applied in Fall after color change or leaf drop.

**Applications made just before or during candling may cause candle injury or death.

[1]Not intended for nursery, orchard, ornamental plantings, new plantings, or seedling trees.

[2]Not for use on ornamental or fruit bearing trees.

(continued)

Brush and Tree Species Resistant to Propose at 12 fl. oz. (0.19 lb. ae) per Acre[1] *(continued)*

Common Name	Scientific Name	Resistance by Application Method Yes = Resistant. No = Not resistant, severe injury or death. ND = Not advised due to insufficient resistance data.	
		Directed Below Foliage	To Foliage
Saltcedar	*Tamarix* spp.	Yes	No
Serviceberry	*Amelanchier alnifolia*	Yes	ND
Snowberry, Western	*Symphoricarpos occidentalis*	Yes	Injury*
Spruce species	*Picea app.*	Yes**	Yes**
Sugarberry	*Celtis laevigata*	Yes	Yes
Sycamore	*Platanus occidentalis*	Yes	No
Tree of Heaven	*Ailanthus altissima*	Yes	Yes
Walnut, American Black	*Juglans nigra*	Yes	No
Willow	*Salix* spp.	Yes	Injury*

*Possible defoliation and/or death. Some species may exhibit tip chlorosis and minor necrosis. If spray contacts foliage, then defoliation and terminal death may occur. Injury can be reduced or eliminated if applied in Fall after color change or leaf drop.

**Applications made just before or during candling may cause candle injury or death.

[1]Not intended for nursery, orchard, ornamental plantings, new plantings, or seedling trees.

WEEDS CONTROLLED - With 4 - 6 fl. oz. (0.06 - 0.09 lb. ae) per acre Propose

BROADLEAVES				
Common Name	**Scientific Name**	**Growth Habit**	C = Control S = Suppression	
			Pre-Emergence*	**Post-Emergence****
Bedstraw, Catchweed	*Galium aparine*	Winter Annual	C	4"
Beggarweed, Florida	*Desmodium tortuosum*	Summer Annual	C	2"
Buffalobur	*Solanum rostratum*	Summer Annual	–	C
Buttercup, Bur	*Ranunculus testiculatus*	Winter Annual	C	C
Cocklebur, Common	*Xanthium strumarium*	Summer Annual	S	6"
Lambsquarters, Common	*Chenopodium album*	Summer Annual	C	2"
Halogeton	*Halogeton glomeratus*	Summer Annual	C	C
Morningglory, Entireleaf	*Ipomoea hederacea*	Summer Annual	S	3"
Morningglory, Ivyleaf	*Ipomoea hederacea*	Summer Annual	S	3"
Morningglory, Tall	*Ipomoea purpurea*	Summer Annual	S	3"
Mustard, Wild	*Brassica kaber*	Winter Annual	C	C
Pigweed	*Amaranthus* spp.	Summer Annual	C	6"
Queen Anne's Lace	*Daucus carota*	Biennial	–	4"
Radish, Wild	*Raphanus raphanistrum*	Winter Annual	S	4"
Rocket, Yellow	*Barbarea vulgaris*	Winter Annual	C	4"
Sicklepod	*Senna obtusifolia*	Summer Annual	C	4"
Sida, Prickly	*Sida spinosa*	Summer Annual	C	2"
Smartweed, Ladysthumb	*Polygonum persicaria*	Summer Annual	C	C
Smartweed, Pennsylvania	*Polygonum pensylvanicum*	Summer Annual	C	C
Swamp	*Polygonum coccineum*	Summer Annual	C	C
Starbur, Bristly	*Acanthospermum hispidum*	Summer Annual	C	2"
Velvetleaf	*Abutilon theophrasti*	Summer Annual	C	6"

*C = Control, S = Suppression in northern United States only.
**Maximum plant height in inches at time of application.

(continued)

WEEDS CONTROLLED - With 4 - 6 fl. oz. (0.06 - 0.09 lb. ae) per acre Propose *(continued)*

GRASS WEEDS				
Common Name	**Scientific Name**	**Growth Habit**	C = Control S = Suppression	
			Pre-Emergence*	**Post-Emergence****
Brome, Downy	*Bromus tectorum*	Winter Annual	C	2"
Cheat	*Bromus secalinus*	Winter Annual	C	2"
Crabgrass, Large (Hairy)	*Digitaria sanguinalis*	Summer Annual	C	4"
Crabgrass, Smooth	*Digitaria ischaemum*	Summer Annual	C	4"
Foxtail, Giant	*Setaria faberi*	Summer Annual	C	6"
Foxtail, Green	*Setaria viridis*	Summer Annual	C	4"
Foxtail, Yellow	*Setaria glauca*	Summer Annual	C	4"
Goatgrass, Jointed	*Aegilops cylindrical*	Winter Annual	C	C
Goosegrass	*Eleusine indica*	Summer Annual	S	2"
Johnsongrass (Seedling)	*Sorghum halepense*	Summer Annual	C	12"
Medusahead	*Taeniatherum caput-medusae*	Winter Annual	C	2"
Panicum, Fall	*Panicum dichotomiflorum*	Summer Annual	S	6"
Sandbur	*Cenchrus* spp.	Annual/Perennial	S	C
Shattercane	*Sorghum bicolor*	Summer Annual	C	12"
Signalgrass, Broadleaf	*Brachiaria platyphylla*	Summer Annual	C	C
Stiltgrass, Japanese	*Microstegium vimineum*	Annual	C	4"
Vaseygrass	*Paspalum urvillei*	Perennial	–	8"

*C = Control, S = Suppression in northern United States only.
**Maximum plant height in inches at time of application.

(continued)

WEEDS CONTROLLED - With 4 - 6 fl. oz. (0.06 - 0.09 lb. ae) per acre Propose *(continued)*

SEDGES				
Common Name	**Scientific Name**	**Growth Habit**	C = Control S = Suppression	
			Pre-Emergence*	**Post-Emergence****
Nutsedge, Purple	*Cyperus esculentus*	Perennial	S	4"S
Nutsedge, Yellow	*Cyperus rotundus*	Perennial	S	4"S
Sedge	*Juncus* spp.	Annual/Perennial	S	4"S

*C = Control, S = Suppression in northern United States only.
**Maximum plant height in inches at time of application.

WEEDS CONTROLLED - With 8 - 12 fl. oz. (0.13 - 0.19 lb. ae) per acre Propose

BROADLEAVES				
Common Name	**Scientific Name**	**Growth Habit**	C = Control S = Suppression	
			Pre-Emergence*	**Post-Emergence****
Anoda, Spurred	*Anoda cristata*	Summer Annual	C	6"
Baby's Breath[1]	*Gypsophila paniculata*	Perennial	–	C
Bedstraw, Catchweed	*Galium aparine*	Winter Annual	C	C
Bedstraw, Marsh	*Galium* spp.	Winter Annual	C	C
Beggarweed, Florida	*Desmodium tortuosum*	Summer Annual	C	6"
Bindweed, Field	*Convolvulus arvensis*	Perennial	–	C
Buffalobur	*Solanum rostratum*	Summer Annual	–	C
Burclover	*Medicago* spp.	Summer Annual	–	4"
Chickweed, Common	*Stellaria media*	Summer Annual	C	6"
Cocklebur, Common	*Xanthium strumarium*	Summer Annual	C	6"

*C = Control, S = Suppression in northern United States only.
**Maximum plant height in inches at time of application.
[1]For annual control. The addition of 1 - 2 pts. of 2,4-D will aid in burndown.

(continued)

WEEDS CONTROLLED - With 8 - 12 fl. oz. (0.13 - 0.19 lb. ae) per acre Propose *(continued)*

BROADLEAVES *(continued)*				
Common Name	**Scientific Name**	**Growth Habit**	C = Control S = Suppression	
			Pre-Emergence*	**Post-Emergence****
Cornsalad, Common	*Valerianella locusta*	Winter Annual	–	C
Crownbeard, Golden	*Verbesina encelioides*	Summer Annual	C	2"
Dandelion	*Taraxacum officinale*	Perennial	–	C
Dock, Curly	*Rumex crispus*	Biennial	C	6"
Fiddleneck	*Amsinckia* spp.	Summer Annual	–	C
Flax, Spurge	*Thymelaea passerine*	Annual	C	C
Fleabane, Annual	*Erigeron annuus*	Annual	–	C
Geranium, Carolina	*Geranium carolinianum*	Winter Annual/ Biennial	–	C
Geranium, Cranesbill	*Geranium maculatum*	Winter Annual/ Biennial	C	C
Ground Cherry	*Physalis heterophylla*	Perennial	–	C
Hemlock, Poison	*Conium maculatum*	Biennial	C	6"
Henbit	*Lamium amplexicaule*	Winter Annual/ Biennial	C	3"
Hoary Cress	*Cardaria* spp.	Perennial	–	C
Houndstongue, Bristly	*Cynoglossum officinale*	Biennial	C	C
Indigo, Hairy	*Indigofera hirsute*	Perennial	C	2"
Jimsonweed	*Datura stramonium*	Summer Annual	C	6"
Knapweed, Russian[2]	*Centaurea repens*	Perennial	–	C***
Knotweed, Prostrate	*Polygonum aviculare*	Summer Annual	C	C

*C = Control, S = Suppression in northern United States only.

**Maximum plant height in inches at time of application.

***See **SPECIAL WEED CONTROL** section.

[2]For best control apply in the Fall.

(continued)

WEEDS CONTROLLED - With 8 - 12 fl. oz. (0.13 - 0.19 lb. ae) per acre Propose *(continued)*

BROADLEAVES *(continued)*				
Common Name	**Scientific Name**	**Growth Habit**	C = Control S = Suppression	
			Pre-Emergence*	**Post-Emergence****
Kochia***	*Kochia scoparia*	Summer Annual	C	3"
Lambsquarters, Common	*Chenopodium album*	Summer Annual	C	3"
Morningglory, Cypressvine	*Ipomoea quamoclit*	Summer Annual	C	6"
Morningglory, Entireleaf	*Ipomoea hederacea*	Summer Annual	C	6"
Morningglory, Ivyleaf	*Ipomoea hederacea*	Summer Annual	C	6"
Morningglory, Pitted	*Ipomoea lacunose*	Summer Annual	C	6"
Morningglory, Smallflower	*Jacquemontia tamnifolia*	Summer Annual	C	6"
Morningglory, Tall	*Ipomoea purpurea*	Summer Annual	C	6"
Mustard, Wild	*Brassica kaber*	Winter Annual	C	C
Onion, Wild	*Allium canadense*	Perennial	C	C
Pepperweed, Perennial	*Lepidium latifolium*	Perennial	–	C
Pigweed[3]	*Amaranthus* spp.	Summer Annual	C	6"
Plantain, Narrowleaf	*Plantago lanceolata*	Biennial	C	C
Poinsettia, Wild	*Euphorbia heterophylla*	Summer Annual	C	6"
Puncture Vine	*Tribulus terrestris*	Summer Annual	–	C
Purslane, Common	*Portulaca oleracea*	Summer Annual	C	4"
Pusley, Florida	*Richardia scabra*	Summer Annual	C	4"
Queen Anne's Lace	*Daucus carota*	Biennial	C	C
Ragweed, Common	*Ambrosia artemisiifolia*	Summer Annual	C	3"
Ragweed, Giant	*Ambrosia trifida*	Summer Annual	S	6"

*C = Control, S = Suppression in northern United States only.

**Maximum plant height in inches at time of application.

***See **SPECIAL WEED CONTROL** section.

[3]Some species are resistant and resistant biotypes are possible.

(continued)

WEEDS CONTROLLED - With 8 - 12 fl. oz. (0.13 - 0.19 lb. ae) per acre Propose *(continued)*

BROADLEAVES *(continued)*				
Common Name	**Scientific Name**	**Growth Habit**	C = Control S = Suppression	
			Pre-Emergence*	**Post-Emergence****
Ragweed, Western	*Ambrosia psilostachya*	Annual/Perennial	–	C
Rocket, Yellow	*Barbarea vulgaris*	Winter Annual	C	C
Senna, Coffee	*Cassia occidentalis*	Summer Annual	C	4"
Sicklepod	*Senna obtusifolia*	Summer Annual	C	6"
Sida, Prickly	*Sida spinosa*	Summer Annual	C	6"
Smartweed, Ladysthumb	*Polygonum persicaria*	Summer Annual	C	C
Smartweed, Pennsylvania	*Polygonum pensylvanicum*	Summer Annual	C	C
Smartweed, Swamp	*Polygonum coccineum*	Summer Annual	C	C
Spurge, Leafy	*Euphorbia esula*	Perennial	–	Fall***
Spurge, Spotted	*Euphorbia maculate*	Summer Annual	C	4"
Spurge, Toothed	*Euphorbia dentata*	Summer Annual	C	4"
Starbur, Bristly	*Acanthospermum hispidum*	Summer Annual	–	6"
Sunflower	*Helianthus annuus*	Summer Annual	–	18"
Tansymustard	*Descurainia pinnata*	Winter Annual	C	C
Teasel, Common	*Dipsacus fullonum*	Biennial	–	C
Thistle, Bull	*Cirsium vulgare*	Winter Annual/ Biennial	S	C
Thistle, Musk	*Carduus nutans*	Biennial	–	S
Thistle, Platt	*Cirsium canescens*	Perennial	S	C
Thistle, Russian***	*Salsola iberica*	Annual	C	3"
Toadflax, Dalmatian	*Linaria dalmatica*	Perennial	–	C***

*C = Control, S = Suppression in northern United States only.

**Maximum plant height in inches at time of application.

***See **SPECIAL WEED CONTROL** section.

(continued)

WEEDS CONTROLLED - With 8 - 12 fl. oz. (0.13 - 0.19 lb. ae) per acre Propose *(continued)*

BROADLEAVES *(continued)*				
Common Name	**Scientific Name**	**Growth Habit**	C = Control S = Suppression	
			Pre-Emergence*	**Post-Emergence****
Velvetleaf	*Abutilon theophrasti*	Annual	C	C
Vervain, Blue	*Verbena hastata*	Winter Annual	–	S
Vervain, Prostrate	*Verbena bracteata*	Perennial	–	C
Whitetop	*Cardaria* spp.	Perennial	–	C
Willowherb	*Epilobium* spp.	Perennial	–	C
Woodsorrel, Yellow	*Oxalis stricta*	Perennial	C	C
GRASS WEEDS				
Common Name	**Scientific Name**	**Growth Habit**	C = Control S = Suppression	
			Pre-Emergence*	**Post-Emergence****
Bahiagrass	*Paspalum notatum*	Perennial	S	C***
Barley, Little	*Hordeum pusillum*	Winter Annual	C	4"
Barley, Squirrel Tail	*Hordeum jubatum*	Perennial	–	C
Barnyardgrass	*Echinochloa crus-galli*	Summer Annual	C	6"
Brome, Downy	*Bromus tectorum*	Winter Annual	C	–
Cheat	*Bromus secalinus*	Winter Annual	C	C
Crabgrass	*Digitaria* spp.	Summer Annual	C	6"
Crowfootgrass	*Dactyloctenium aegyptium*	Summer Annual	C	C
Dallisgrass	*Paspalum dilatatum*	Perennial	S	C***
Dropseed, Tall	*Sporobolus cryptandrus*	Annual/Perennial	S	C
Fescue, Tall	*Festuca arundinacea*	Perennial	C	C***

*C = Control, S = Suppression in northern United States only.

**Maximum plant height in inches at time of application.

***See **SPECIAL WEED CONTROL** section.

(continued)

WEEDS CONTROLLED - With 8 - 12 fl. oz. (0.13 - 0.19 lb. ae) per acre Propose *(continued)*

GRASS WEEDS *(continued)*				
Common Name	**Scientific Name**	**Growth Habit**	C = Control S = Suppression	
			Pre-Emergence*	**Post-Emergence****
Foxtail, Giant	*Setaria faberi*	Summer Annual	C	C
Foxtail, Green	*Setaria viridis*	Summer Annual	C	C
Foxtail, Knotroot	*Setaria geniculatus*	Summer Annual	S	6"
Foxtail, Purple Robust	*Setaria viridis*	Summer Annual	S	S
Foxtail, Yellow	*Setaria glauca*	Summer Annual	C	4"
Garlic, Wild	*Allium vineale*	Perennial	C	C
Goosegrass	*Eleusine indica*	Summer Annual	C	3"S
Itchgrass	*Rottboellia cochinchinensis*	Summer Annual	–	C***
Johnsongrass, Rhizome	*Sorghum halepense*	Perennial	–	C***
Johnsongrass, Seedling	*Sorghum halepense*	Summer Annual	C	C
Medusahead	*Taeniatherum caput-medusa*	Winter Annual	C	C
Panicum, Fall	*Panicum dichotomiflorum*	Summer Annual	C	C
Panicum, Texas	*Panicum texanum*	Summer Annual	C	C
Ryegrass, Annual (Italian)	*Lolium multiflorum*	Winter Annual	C	C
Ryegrass, Perennial	*Lolium perenne*	Perennial	–	C
Sandbur	*Cenchrus* spp.	Annual/Perennial	S	C
Shattercane	*Sorghum bicolor*	Summer Annual	C	C
Signalgrass, Broadleaf	*Brachiaria platyphylla*	Summer Annual	C	C
Smutgrass	*Sporobolus indicus*	Perennial	–	C
Stiltgrass, Japanese	*Microstegium vimineum*	Annual	C	C

*C = Control, S = Suppression in northern United States only.
**Maximum plant height in inches at time of application.
***See **SPECIAL WEED CONTROL** section.

(continued)

WEEDS CONTROLLED - With 8 - 12 fl. oz. (0.13 - 0.19 lb. ae) per acre Propose *(continued)*

GRASS WEEDS *(continued)*				
Common Name	**Scientific Name**	**Growth Habit**	C = Control S = Suppression	
			Pre-Emergence*	**Post-Emergence****
Stinkgrass, Annual	*Eragrostis cilianensis*	Summer Annual	C	2"
Torpedograss	*Panicum repens*	Perennial	–	C
Vaseygrass	*Paspalum urvillei*	Perennial	–	C
Wild Oats	*Avena fatua*	Winter Annual	–	C
SEDGES/RUSHES				
Common Name	**Scientific Name**	**Growth Habit**	C = Control S = Suppression	
			Pre-Emergence*	**Post-Emergence****
Nutsedge, Purple	*Cyperus rotundus*	Perennial	C	C
Nutsedge, Yellow	*Cyperus esculentus*	Perennial	C	C
Rush	*Juncus* spp.	Annual/Perennial	S	4"

*C = Control, S = Suppression in northern United States only.
**Maximum plant height in inches at time of application.

STORAGE AND DISPOSAL

DO NOT contaminate water, food, or feed by storage or disposal.

PESTICIDE STORAGE: Keep from freezing. **DO NOT** store below 20°F.

PESTICIDE DISPOSAL: Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA regional office.

CONTAINER HANDLING:

Less Than or Equal to 5 Gallons. Nonrefillable container. **DO NOT** reuse or refill this container. Offer for recycling if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill or by incineration.

Greater Than 5 Gallons. Nonrefillable container. **DO NOT** reuse or refill this container. Offer for recycling, if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Dispose of empty container in a sanitary landfill or by incineration.

For Bulk and Mini-Bulk Containers. Refillable container. Refill this container with pesticide only. **DO NOT** use this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the person refilling. To clean container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10% full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by State and local authorities.

CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

NOTICE: Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather, presence of other materials or other influencing factors in the use of the product, which are beyond the control of Sharda USA LLC or Seller. To the extent consistent with applicable law, all such risks shall be assumed by Buyer and User, and Buyer and User agree to hold Sharda USA LLC and Seller harmless for any claims relating to such factors.

Sharda USA LLC warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. This warranty does not extend to the use of this product contrary to label instructions, or under conditions not reasonably foreseeable to or beyond the control of Seller or Sharda USA LLC and Buyer and User assume the risk of any such use. To the extent consistent with applicable law, SHARDA USA LLC MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

To the extent consistent with applicable law, neither Sharda USA LLC nor Seller shall be liable for any incidental, consequential, or special damages resulting from the use or handling of this product. **TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF SHARDA USA LLC AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF SHARDA USA LLC OR SELLER, THE REPLACEMENT OF THE PRODUCT.**

Sharda USA LLC and Seller offer this product, and Buyer and User accept it, subject to the foregoing Conditions of Sale and Limitation of Warranty and Liability, which may not be modified except by written agreement signed by a duly authorized representative of Sharda USA LLC.

IMAZAPIC | GROUP 2 | HERBICIDE

Propose

For Use on Conservation Reserve Program (CRP) Land, Paved Surfaces, and Pasture and Rangeland.

ACTIVE INGREDIENT:	**WT. BY %**
Ammonium salt of Imazapic: [(±)-2-[4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo-1*H*-imidazol-2-yl]-5-methyl-3-pyridinecarboxylic acid]*	23.6%
OTHER INGREDIENTS:	76.4%
TOTAL:	**100.0%**

Contains 2 pounds of active ingredient as the free acid per 1 gallon.
*Equivalent to 22.2% (±)-2-[4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo-1*H*-imidazol-2-yl]-5-methyl-3-pyridinecarboxylic acid

KEEP OUT OF REACH OF CHILDREN

CAUTION/PRECAUCIÓN

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand this label, find someone to explain it to you in detail.)

FIRST AID - IF SWALLOWED: • Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • **DO NOT** induce vomiting unless told to do so by a poison control center or doctor. • **DO NOT** give anything by mouth to an unconscious person. **IF ON SKIN OR CLOTHING:** • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15 - 20 minutes. • Call a poison control center or doctor for treatment advice. **IF IN EYES:** • Hold eye open and rinse slowly and gently with water for 15 - 20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.

HOTLINE NUMBER - Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For emergency information concerning this product, call your poison control center at **1-800-222-1222**. For general information on this product, contact the National Pesticides Information Center (NPIC) at **1-800-858-7378**, Monday through Friday, 8 AM to 12 PM PST, or at http://npic.orst.edu.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

Harmful if swallowed. Harmful if absorbed through skin. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse.

ENVIRONMENTAL HAZARDS

DO NOT apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. **DO NOT** contaminate water when cleaning equipment or disposing of equipment wash waters or rinsate.

STORAGE AND DISPOSAL

DO NOT contaminate water, food, or feed by storage or disposal. **PESTICIDE STORAGE:** Keep from freezing. **DO NOT** store below 20°F. **PESTICIDE DISPOSAL:** Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA regional office. **CONTAINER HANDLING:** Nonrefillable container. **DO NOT** reuse or refill this container. Offer for recycling if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill or by incineration.

See label booklet for additional Precautionary Statements and Directions For Use.

Manufactured For:
Sharda USA LLC, 7217 Lancaster Pike, Suite A
Hockessin, Delaware 19707

EPA Reg. No. 83529-169 EPA Est. No. DI 05905-IA-001; SC 39578-TX-001; MA 83411-MN-001; GH 70815-GA-002

The EPA Establishment Number is identified by the circled letters above that match the first two letters in the batch number.

Net Contents: 1 Gallon

OPEN HERE

GROUP 9 HERBICIDE

AquaNeat®

Aquatic Herbicide

FOR USE ON EMERGED AQUATIC WEEDS AND BRUSH IN AQUATIC SITES. FOR USE IN FORESTRY (INCLUDING WEED CONTROL IN CHRISTMAS TREE PLANTATIONS), PASTURES, RANGELANDS, RIGHTS-OF-WAY, HABITAT RESTORATION AREAS, NON-CROP AND OTHER LISTED APPLICATION SITES.

ACTIVE INGREDIENT:	
Glyphosate, N-(phosphonomethyl)glycine, in the form of its isopropylamine salt*	53.8%
OTHER INGREDIENTS:	46.2%
TOTAL:	100.0%

*Contains 648 grams per litre or 5.4 pounds per U.S. gallon of the active ingredient, glyphosate, in the form of its isopropylamine salt. Equivalent to 480 grams per litre or 4 pounds per U.S. gallon of the acid, glyphosate.

KEEP OUT OF REACH OF CHILDREN

CAUTION / PRECAUCION

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.
(If you do not understand the label, find someone to explain it to you in detail.)

SEE INSIDE BOOKLET FOR FIRST AID AND ADDITIONAL PRECAUTIONARY STATEMENTS

For Medical Emergencies, Call (877) 325-1840
For Chemical Spill, Leak, Fire, or Exposure, Call CHEMTREC (800) 424-9300

EPA Reg No. 228-365

Manufactured for
Nufarm Americas Inc.
11901 S. Austin Avenue
Alsip, IL 60803

Nufarm
Grow a better tomorrow

1 91662 01300 9

Net Contents
2.5 Gal.
(9.46 L)
Nonrefillable Container

14501000

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS
CAUTION / PRECAUCION

Harmful if inhaled. Avoid breathing spray mist. Remove contaminated clothing and wash clothing before reuse. Wash thoroughly with soap and water after handling.

FIRST AID	
IF INHALED	• Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. • Call a poison control center or doctor for further treatment advice.

HOT LINE NUMBER

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.
You may also contact 1-877-325-1840 for emergency medical treatment information.

PERSONAL PROTECTIVE EQUIPMENT (PPE):
Applicators and other handlers must wear long-sleeved shirt and long pants and shoes plus socks. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exists, use detergent and hot water. Keep and wash PPE separately from other laundry.

Engineering Control Statements: When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d)], the handler PPE requirements may be reduced or modified as specified in the WPS.

USER SAFETY RECOMMENDATIONS

Users Should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

ENVIRONMENTAL HAZARDS

For aquatic uses, do not contaminate water when disposing of equipment washwaters. Treatment of aquatic weeds can result in oxygen depletion or loss due to decomposition of dead plants. This oxygen loss can cause fish suffocation.

For terrestrial uses, do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark.

In case of, SPILL OR LEAK, soak up and remove to a landfill. Do not contaminate water when disposing of equipment washwaters or rinsate.

PHYSICAL OR CHEMICAL HAZARDS

Spray solutions of this product must be mixed, stored and applied using only stainless steel, aluminum, fiberglass, plastic and plastic-lined steel containers.

DO NOT MIX, STORE OR APPLY THIS PRODUCT OR SPRAY SOLUTIONS OF THIS PRODUCT IN GALVANIZED STEEL OR UNLINED STEEL (EXCEPT STAINLESS STEEL) CONTAINERS OR SPRAY TANKS. This product or spray solutions of this product react with such containers and tanks to produce hydrogen gas which may form a highly combustible gas mixture. This gas mixture could flash or explode, causing serious personal injury, if ignited by open flame, spark, welder's torch, lighted cigarette or other ignition source.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the State or Tribal agency responsible for pesticide regulation.

Read the entire label before using this product. Use strictly in accordance with label precautionary statements and directions.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protection equipment (PPE) and Restricted-Entry Interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the Restricted-Entry Interval (REI) of 4 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is: coveralls, shoes plus socks, and waterproof gloves.

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries or greenhouses. Keep people and pets off treated areas until spray solution has dried.

PRODUCT INFORMATION

DO NOT APPLY THIS PRODUCT USING AERIAL SPRAY EQUIPMENT EXCEPT UNDER CONDITIONS AS SPECIFIED WITHIN THIS LABEL OR CURRENT SUPPLEMENTAL LABELING ISSUED BY MANUFACTURER.

This product, a water-soluble liquid, mixes readily with water and nonionic surfactant to be applied as a foliar spray after dilution and thoroughly mixing with water in accordance with label instructions for the control or destruction of many herbaceous and woody plants.

Always use the higher rate of this product per acre within the specified range when vegetation is heavy or dense, when treating dense multi-canopied sites, or woody vegetation or difficult-to-control herbaceous or woody plants.

This product moves through the plant from the point of foliage contact to and into the root system. Visible effects on most annual weeds occur within 2 to 4 days but on most perennial brush species may not occur for 7 days or more. Extremely cool or cloudy weather following treatment may slow the activity of this product and delay visual effects of control. Visible effects are a gradual wilting and yellowing of the plant which advances to complete browning of above-ground growth and deterioration of underground plant parts.

Unless otherwise directed on this label, delay application until vegetation has emerged and reached the stages described for control of such vegetation under the “WEEDS CONTROLLED” section of this label.

Unemerged plants arising from unattached underground rhizomes or root stocks of perennials or brush will not be affected by the spray and will continue to grow. For this reason best control of most perennial weeds or brush is obtained when treatment is made at late growth stages approaching maturity.

Do not treat weeds or brush under poor growing conditions such as drought stress, disease or insect damage, as reduced control may result. Reduced results may also occur when treating weeds or brush heavily covered with dust.

Reduced control may result when applications are made to any weed or brush species that have been mowed, grazed or cut, and have not been allowed to regrow to the recommended stage for treatment.

Rainfall or irrigation occurring within 6 hours after application may reduce effectiveness. Heavy rainfall or irrigation within 2 hours after application may wash the product off the foliage and a repeat treatment may be required.

Mixing this product with herbicides or other materials not instructed in this label may result in reduced performance. However, unless otherwise prohibited on this label or the label of an intended tank mix product may be applied in combination with any herbicide registered for the same site, timing, and method of application. Observe the most restrictive label statements of various tank mix products used. TO THE FULLEST EXTENT PERMITTED BY LAW, BUYER AND ALL USERS ARE RESPONSIBLE FOR ALL LOSS OR DAMAGE IN CONNECTION WITH THE USE OR HANDLING OF MIXTURES OF THIS PRODUCT OR OTHER MATERIALS THAT ARE NOT EXPRESSLY SPECIFIED IN THIS LABEL.

For best results, spray coverage must be uniform and complete. Do not spray weed foliage to the point of runoff.

When this product comes in contact with soil (on the soil surface or as suspended soil or sediment in water) it is bound to soil particles. Under labeled use situations, once this product is bound to soil particles, it is not available for plant uptake and will not harm off-site vegetation where roots grow into the treatment area or if the soil is transported off-site. Under labeled use conditions, the strong affinity of this product to soil particles prevents this product from leaching out of the soil profile and entering ground water. The affinity between this product and soil particles remains until this product is degraded, which is primarily a biological degradation process carried out under both aerobic and anaerobic conditions by soil micro flora.

This product does not provide residual weed control. For subsequent residual weed control, follow a label-approved herbicide program. Read and carefully observe the cautionary statements and all other information appearing on the labels of all herbicides used. Read “**WARRANTY DISCLAIMER**” and “**LIMITATION OF LIABILITY**” before buying or using. If items are not acceptable, return at once unopened. Buyer and all users are responsible for all loss or damage in connection with the use of handling of mixtures of this product or other materials that are not expressly specified in this label.

For more product information, call toll-free 1-800-345-3330.

ATTENTION

AVOID CONTACT WITH FOLIAGE, GREEN STEMS, EXPOSED NON-WOODY ROOTS, OR FRUIT OF CROPS, DESIRABLE PLANTS AND TREES, SINCE SEVERE INJURY OR DESTRUCTION MAY RESULT. AVOID DRIFT. EXTREME CARE MUST BE USED WHEN APPLYING THIS PRODUCT TO PREVENT INJURY TO DESIRABLE PLANTS AND CROPS.

Do not allow the herbicide solution to mist, drip, drift or splash onto desirable vegetation since minute quantities of this product can cause severe damage or destruction to the crop, plants or other areas on which treatment was not intended. The likelihood of plant or crop injury occurring from the use of this product is greatest when winds are gusty or in excess of 5 miles per hour or when other conditions, including lesser wind velocities, will allow spray drift to occur. When spraying, avoid combinations of pressure and nozzle type that will result in splatter or fine particles (mist) which are likely to drift. AVOID APPLYING AT EXCESSIVE SPEED OR PRESSURE.

NOTE: Use of this product in any manner not consistent with this label may result in injury to persons, animals or crops, or other unintended consequences. When not in use, keep container closed to prevent spills and contamination.

WEED RESISTANCE

Any weed population may contain plants that are naturally resistant to glyphosate, the active ingredient in this product, and to other herbicides with the same mode of action. ATTENTION: These resistant weed biotypes will not be controlled by this product. Consult advisors such as your local agricultural extension service for agronomic management practices to minimize the occurrence of glyphosate resistance and considerations for supplemental control measures.

Weed Management

To minimize the occurrence of glyphosate-resistant biotypes, observe the following general weed management practices:

- Scout application site before and after herbicide applications.
- Start with a clean application site, using either a burndown herbicide application or tillage.
- Control weeds early when they are relatively small.
- Add other herbicides (e.g. a selective and/or a residual herbicide) and cultural practices (e.g. tillage or crop rotation) where appropriate.
- Utilize the specified label rate for the most difficult to control weed in your field. Avoid tank mixtures with other herbicides that reduce this product's efficacy (through antagonism), or tank mixture directions that encourage application rates of this product below the label directions.
- Control weed escapes and prevent weeds from setting seeds.
- Clean equipment before moving from field to field to minimize the spread of weed seed or plant parts.
- Report any incidence of repeated non-performance of this product on a particular weed to your Nufarm representative, local retailer, or county extension agent.

Management of Glyphosate-Resistant Biotypes

Since the occurrence of new glyphosate-resistant weeds cannot be determined until after product use and scientific confirmation, manufacturer is not responsible for any losses that may result from the failure of this product to control glyphosate-resistant weed biotypes.

The following good agronomic practices are recommended to reduce the spread of confirmed glyphosate-resistant biotypes:

- If a naturally occurring resistant biotype is present in your application site, this product should be tank-mixed or applied sequentially with an appropriately labeled herbicide with a different mode of action to achieve control.
- Cultural and mechanical control practices (e.g. crop rotation or tillage) may also be used as appropriate.
- Scout treated application site after herbicide applications and control escaping weeds including resistant biotypes before they set seed.
- Thoroughly clean equipment before leaving fields known to contain resistant biotypes.

MIXING AND APPLICATION INSTRUCTIONS

APPLY THESE SPRAY SOLUTIONS IN PROPERLY MAINTAINED AND CALIBRATED EQUIPMENT CAPABLE OF DELIVERING DESIRED VOLUMES. HAND-GUN APPLICATIONS MUST BE PROPERLY DIRECTED TO AVOID SPRAYING DESIRABLE PLANTS. NOTE: REDUCED RESULTS MAY OCCUR IF WATER CONTAINING SOIL IS USED, SUCH AS WATER FROM PONDS AND UNLINED DITCHES.

TANK MIXTURES

Always predetermine the compatibility of labeled tank mixtures of this product with water carrier by mixing small proportional quantities in advance. Mix labeled tank mixtures of this product with water as follows:

1. Place a 20 to 35 mesh screen or wetting basket over filling port.
2. Through the screen, fill the spray tank one-half full with water and start agitation.
3. If a wettable powder is used, make a slurry with the water carrier, and add it SLOWLY through the screen into the tank. Continue agitation.
4. If a flowable formulation is used, premix one part flowable with one part water. Add diluted mixture SLOWLY through the screen into the tank. Continue agitation.
5. If an emulsifiable concentrate formulation is used, premix one part emulsifiable concentrate with two parts water. Add diluted SLOWLY through the screen into the tank. Continue agitation.
6. Continue filling the spray tank with water and add the required amount of this product near the end of the filling process.
7. Where nonionic surfactant is recommended, add this to the spray tank before completing the filling process.
8. Add individual formulations to the spray tank as follows: wettable powder, flowable, emulsifiable concentrate, drift control additive, water soluble liquid followed by surfactant.

Maintain good agitation at all times until the contents of the tank are sprayed. If the spray mixture is allowed to settle, thorough agitation is required to resuspend the mixture before spraying is resumed. To prevent or minimize foam, avoid the use of mechanical agitators, place the filling hose below the surface of the spray solution, terminate by-pass and return lines at the bottom of the tank and if needed use an approved anti-foam or defoaming agent.

Use screen size in nozzle or line strainers that are no finer than 50 mesh. Carefully select proper nozzle to avoid spraying a fine mist. For best results with conventional ground application equipment, use flat fan nozzles.

Clean sprayer and parts immediately after using this product by thoroughly flushing with water.

For best results with conventional ground application equipment, use flat fan nozzles. Check for even distribution of spray droplets.

When using this product, mix 2 or more quarts of a nonionic surfactant per 100 gallons of spray solution. Use a nonionic surfactant labeled for use with herbicides. The surfactant must contain 50 percent or more active ingredient.

Always read and follow the manufacturer's surfactant label instructions for best results.

Do not use surfactants in excess of 1 quart per acre when making broadcast applications.

Colorants or marking dyes approved for use with herbicides may be added to spray mixtures of this product. Colorants or dyes used in spray solutions of this product may reduce performance, especially at lower rates or dilutions. Use colorants or dyes according to the manufacturer's label instructions.

Clean sprayer and parts immediately after using this product by thoroughly flushing with water and dispose of rinsate according to labeled use or disposal instructions.

Carefully observe all cautionary statements and other information appearing in the surfactant label.

APPLICATION EQUIPMENT AND TECHNIQUES

This product may be applied with the following application equipment:

Broadcast Spray

Controlled Droplet Applicator (CDA) - Hand-held or boom-mounted applicators which produce a spray consisting of a narrow range of droplet sizes.

Hand-Held and High-Volume Spray Equipment* - Knapsack and backpack sprayers, pump-up pressure sprayers, handguns, handwands, lances and other hand-held and motorized spray equipment used to direct the spray onto weed foliage.

*This product is not registered in California or Arizona for use in mistblowers.

Selective Equipment - Recirculating sprayers and wiper applicators. See the appropriate part of this section for specific instructions and rates of application.

Aerial - Fixed Wing and Helicopter

APPLICATION INFORMATION

Observe the following directions to minimize off-site movement during aerial application of this herbicide. Minimization of off-site movement is the responsibility of the grower, Pest Control Advisor, and aerial applicator.

BOOM EQUIPMENT

For control of weed or brush species listed in this label using conventional boom equipment - Use the specified rates of this product and surfactant in 3 to 30 gallons of water per acre as a broadcast spray, unless otherwise specified. See the "WEEDS CONTROLLED" section of this label for specific rates. As density of vegetation increases, spray volume may be increased within the specified range to ensure complete coverage. Carefully select correct nozzle to avoid spraying a fine mist. For best results with ground application equipment, use flat fan nozzles. Check for even distribution of spray droplets.

HAND-HELD AND HIGH-VOLUME EQUIPMENT

Use Coarse Sprays Only

For control of weeds listed in this label using knapsack sprayers or high-volume spraying equipment utilizing handguns or other suitable nozzle arrangements - Prepare a 0.75 to 2 percent solution of this product in water, add a nonionic surfactant and apply to foliage of vegetation to be controlled. For specific rates of application and instructions for control of various annual and perennial weeds, see the "WEEDS CONTROLLED" section in this label.

Apply on a spray-to-wet basis so that the spray coverage is uniform and complete. Do not spray to point of runoff.

This product may be used as a 5 to 8 percent solution plus 0.5 to 1 fluid ounce non-ionic surfactant per gallon spray solution for low-volume directed sprays for spot treatment of trees and brush. It is most effective in areas where there is a low density of undesirable trees or brush. If a straight stream nozzle is used, start the application at the top of the targeted vegetation and spray from top to bottom in a lateral zig-zag motion. Ensure that at least 50 percent of the leaves are contacted by the spray solution. For flat fan and cone nozzles and with hand-directed mist blowers, mist the application over the foliage of the targeted vegetation. Small, open-branched trees need only be treated from one side. If the foliage is thick or there are multiple root sprouts, applications must be made from several sides to ensure adequate spray coverage.

For use in knapsack sprayers, it is suggested that the specified amount of this product be mixed with water in a large container. Fill sprayer with the mixed solution and add the correct amount of surfactant.

Prepare the desired volume of spray solution by mixing the amount of this product in water as shown in the following table:

SPRAY SOLUTION

DESIRED VOLUME	AMOUNT OF PRODUCT					
	0.75%	1.0%	1.25%	1.5%	5.0%	8.0%
1 Gallon	1.0 fl. oz.	1.33 fl. oz.	1.66 fl. oz.	2.0 fl. oz.	6.0 fl. oz.	10.25 fl. oz.
25 Gallons	1.5 pts.	1.0 qt.	1.25 qts.	1.5 qts.	5.0 qts.	2.0 gals.
100 Gallons	3.0 qts.	1.0 gal.	1.25 gals.	1.5 gals.	5.0 gals.	8.0 gals.

2 Tablespoons = 1 fluid ounce

SELECTIVE EQUIPMENT

For terrestrial application, this product may be applied through a shielded applicator, or a wiper applicator after dilution and thorough mixing with water to listed weeds growing in any non-crop site specified on this label.

- A shielded applicator directs the herbicide solution onto weeds, while shielding desirable vegetation from the herbicide.
- A wiper applicator applies the herbicide solution onto weeds by rubbing the weed with an absorbent material containing the herbicide solution.

AVOID CONTACT WITH DESIRABLE VEGETATION.

This section summarizes the general weed control spectrum and rates of application for this herbicide. Additional information specific to individual use patterns is detailed in following sections.

AERIAL EQUIPMENT

Use the specified rates of this product and surfactant in 3 to 20 gallons of water per acre as a broadcast spray, unless otherwise specified. See the "WEEDS CONTROLLED" section of this label for specific rates. Unless otherwise specified, do not exceed 1.5 pints per acre. Aerial applications of this product may only be made as specified in this label.

AVOID DRIFT - DO NOT APPLY DURING LOW-LEVEL INVERSION CONDITIONS, WHEN WINDS ARE GUSTY OR UNDER ANY OTHER CONDITION WHICH WILL ALLOW DRIFT. DRIFT MAY CAUSE DAMAGE TO ANY VEGETATION CONTACTED TO WHICH TREATMENT IS NOT INTENDED. TO PREVENT INJURY TO ADJACENT DESIRABLE VEGETATION, APPROPRIATE BUFFER ZONES MUST BE MAINTAINED.

Coarse sprays are less likely to drift; therefore, do not use nozzles or nozzle configurations which dispense spray as fine spray droplets. Do not angle nozzles forward into the airstream and do not increase spray volume by increasing nozzle pressure above the manufacturer's instructions.

Drift control additives may be used. When a drift control additive is used, read and carefully observe the precautionary statements and all other information appearing in the additive label.

Ensure uniform application - To avoid streaked, uneven or overlapped application, use appropriate marking devices.

Thoroughly wash aircraft, especially landing gear, after each day of spraying to remove residues of this product accumulated during spraying or from spills. PROLONGED EXPOSURE OF THIS PRODUCT TO UNCOATED STEEL SURFACES MAY RESULT IN CORROSION AND POSSIBLE FAILURE OF THE PART. LANDING GEAR ARE MOST SUSCEPTIBLE. The maintenance of an organic coating (paint) which meets aerospace specification MIL-C-38413 may prevent corrosion.

For use of this product by air in California see additional instructions in "FOR AERIAL APPLICATION IN CALIFORNIA ONLY" Section.

FOR AERIAL APPLICATION IN CALIFORNIA ONLY

EXTREME CARE MUST BE EXERCISED TO AVOID CONTACT OF SPRAY WITH FOLIAGE, GREEN STEMS, OR FRUIT OF DESIRABLE CROPS, PLANTS, TREES, OR OTHER DESIRABLE VEGETATION SINCE SEVERE DAMAGE OR DESTRUCTION MAY RESULT.

Written Directions

A written direction MUST be submitted by or on behalf of the applicator to the Fresno County Agricultural Commissioner 24 hours prior to the application. This written direction MUST state the proximity of surrounding crops, and that conditions of each manufacturer's applicable product label(s) and this label have been satisfied.

Aerial Applicator Training and Equipment

Aerial application of this herbicide is limited to pilots who have successfully completed a Fresno County Agricultural Commissioner and California Department of Pesticide Regulation approved training program for aerial application of herbicides. All aircraft must be inspected, critiqued in flight, and certified at a Fresno County Agricultural Commissioner approved fly-in. Test and calibrate spray equipment at intervals sufficient to insure that proper rates of herbicides and adjuvants are being applied during commercial use. Applicator must document such calibrations and testing. Demonstration of performance at Fresno County Agricultural Commissioner approved "fly-ins" constitutes such documentation, or other written records showing calculations and measurements of flight and spray parameters acceptable to the Fresno County Agricultural Commissioner.

Application at night
Do not apply this product by air earlier than 30 minutes prior to sunrise and/or later than 30 minutes after sunset without prior permission from the Fresno County Agricultural Commissioner.

Aquatic and Other Noncrop Sites
When applied as directed and under the conditions described in the "Weeds Controlled" section of the label booklet for this product, this herbicide will control or partially control the labeled weeds growing in the following industrial and public areas, or other similar sites.

Aquatic Sites-including all bodies of fresh and brackish water which may be flowing, nonflowing or transient. This includes lakes, rivers, streams, ponds, seeps, irrigation and drainage ditches, canals, reservoirs, estuaries and similar sites.

If aquatic sites are present in the noncrop areas and are part of the intended treatment, read and observe the following directions: There is no limit on the use of treated water for irrigation, recreation or domestic purposes.

Consult local state fish and game agency and water control authorities before applying this product to public water. Permits may be required to treat such water.

NOTE: Do not apply this product within 1/2 mile upstream of an active potable water intake in flowing water (i.e., river, stream, etc.) or within 1/2 mile of an active potable water intake in a standing body of water such as a lake, pond or reservoir. To make aquatic applications around and within 1/2 mile of active potable water intakes, the water intake must be turned off for a minimum period of 48 hours after the application. The water intake may be turned on prior to 48 hours if the glyphosate level in the intake water is below 0.7 parts per million as determined by laboratory analysis. These aquatic applications may be made ONLY in those cases where there are alternative water sources or holding ponds which would permit the turning off of an active potable water intake for a minimum period of 48 hours after application.

This product does not control plants which are completely submerged or have a majority of their foliage underwater.

AVOID DRIFT - DO NOT APPLY WHEN WINDS ARE GUSTY OR UNDER ANY OTHER CONDITION WHICH WILL ALLOW DRIFT. DRIFT MAY CAUSE DAMAGE TO ANY VEGETATION CONTACTED TO WHICH TREATMENT IS NOT INTENDED. TO PREVENT INJURY TO ADJACENT DESIRABLE VEGETATION, APPROPRIATE BUFFER ZONES MUST BE MAINTAINED.

Use the following guidelines when aerial applications are made near crops or desirable perennial vegetation after bud break and before total leaf drop, and/or near other desirable vegetation or annual crops.

1. Do not apply within 100 feet of all desirable vegetation or crop(s).
2. If wind up to 5 miles per hour is blowing toward desirable vegetation or crop(s), do not apply within 500 feet of the desirable vegetation or crop(s).
3. Winds blowing from 5 to 10 miles per hour toward desirable vegetation or crop(s) may require buffer zones in excess of 500 feet.
4. Do not apply when winds are in excess of 10 miles per hour or when inversion conditions exist.

FOR AERIAL APPLICATION IN FRESNO COUNTY, CALIFORNIA ONLY

(From February 15 through March 31 only)

For aerial application outside of these dates (April 1 through February 14), refer to the "FOR AERIAL APPLICATION IN CALIFORNIA ONLY" section printed above.

Applicable Area
This supplement only applies to the area contained inside the following boundaries within Fresno County, California only.

North: Fresno County line
South: Fresno County line
East: State Highway 99
West: Fresno County line

Information
Always read and follow the label directions and precautionary statements for all products used in the aerial application. Observe the following directions to minimize off-site movement during aerial application of this product. Minimization of off-site movement is the responsibility of the grower, Pest Control Advisor and aerial applicator.

Written directions MUST be submitted by or on behalf of the applicator to the Fresno County Agricultural Commissioner 24 hours prior to the application. This written direction MUST state the proximity of surrounding crops, and that conditions of each manufacturer's product label and this label have been satisfied.

Aerial Applicator Training and Equipment
Aerial application of this product is limited to pilots who have successfully completed a Fresno County Agricultural Commissioner and California Department of Pesticide Regulation approved training program for aerial application of herbicides. All aircraft must be inspected, critiqued in flight and certified at a Fresno County Agricultural Commissioner approved fly-in. Test and calibrate spray equipment at intervals sufficient to insure that proper rates of herbicides and adjuvants are being applied during commercial use. Applicator must document such calibrations and testing. Demonstration of performance at Fresno County Agricultural Commissioner approved fly-ins constitutes such documentation, or other written records showing calculations and measurements of flight and spray parameters acceptable to the Fresno County Agricultural Commissioner.

Applications at Night—Do not apply this product by air earlier than 30 minutes prior to sunrise and/or later than 30 minutes after sunset without prior permission from the Fresno County Agricultural Commissioner.

For aerial application from April 1 through February 14, refer to the "FOR AERIAL APPLICATION IN CALIFORNIA ONLY" section printed above.

SPRAY DRIFT MANAGEMENT

Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment and weather related factors determine the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions. The following drift management requirements must be followed to avoid off-target drift movement from aerial applications. These requirements do not apply to forestry applications, public health uses or to applications using dry formulations.

1. The distance of the outer most operating nozzles on the boom must not exceed 3/4 the length of the rotor.
2. Nozzles must always point backward parallel with the air stream and never be pointed downward more than 45 degrees. Where states have more stringent regulations, they must be observed.

The applicator must be familiar with and take into account the information covered in the Aerial Drift Reduction Advisory Information.

Importance of Droplet Size

The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential, but will not prevent drift if applications are made improperly, or under unfavorable environmental conditions (see Wind, Temperature and Humidity, and Temperature Inversions sections of this label).

Controlling Droplet Size

- **Volume -** Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- **Pressure -** Do not exceed the nozzle manufacturer's specified pressures. For many nozzle types, lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure. Higher pressure reduces droplet size and does not improve canopy protection.
- **Number of Nozzles -** Use the minimum number of nozzles that provide uniform coverage.
- **Nozzle Orientation -** Orienting nozzles so that the spray is released backwards, parallel to the air stream produces larger droplets than other orientations. Significant deflection from horizontal will reduce droplet size and increase drift potential.
- **Nozzle Type -** Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift.
- **Boom Length -** For some use patterns, reducing the effective boom length to less than 3/4 of the wingspan or rotor length may further reduce drift without reducing swath width.
- **Application Height -** Applications must not be made at a height greater than 10 feet above the top of the largest plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

Swath Adjustment

When applications are made with a crosswind, the swath will be displaced downwind. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance must increase, with increasing drift potential (higher wind, smaller drops, etc.).

Wind

Drift potential is lowest between wind speeds of 2-10 mph. However, many factors, including droplet size and equipment type, determine drift potential at any given speed. Do not make applications when wind speed is below 2 mph due to variable wind direction and high inversion potential. Note: Local terrain can influence wind patterns. Every applicator must be familiar with local wind patterns and how they affect spray drift.

Temperature and Humidity

When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

Temperature Inversions

Applications must not occur during a local, low level temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of the smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

Sensitive Areas
Only make applications when the potential for drift to adjacent sensitive areas (e.g., residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops) is minimal (e.g. when wind is blowing away from the sensitive areas).

WEEDS CONTROLLED

ANNUAL WEEDS
Apply to actively growing annual grasses and broadleaf weeds.

Allow at least 3 days after application before disturbing treated vegetation. After this period the weeds may be mowed, tilled or burned. See "DIRECTIONS FOR USE", "PRODUCT INFORMATION" and "MIXING AND APPLICATION INSTRUCTIONS" for labeled uses and specific application instructions.

Broadcast Application - Use 1-1/2 pints of this product per acre plus 2 or more quarts of a nonionic surfactant per 100 gallons of spray solution, if weeds are less than 6 inches tall. If weeds are greater than 6 inches tall, use 2-1/2 pints of this product per acre plus 2 or more quarts of an approved nonionic surfactant per 100 gallons of spray solution.

Hand-Held, High-Volume Application - Use a 3/4 percent solution of this product in water plus 2 or more quarts of a nonionic surfactant per 100 gallons of spray solution and apply to foliage of vegetation to be controlled.

When applied as directed under the conditions described in this label, this product plus nonionic surfactant WILL CONTROL the following ANNUAL WEEDS:

Balsamapple**
Momordica charantia
Barley
Hordeum vulgare
Barnyardgrass
Echinochloa crus-galli
Bassia, fivehook
Bassia hyssopifolia
Bluegrass, annual
Poa annua
Bluegrass, bulbous
Poa bulbosa
Brome*
Bromus spp.
Buttercup
Ranunculus spp.
Cheat
Bromus secalinus
Chickweed, mouseear
Cerastium vulgatum
Cocklebur
Xanthium strumarium
Corn, volunteer
Zea mays
Crabgrass
Digitaria spp.
Dwarf dandelion
Krigia cespitosa
False dandelion
Krigia cespitosa
Falseflax, smallseed
Camelina microcarpa
Fiddleneck*
Amsinckia spp.
Flax leaf fleabane*
Conyza bonariensis
Fleabane
Erigeron spp.
Foxtail
Setaria spp.
Foxtail, Carolina
Alopecurus carolinianus
Groundsel, common
Senecio vulgaris
Horseweed/Marestail
Conyza canadensis
Kochia*
Kochia scoparia
Lambsquarters, common
Chenopodium album
Lettuce, prickly*
Lactuca serriola
Morningglory
Ipomoea spp.
Mustard, blue
Chorispora tenella
Mustard, tansy
Descurainia pinnata
Mustard, tumble
Sisymbrium altissimum
Mustard, wild
Sinapis arvensis
Oats, wild
Avena fatua
Panicum*
Panicum spp.
Pennycress, field
Thlaspi arvense
Pigweed, redroot
Amaranthus retroflexus
Pigweed, smooth
Amaranthus hybridus
Ragweed, common*
Ambrosia artemisiifolia
Ragweed, giant*
Ambrosia trifida
Rocket, London
Sisymbrium irio
Rye
Secale cereale
Ryegrass, Italian*
Lolium multiflorum
Sandbur, field
Cenchrus spp.
Shattercane
Sorghum bicolor
Shepherd's-purse
Capsella bursa-pastoris
Signalgrass, broadleaf
Brachiaria platyphylla
Smartweed, Pennsylvania
Polygonum pensylvanicum
Sowthistle, annual*
Sonchus oleraceus
Spanishneedles*
Bidens bipinnata
Spurry, umbrella
Holosteum umbellatum
Stinkgrass
Eragrostis cilianensis
Sunflower*
Helianthus annuus
Thistle, Russian
Salsola kali
Velvetleaf*
Abutilon theophrasti
Wheat
Triticum aestivum
Witchgrass
Panicum capillare

*Apply 3 pints of this product per acre.
**Apply with hand-held equipment only.

Annual weeds will generally continue to germinate from seed throughout the growing season. Repeat treatments will be necessary to control later germinating weeds.

PERENNIAL WEEDS

Apply this product as follows to control or destroy most vigorously growing perennial weeds. Unless otherwise directed, allow at least 7 days after application before disturbing vegetation.

See individual control instructions for specific weeds following the table. For other perennials listed on this label, apply 4-1/2 to 7-1/2 pints of product per acre as a broadcast spray or as a 3/4 to 1-1/2 percent solution with hand-held equipment. Apply when target plants are actively growing and most have reached early head or early bud stage of growth.

Add 2 or more quarts of a nonionic surfactant per 100 gallons of spray solution to the rates of this product given in this list. See the "PRODUCT INFORMATION", "DIRECTIONS FOR USE" and "MIXING AND APPLICATION" sections in this label for specific uses and application instructions.

NOTE: If weeds have been mowed or tilled, do not treat until regrowth has reached the recommended stages. Fall treatments must be applied before a killing frost.

Repeat treatments may be necessary to control weeds regenerating from underground parts or seed.

When applied as specified under the conditions described, this product plus surfactant WILL CONTROL the following PERENNIAL WEEDS:

Alfalfa
Medicago sativa
Alligatorweed*
Alternanthera philoxeroides
Anise/Fennel
Foeniculum vulgare
Artichoke, Jerusalem
Helianthus tuberosus
Bahiagrass
Paspalum notatum
Bermudagrass
Cynodon dactylon
Bindweed, field
Convolvulus arvensis
Bluegrass, Kentucky
Poa pratensis
Blueweed, Texas
Helianthus ciliaris
Brackenfern
Pteridium spp.
Bromegrass, smooth
Bromus inermis
Canarygrass, reed
Phalaris arundinacea
Cattail
Typha spp.
Clover, red
Trifolium pratense
Clover, white
Trifolium repens
Cogongrass
Imperata cylindrica
Cordgrass
Spartina spp.
Cutgrass, giant*
Zizaniopsis miliacea
Dallisgrass
Paspalum dilatatum
Dandelion
Taraxacum officinale
Dock, curly
Rumex crispus
Dogbane, hemp
Apocynum cannabinum
Fescue
Festuca spp.
Fescue, tall
Festuca arundinacea
Guineagrass
Panicum maximum
Hemlock, poison
Conium maculatum
Horsenettle
Solanum carolinense
Horseradish
Armoracia rusticana
Ice Plant
Mesembryanthemum crystallinum
Johnsongrass
Sorghum halepense
Kikuyugrass
Pennisetum clandestinum
Knapweed
Centaurea repens
Lantana
Lantana camara
Lespedeza: common, services
Lespedeza striata
Lespedeza cuneata
Loosestrife, purple
Lythrum salicaria
Lotus, American
Nelumbo lutea
Maidencane
Panicum hematomon
Milkweed
Asclepias spp.
Muhly, wirestem
Muhlenbergia frondonsa
Mullein, common
Verbascum thapsus
Napiergrass
Pennisetum purpureum
Nightshade, silverleaf
Solanum elaeagnifolium
Nutsedge: purple, yellow
Cyperus rotundus
Cyperus esculentus
Orchardgrass
Dactylis glomerata
Pampas grass
Cortaderia jubata
Paragrass
Brachiaria mutica
Phragmites**
Phragmites spp.
Quackgrass
Agropyron repens
Reed, giant
Arundo donax
Ryegrass, perennial
Lolium perenne
Smartweed, swamp
Polygonum coccineum
Spatterdock
Nuphar luteum
Starthistle, yellow
Centaurea solstitalis
Sweet potato, wild*
Ipomoea pandurata
Thistle, artichoke
Cynara cardunculus
Thistle, Canada
Cirsium arvense
Timothy
Phleum pratense
Torpedograss*
Panicum repens
Tules, common
Scirpus acutus
Vaseygrass
Paspalum urvillei
Velvetgrass
Holcus spp.
Waterhyacinth
Eichornia crassipes
Waterlettuce
Pistia stratiotes
Waterprimrose
Ludwigia spp.
Wheatgrass, western
Agropyron smithii

*Partial control.
**Partial control in southeastern states. See specific instructions below.

Alligatorweed - Apply 6 pints of this product per acre as a broadcast spray or as a 1-1/4 percent solution with hand-held equipment to provide partial control of alligatorweed. Apply when most of the target plants are in bloom. Repeat applications will be required to maintain such control.

Bermudagrass - Apply 7-1/2 pints of this product per acre as a broadcast spray or as a 1-1/2 percent solution with hand-held equipment. Apply when target plants are actively growing and when seedheads appear.

Bindweed, field/Silverleaf Nightshade/Texas Blueweed - Apply 6 to 7-1/2 pints of this product per acre as a broadcast spray west of the Mississippi River and 4-1/2 to 6 pints of this product per acre east of the Mississippi River. With hand-held equipment, use a 1-1/2 percent solution. Apply when target plants are actively growing and are at or beyond full bloom. For silverleaf nightshade, best results can be obtained when application is made after berries are formed. Do not treat when weeds are under drought stress. New leaf development indicates active growth. For best results apply in late summer or fall.

Brackenfern - Apply 4-1/2 to 6 pints of this product per acre as a broadcast spray or as a 3/4 to 1 percent solution with hand-held equipment. Apply to fully expanded fronds which are at least 18 inches long.

Cattail - Apply 4-1/2 to 6 pints of this product per acre as a broadcast spray or as a 3/4 percent solution with hand-held equipment. Apply when target plants are actively growing and are at or beyond the early-to-full bloom stage of growth. Best results are achieved when application is made during the summer or fall months.

Cogongrass - Apply 4-1/2 to 7-1/2 pints of this product per acre as a broadcast spray. Apply when cogongrass is at least 18 inches tall and actively growing in late summer or fall. Allow 7 or more days after application before tillage or mowing. Due to uneven stages of growth and the dense nature of vegetation preventing good spray coverage, repeat treatments may be necessary to maintain control.

Cordgrass - Apply 4-1/2 to 7-1/2 pints of this product per acre as a broadcast spray or as a 1 to 2 percent solution with hand-held equipment. Schedule applications in order to allow 6 hours before treated plants are covered by tidewater. The presence of debris and silt on the cordgrass plants will reduce performance. It may be necessary to wash targeted plants prior to application to improve uptake of this product into the plant.

Cutgrass, giant - Apply 6 pints of this product per acre as a broadcast spray or as a 1 percent solution with hand-held equipment to provide partial control of giant cutgrass. Repeat applications will be required to maintain such control, especially where vegetation is partially submerged in water. Allow for substantial regrowth to the 7- to 10-leaf stage prior to retreatment.

Dogbane, hemp/Knapweed/Horseradish - Apply 6 pints of this product per acre as a broadcast spray or as a 1-1/2 percent solution with hand-held equipment. Apply when target plants are actively growing and most have reached the late bud-to-flower stage of growth. For best results, apply in late summer or fall.

Fescue, tall - Apply 4-1/2 pints of this product per acre as a broadcast spray or as a 1 percent solution with hand-held equipment. Apply when target plants are actively growing and most have reached the boot-to-head stage of growth. When applied prior to the boot stage, less desirable control may be obtained.

Guineagrass - Apply 4-1/2 pints of this product per acre as a broadcast spray or as a 3/4 percent solution with hand-held equipment. Apply when target plants are actively growing and when most have reached at least the 7-leaf stage of growth.

Johnsongrass/Bluegrass, Kentucky/Bromegrass, smooth/Canarygrass, reed/Orchardgrass/Ryegrass, perennial/Timothy/Wheatgrass, western - Apply 3 to 4-1/2 pints of this product per acre as a broadcast spray or as a 3/4 percent solution with hand-held equipment. Apply when target plants are actively growing and most have reached the boot-to-head stage of growth. When applied prior to the boot stage, less desirable control may be obtained. In the fall, apply before plants have turned brown.

Lantana - Apply this product as a 3/4 to 1 percent solution with hand-held equipment. Apply to actively growing Lantana at or beyond the bloom stage of growth. Use the higher application rate for plants that have reached the woody stage of growth.

Loosestrife, purple - Apply 4 pints of this product per acre as a broadcast spray or as a 1 to 1-1/2 percent solution using hand-held equipment. Treat when plants are actively growing at or beyond the bloom stage of growth. Best results are achieved when application is made during summer or fall months. Fall treatments must be applied before a killing frost.

Lotus, American - Apply 4 pints of this product per acre as a broadcast spray or as a 3/4 percent solution with hand-held equipment. Treat when plants are actively growing at or beyond the bloom stage of growth. Best results are achieved when application is made during summer or fall months. Fall treatments must be applied before a killing frost. Repeat treatment may be necessary to control regrowth from underground parts and seeds.

Maidencane/Paragrass - Apply 6 pints of this product per acre as a broadcast spray or as a 3/4 percent solution with hand-held equipment. Repeat treatments will be required, especially to vegetation partially submerged in water. Under these conditions, allow for regrowth to the 7- to 10-leaf stage prior to retreatment.

Milkweed, common - Apply 4-1/2 pints of this product per acre as a broadcast spray or as a 1-1/2 percent solution with hand-held equipment. Apply when target plants are actively growing and most have reached the late bud-to-flower stage of growth.

Nutsedge: purple, yellow - Apply 4-1/2 pints of this product per acre as a broadcast spray, or as a 3/4 percent solution with hand-held equipment to control existing nutsedge plants and immature nutlets attached to treated plants. Apply when target plants are in flower or when new nutlets can be found at rhizome tips. Nutlets which have not germinated will not be controlled and may germinate following treatment. Repeat treatments will be required for long-term control.

Pampasgrass - Apply a 1-1/2 percent solution of this product with hand-held equipment when plants are actively growing.

Phragmites - For partial control of phragmites in Florida and the counties of other states bordering the Gulf of Mexico, apply 7-1/2 pints per acre as a broadcast spray or apply a 1-1/2 percent solution with hand-held equipment. In other areas of the U.S., apply 4 to 6 pints per acre as a broadcast spray or apply a 3/4 percent solution with hand-held equipment for partial control. For best results, treat during late summer or fall months when plants are actively growing and in full bloom. Due to the dense nature of the vegetation, which may prevent good spray coverage and uneven stages of growth, repeat treatments may be necessary to maintain control. Visual control symptoms will be slow to develop.

Quackgrass/Kikuyugrass/Muhly, wirestem - Apply 3 to 4-1/2 pints of this product per acre as a broadcast spray or as a 3/4 percent solution with hand-held equipment when most quackgrass or wirestem muhly is at least 8 inches in height (3- to 4-leaf stage of growth) and actively growing. Allow 3 or more days after application before tillage.

Reed, giant/ice plant - For control of giant reed and ice plant, apply a 1-1/2 percent solution of this product with hand-held equipment when plants are actively growing. For giant reed, best results are obtained when applications are made in late summer to fall.

Spatterdock - Apply 6 pints of this product per acre as a broadcast spray or as a 3/4 percent solution with hand-held equipment. Apply when most plants are in full bloom. For best results, apply during the summer or fall months.

Sweet potato, wild - Apply this product as a 1-1/2 percent solution using hand-held equipment. Apply to actively growing weeds that are at or beyond the bloom stage of growth. Repeat applications will be required. Allow the plant to reach the recommended stage of growth before retreatment.

Thistle: Canada, artichoke - Apply 3 to 4-1/2 pints of this product per acre as a broadcast spray or as a 1-1/2 percent solution with hand-held equipment for Canada thistle. To control artichoke thistle, apply a 2 percent solution as a spray to wet application. Apply when target plants are actively growing and are at or beyond the bud stage of growth.

Torpedograss - Apply 6 to 7-1/2 pints of this product per acre as a broadcast spray or as a 3/4 to 1-1/2 percent solution with hand-held equipment to provide partial control of torpedograss. Use the lower rates under terrestrial conditions, and the higher rates under partially submerged or a floating mat condition. Repeat treatments will be required to maintain such control.

Tules, common - Apply this product as a 1-1/2 percent solution with hand-held equipment. Apply to actively growing plants at or beyond the seedhead stage of growth. After application, visual symptoms will be slow to appear and may not occur for 3 or more weeks.

Waterhyacinth - Apply 5 to 6 pints of this product per acre as a broadcast spray or apply a 3/4 to 1 percent solution with hand-held equipment. Apply when target plants are actively growing and at or beyond the early bloom stage of growth. After application, visual symptoms may require 3 or more weeks to appear with complete necrosis and decomposition usually occurring within 60 to 90 days. Use the higher rates when more rapid visual effects are desired.

Waterlettuce - For control, apply a 3/4 to 1 percent solution using hand-held equipment to actively growing plants. Use higher rates where infestations are heavy. Best results are obtained from mid-summer through winter applications. Spring applications may require retreatment.

Waterprimrose - Apply this product as a 3/4 percent solution using hand-held equipment. Apply to plants that are actively growing at or beyond the bloom stage of growth, but before fall color changes occur. Thorough coverage is necessary for best control.

Other perennials listed on this label - Apply 4-1/2 to 7-1/2 pints of this product per acre as a broadcast spray or as a 3/4 to 1-1/2 percent solution with hand-held equipment. Apply when target plants are actively growing and most have reached early head or early bud stage of growth.

WOODY BRUSH AND TREES

See individual control instructions for specific woody brush and trees to be controlled in the following table. For partial control of other woody brush and trees listed in the table, apply 1.5 to 7.5 quarts of this product per acre as a broadcast spray or as a 0.75 to 10 percent solution with hand-held equipment.

Apply the specified rate of this product plus 2 or more quarts of a nonionic surfactant per 100 gallons of spray solution when plants are actively growing and, unless otherwise directed, after full-leaf expansion. Use the higher rate for larger plants and/or dense areas of growth. On vines, use the higher rate for plants that have reached the woody stage of growth. Best results are obtained when application is made in late Summer or Fall after fruit formation.

Applied as a 5 to 8 percent solution as a directed application as described in the “HAND-HELD AND HIGH-VOLUME EQUIPMENT” section, this product will control or partially control all species listed in this section of the label. Use the higher rate of application for dense stands and larger woody brush and trees.

In arid areas, best results are obtained when application is made in the Spring or early Summer when brush species are at high moisture content and are flowering. Ensure thorough coverage when using hand-held equipment. Symptoms may not appear prior to frost or senescence with Fall treatment.

Allow 7 or more days after application before mowing or removal. Repeat treatments may be necessary to control plants regenerating from underground parts or seed. Some autumn colors on undesirable deciduous species are acceptable provided no major leaf drop has occurred. Reduced performance may result if Fall treatments are made following a frost.

Application Rates[1]

METHOD OF APPLICATION	APPLICATION RATE	SPRAY VOLUME (Gallons/Acre)
Broadcast		
Aerial	1.5 to 7.5 qts./ acre	5 to 30
Ground	1.5 to 7.5 qts./ acre	10 to 60
Spray-to-Wet		
Handgun, Backpack, Mistblower	0.75% to 2.0% by volume	Spray-to-Wet
Low Volume Directed Spray[2]		
Handgun, Backpack, Mistblower	5.0% to 10.0% by volume	Partial Coverage

[1] Where repeat applications are necessary do not exceed 8.0 quarts per acre per year.

[2] For low volume directed spray applications, coverage should be uniform with at least 50 percent of the foliage contacted. For best results, coverage of the top one-half of the plant is important.

NOTE: If brush has been mowed or tilled or trees have been cut, do not treat until regrowth has reached the recommended stage of growth.

When applied as specified under the conditions described, this product plus surfactant CONTROLS or PARTIALLY CONTROLS the following woody brush plants and trees:

Alder
Alnus spp.
Ash*
Fraxinus spp.
Aspen, quaking
Populus tremuloides
Bearclover, Bearmat
Chamaebatia foliolosa
Birch
Betula spp.
Blackberry
Rubus spp.
Broom:
French
Cytisus monspessulanus
Scotch
Cytisus scoparius
Buckwheat, California*
Eriogonum fasciculatum
Cascara*
Rhamnus purshiana
Catsclaw*
Acacia greggi
Ceanothus
Ceanothus spp.
Chamise
Adenostoma fasciculatum
Cherry:
Bitter
Prunus emarginata
Black
Prunus serotina
Pin
Prunus pensylvanica
Coyote brush
Bacharis consanguinea
Creeper, Virginia*
Parthenocissus quinquefolia
Dewberry
Rubus trivialis
Dogwood
Cornus spp.
Elderberry
Sambucus spp.
Elm*
Ulmus spp.
Eucalyptus, bluegum
Eucalyptus globules
Hasardia*
Haplopappus squamosus
Hawthorn
Crataegus spp.
Hazel
Corylus spp.
Hickory
Carya spp.
Holly, Florida; Brazilian Peppertree
Schinus terebinthifolius
Honeysuckle
Lonicera spp.
Hornbeam, American
Carpinus caroliniana
Kudzu
Pueraria lobata
Locust, black*
Robinia pseudoacacia
Manzanita
Arctostaphylos spp.
Maple:
Red**
Acer rubrum
Sugar
Acer saccharum
Vine*
Acer circinatum
Monkey Flower*
Mimulus guttatus
Oak:
Black*
Quercus velutina
Northern pine
Quercus palustris
Post
Quercus stellata
Red
Quercus rubra
Southern red
Quercus falcata
White*
Quercus alba
Persimmon*
Diospyros spp.
Poison Ivy
Rhus radicans
Poison Oak
Rhus toxicodendron
Poplar, yellow*
Liriodendron tulipifera
Prunus
Prunus spp.
Raspberry
Rubus spp.
Redbud, eastern
Cercis canadensis
Rose, multiflora
Rosa multiflora
Russian-olive
Elaeagnus angustifolia
Sage: black, white
Salvia spp.
Sagebrush, California
Artemisia californica

(continued)

Salmonberry
Rubus spectabilis
Salt cedar*
Tamarix spp.
Saltbush, Sea myrtle
Baccharis halimifolia
Sassafras
Sassafras aibidum
Sourwood*
Oxydendrum arboreum

Sumac:
Poison*
Rhus vernix
Smooth*
Rhus glabra
Winged*
Phus copallina
Sweet gum
Liquidambar styraciflua
Swordfern*
Polystichum munitum

Tallowtree, Chinese
Sapium sebiferum
Thimbleberry
Rubus parviflorus
Tobacco, tree*
Nicotiana glauca
Trumpetcreeper
Campsis radicans
Waxmyrtle, southern*
Myrica cerifera
Willow
Salix spp.

*Partial control
**See below for control or partial control instruction.

See the "DIRECTIONS FOR USE" and "MIXING AND APPLICATION INSTRUCTIONS" sections in this label for labeled use and specific application instructions.

Apply the product as follows to control or partially control the following woody brush and trees.

Alder/Blackberry/Dewberry/Honeysuckle/Oak, Post/Raspberry - For control, apply 4-1/2 to 6 pints per acre as a broadcast spray or as a 3/4 to 1-1/4 percent solution with hand-held equipment.

Aspen, Quaking/Hawthorn/Trumpetcreeper - For control, apply 3 to 4-1/4 pints of this product per acre as a broadcast spray or as a 3/4 to 1-1/4 percent solution with hand-held equipment.

Birch/Elderberry/Hazel/Salmonberry/Thimbleberry - For control, apply 3 pints per acre of this product as a broadcast spray or as a 3/4 percent solution with hand-held equipment.

Broom: French, Scotch - For control, apply a 1-1/4 to 1-1/2 percent solution with hand-held equipment.

Buckwheat, California/Hasardia/Monkey Flower/Tobacco, Tree - For partial control of these species apply a 3/4 to 1-1/2 percent solution of this product as a foliar spray with hand-held equipment. Thorough coverage of foliage is necessary for best results.

Catsclaw - For partial control, apply a 1-1/4 to 1-1/2 percent solution with hand-held equipment when at least 50 percent of the new leaves are fully developed.

Cherry: Bitter, Black, Pin/Oak, Southern Red/Sweet Gum/Prunus - For control, apply 3 to 7-1/2 pints of this product per acre as a broadcast spray or as a 1 to 1-1/2 percent solution with hand-held equipment.

Coyote brush - For control, apply a 1-1/4 to 1-1/2 percent solution with hand-held equipment when at least 50 percent of the new leaves are fully developed.

Dogwood/Hickory/Salt cedar - For partial control, apply a 1 to 2 percent solution of this product with hand-held equipment or 6 to 7-1/2 pints per acre as a broadcast spray.

Eucalyptus, bluegum - For control of eucalyptus resprouts, apply a 1-1/2 percent solution of this product with hand-held equipment when resprouts are 6- to 12-feet tall. Ensure complete coverage. Apply when plants are actively growing. Avoid application to drought-stressed plants.

Holly, Florida/Waxmyrtle, southern - For partial control, apply this product as a 1-1/2 percent solution with hand-held equipment.

Kudzu - For control, apply 6 pints of this product per acre as a broadcast spray or as a 1-1/2 percent solution with hand-held equipment. Repeat applications will be required to maintain control.

Maple, Red - For control, apply as a 3/4 to 1-1/4 percent solution with hand-held equipment when leaves are fully developed. For partial control, apply 2 to 7-1/2 pints of this product per acre as a broadcast spray.

Maple, Sugar/Oak: Northern Pine, Red - For control, apply as a 3/4 to 1-1/4 percent solution with hand-held equipment when at least 50 percent of the new leaves are fully developed.

Poison Ivy/Poison Oak - For control, apply 6 to 7-1/2 pints of this product per acre as a broadcast spray or as a 1-1/2 percent solution with hand-held equipment. Repeat applications may be required to maintain control. Fall treatments must be applied before leaves lose green color.

Rose, multiflora - For control, apply 3 pints of this product per acre as a broadcast spray or as a 3/4 to 1-1/2 percent solution with handheld equipment. Make treatments prior to leaf deterioration by leaf-feeding insects.

Sage, black/Sagebrush, California/Chamise/Tallowtree, Chinese - For control of these species, apply a 3/4 percent solution with hand-held equipment. Thorough coverage of foliage is necessary for best results.

Saltbush, Sea myrtle - For control, apply this product as a 1 percent solution with hand-held equipment.

Willow - For control, apply 4-1/2 pints of this product per acre as a broadcast spray or as a 3/4 percent solution with hand-held equipment.

Other woody brush and trees listed in this label - For partial control, apply 3 to 7-1/2 pints of this product per acre as a broadcast spray or as a 3/4 to 1-1/2 percent solution with hand-held equipment.

PASTURE AND RANGELANDS

PASTURES

LABELED GRASSES: Bahiagrass, Bermudagrass, Bluegrass, Brome, Fescue, Guineagrass, Kikuyugrass, Orchardgrass, Pangola grass, Ryegrass, Timothy and Wheatgrass.

TYPES OF APPLICATIONS: Preplant, Preemergence, Pasture Renovation, Spot Treatment, Over-the-Top Wiper Applications, Postemergent Weed Control (Broadcast Treatments).

Preplant, Preemergence, Pasture Renovation

USE INSTRUCTIONS: This product can be applied prior to planting or emergence of forage grasses or used to control perennial pasture species listed on this label prior to re-planting.

RESTRICTIONS: If application rates total 4.5 pints per acre or less, no waiting period between treatment and feeding of livestock grazing is required. If the rate is greater than 4.5 pints per acre, remove domestic livestock before application and wait 8 weeks after application before grazing or harvesting. Crops listed for treatment in this label may be planted into the treated area at any time; for other crops, wait 30 days between application and planting.

Spot Treatment, Over-the-Top Wiper Applications

USE INSTRUCTIONS: This product can be applied as a spot treatment or with wiper applicators in pastures. Applications may be made in the same area at 30-day intervals.

PRECAUTIONS: To achieve maximum performance, remove domestic livestock before application and wait 7 days after application before grazing livestock or harvesting.

RESTRICTIONS: For spot treatments or wiper application methods using rates of 4.5 pints per acre or less, the entire field or any portion of it may be treated. When spot treatments or wiper application are made using rates above 4.5 pints per acre, no more than 10 percent of the total pasture may be treated at any one time.

Postemergent Weed Control (Broadcast Treatments)

USE INSTRUCTIONS: This product can be used to suppress competitive growth and seed production of annual weeds and undesirable vegetation in pastures. For selective applications with broadcast spray equipment, apply 9 to 12 fluid ounces of this product per acre in early spring before desirable perennial grasses break dormancy and initiate green growth. Late fall applications can be made after desirable perennial grasses have reached dormancy.

PRECAUTIONS: Some stunting of perennial grasses will occur if broadcast applications are made when plants are not dormant. No waiting period is required between application and grazing or harvesting for feed. Use of higher application rates will cause stand reductions.

RESTRICTIONS: Do not apply more than 72 fluid ounces per acre per year onto pasture grasses except for renovation uses (see instructions above). If replanting is needed due to severe stand reduction, applications must be made at least 30 days prior to planting any crop not listed for treatment in this label.

RANGELANDS

TYPES OF APPLICATIONS: Postemergence.

This product will control or suppress many annual weeds growing in perennial cool and warm-season grass rangelands.

Preventing viable seed production is key to the successful control and invasion of annual grassy weeds in rangelands. Follow-up applications in sequential years should eliminate most of the viable seeds. Delay grazing of treated areas to encourage growth of desirable perennials. Allowing desirable perennials to flower and reseed in the treated area will encourage successful transition.

USE INSTRUCTIONS: Apply 9 to 12 fluid ounces of this product per acre to control or suppress many weeds, including downy brome, cheatgrass, cereal rye and jointed goatgrass in rangelands. Apply when most brome plants are in early flower and before the plants, including seedheads, turn color. Allowing for secondary weed flushes to occur in the spring following rain events further depletes the seed reserve and encourages perennial grass conversion on weedy sites. Fall applications are possible, and recommended, where spring moisture is usually limited and fall germination allows for good weed growth.

For medusahead, apply 12 fluid ounces of this product per acre at the 3-leaf stage. Delaying applications beyond this stage will result in reduced or unacceptable control. Controlled burning may be useful in eliminating the thatch layer produced by slow decaying culms prior to application. Allow new growth to occur before spraying after a burn. Repeat applications in subsequent years may be necessary to eliminate the seedbank before reestablishing desirable perennial grasses in medusahead-dominated rangelands.

PRECAUTIONS: Slight discoloration of the desirable grasses may occur, but they will regreen and regrow under moist soil conditions as effects of this product wear off. No waiting period between treatment and feeding of livestock or grazing is required.

RESTRICTIONS: Do not use ammonium sulfate when spraying rangeland grasses with this product. Do not apply more than 4.5 pints per acre per year.

RANGELAND AND PASTURE THE USE OF SURFACTANT

When using this product for use on Rangeland and Pasture the use of a nonionic surfactant is required. Mix two or more quarts of a nonionic surfactant per 100 gallons of spray solution. Examples of when to use the higher surfactant rate include, but are not limited to: high water volumes, adverse environmental conditions, tough to control weeds, weeds under stress, surfactants with less than 70 percent active ingredient, tank mixes, etc.

When applied as directed under the conditions described, this product controls annual and perennial weeds listed in the label booklet. Do not reduce rates of this product when adding surfactant. DO NOT add buffering agents or pH adjusting agents to the spray solution when AquaNeat is the only pesticide used.

NON-CROP USES

See "PRODUCT INFORMATION" and "MIXING AND APPLICATION INSTRUCTIONS" sections of this label for essential product performance information and the following "NON-CROP" sections for specific uses.

EXTREME CARE MUST BE EXERCISED TO AVOID CONTACT OR SPRAY WITH FOLIAGE, GREEN STEMS, EXPOSED NON-WOODY ROOTS OR FRUIT OF CROPS, DESIRABLE TURFGRASSES, TREES, SHRUBS OR OTHER DESIRABLE VEGETATION SINCE SEVERE DAMAGE OR DESTRUCTION MAY RESULT.

Repeat treatments may be necessary to control weeds regenerating from underground parts or seeds. Where repeat applications are necessary, do not exceed 8 quarts of this product per acre per year.

This product does not provide residual weed control. For subsequent weed control, follow a label-approved herbicide program.

Read and carefully observe the cautionary statements and all other information appearing on the labels of all herbicides used.

INDUSTRIAL AND PUBLIC AREAS

When applied as directed for "NON-CROP USES", under conditions described, this product may be used to control the listed weeds.

Non-Crop Sites - This product may be used to control the listed weeds in terrestrial noncrop sites and/or in aquatic sites within these areas:

airfields; airports; lanes, trails & access roads; around commercial or industrial structures or outbuildings; around farm and ranch structures and outbuildings; around ornamental gardens; around ornamental trees & shrubs; bare ground; construction sites; ditch banks; driveways & ramps; dry ditches & canals; fences & fencerows; firebreaks; golf courses: gravel yards; habitat restoration & management areas; highways & roadsides (including aprons, medians, guardrails & right of ways); industrial plant sites; industrial areas; lumber yards; mulched areas; natural areas; paths and trails; parking areas; paved areas; petroleum & other tank farms; pumping installations; pipeline, power, telephone & utility rights-of-way; power stations; railroad rights-of way; refineries; storage areas; substations; uncropped farmstead areas; uncultivated non-agricultural areas; wastelands; & wildlife habitat areas.

This product is a non-selective herbicide that is diluted and applied to the foliage of actively growing weeds as a spot or broadcast application. It is absorbed by the leaves and moves throughout the stem and roots to control the entire plant. Visible symptoms may require a week or more to appear, with burndown usually occurring in 2 to 4 weeks. Symptoms are a gradual wilting and yellowing of the sprayed plant followed by deterioration of both shoots and roots. This product has no herbicide activity in the soil and will not wash or leach to affect nearby vegetation. Any ornamental species may be planted in treated areas 7 days or more after application. For most effective results, delay mowing, clipping, planting or sodding of treated areas for at least 7 days after application. This allows time for this product to move within the plant.

For specific rates of application and instructions for control of particular annual weeds, perennial weeds, woody brush and trees, see the "WEEDS CONTROLLED" section of this label. These applications may be made to large affected areas or as spot treatments. For general use in small areas, see alternative instructions below under "Small Area Treatment With Hand-held Sprayers".

Unless the "Agriculture Use Requirements" on this label are observed, the following restrictions apply:

Not for use on plants being grown for sale or other commercial use, or for commercial seed production, or for research purposes. For use on plants intended for aesthetic purposes or climactic modification and being grown on golf courses.

AVOID SPRAY DRIFT CONTACT WITH DESIRABLE LAWN GRASSES, FLOWERS, VEGETABLES, SHRUBS OR TREES. DO NOT CONTACT GREEN BARK OF TREES OR SHRUBS. IF DESIRABLE VEGETATION IS CONTACTED, WASH IMMEDIATELY WITH WATER.

Depending on the type of non-crop application, this product may be applied with boom equipment, high-volume spray equipment and hand-held sprayers as described in the respective portions of the "APPLICATION EQUIPMENT and TECHNIQUES" section of the label. Additionally, the product may be applied with recirculating sprayers, shielded applicators, or wiper applicators in any non-crop site specified on this label. See the "Selective Equipment" part of "APPLICATION EQUIPMENT AND TECHNIQUES" section of this label for information on proper use and calibration of this equipment.

Small Area Treatment With Hand-held Sprayers

Add 2.25 to 4.5 fluid ounces of this product plus 0.5 to 1 fluid ounce of nonionic surfactant to 1 gallon of clean water. Use the low rate for many grasses and annual weeds. Use the higher specified rate for control of perennials and brush. Use pump-up sprayer, backpack sprayer or other sprayer suitable for small areas. Adjust equipment to deliver a coarse spray pattern. USE OF HOSE-END SPRAYERS OR SPRINKLER-TYPE DEVICES MAY NOT BE USED.

TANK MIXTURES FOR NON-CROP SITES

When applied as a tank mixture, this product provides control of the emerged annual weeds and partial control of the emerged perennial weeds listed in this label. When applied as a tank mixture, the following residual herbicides will provide preemergence control of the weeds listed in the individual product labels.

This product PLUS Diuron
This product PLUS Krovar® I
This product PLUS Princep®, Caliber®90, Simazine 4L, 80W or 90DF
This product PLUS Surflan®75W, Surflan AS
This product PLUS Ronstar®50WP
This product PLUS Spyder or Spyder Extra
This product PLUS ProClipse
This product PLUS Polaris AC Complete

When tank mixing with residual herbicides, add an nonionic surfactant at 0.5 to 1 percent by volume of spray solution. See the "APPLICATION EQUIPMENT AND TECHNIQUES" section of this label before preparing these tank mixtures.

Read and carefully observe the label claims, precautionary statements, specified use rate and all other information on the labels of all products used in these tank mixtures.

Use according to the most restrictive label directions for each product in the mixture.

CONTROL OF EMERGED WEEDS

Note: For backpack sprayer and handgun applications, see the "HAND-HELD AND HIGH VOLUME EQUIPMENT" section for specified rates.

Annual Weeds

Apply 1.5 pints per acre of this product in these tank mixtures when weeds are less than 6 inches tall and 2.25 pints per acre when weeds are more than 6 inches tall.

Perennial Weeds

For partial control of perennial weeds using these tank mixtures, apply 1.5 to 7.5 pints per acre of this product. Follow the recommendations in the "WEEDS CONTROLLED" section of this label for stage of growth and rate of application for specific perennial weeds.

PREEMERGENCE WEED CONTROL

For preemergence weed control, refer to the individual product labels for specific non-crop sites, rates, carrier volumes and precautionary statements.

Mix only the quantity of spray solution which can be used during the same day. Do not allow these tank mixtures to stand overnight as this may result in reduced weed control.

BROADCAST APPLICATION FOR WEED CONTROL IN CHRISTMAS TREE PLANTATIONS

NOTE: IF THIS PRODUCT IS IMPROPERLY APPLIED, IT HAS THE POTENTIAL TO CAUSE SEVERE INJURY TO CHRISTMAS TREES. FOLLOW ALL LABELED DIRECTIONS.

This product may be applied as a broadcast spray over established Christmas trees. To prevent drift onto nearby desirable crops or vegetation, ensure that adequate buffers are maintained.

The following Christmas tree species are approved for this application:

- Douglas Fir (*Pseudotsuga menziesii*)
- Fir species (*Abies* spp.)
- Spruce species (*Picea* spp.)

Do not apply this product until trees have completed at least a full growing season since planting or transplanting.

Pre-harvest Interval (PHI): Do not apply within 1 full year prior to tree harvest.

In the fall, applications may only be made after the formation of final conifer resting buds. Final resting buds must be in the dormant stage and fully hardened. If applications are made at any other time, unacceptable Christmas tree injury may occur.

Avoid spray pattern overlap, as injury may result.

Apply 24 fluid ounces of this product per acre in 5 to 30 gallons of water per acre.

NOTE: ADDING SURFACTANTS, ADDITIVES CONTAINING SURFACTANTS, OR ANY OTHER ADDITIVES TO THIS PRODUCT MAY RESULT IN SEVERE CHRISTMAS TREE INJURY.

In some areas, this product may be used at rates from 24 to 48 fluid ounces per acre. Consult your local Nufarm representative for specific instructions if you require rates that exceed 24 fluid ounces per acre.

Do not use drift control additives as they may increase Christmas tree injury. Do not use other herbicides in a tank mix with this product as Christmas trees could be severely injured.

SILVICULTURAL SITES AND RIGHTS-OF-WAY

NOTE: DO NOT USE AS AN OVER-THE-TOP BROADCAST SPRAY IN SILVICULTURAL NURSERIES.

When applied as directed for "NON-CROP USES" under conditions described this product controls undesirable vegetation listed on this label. This product also suppresses or controls undesirable vegetation listed on this label when applied at specified rates for release of established coniferous species listed on this label.

For specific rates of application and instructions for control of various brush, annual and perennial weeds, see the "WEEDS CONTROLLED" section of this label. For specific rates of application for release of listed coniferous species, see the "CONIFER RELEASE" part of this section of the label.

Where repeat applications are necessary, do not exceed 8 quarts of this product per acre per year.

Aerial Application

This product may be applied using aerial spray equipment for silvicultural site preparation, conifer release and rights-of-way treatments. See the "APPLICATION EQUIPMENT and TECHNIQUES" part of the "MIXING AND APPLICATION INSTRUCTIONS APPLICATION EQUIPMENT AND TECHNIQUES" section of this label for information on how to apply this product by air.

DO NOT APPLY THIS PRODUCT BY AIR TO RIGHTS-OF-WAY SITES IN THE STATE OF CALIFORNIA.
For aerial application, do not exceed 8 quarts per acre per year.
The maximum aerial application rate is 7-1/2 quarts per application.

SITE PREPARATION

Following preplant applications of this product, any silvicultural species may be planted.

POST DIRECTED SPRAY

In established silvicultural sites, use as a spray on the foliage of undesirable vegetation. Care must be exercised to avoid contact of spray, drift or mist with foliage or green bark of desirable species.

CONIFER RELEASE

For release, apply at the end of the first growing season, except in California. Do not disturb vegetation of target weeds or trees prior to treatment or until visual symptoms appear after treatment. Symptoms of treatment are slow to appear, especially in woody species treated in late Fall. **Injury may occur to conifers treated for release, especially where spray patterns overlap or the higher rates are applied or when applications are made during periods of active conifer growth.**

Applications must be made after formation of final conifer resting buds in the fall or prior to initial bud swelling in spring. Some autumn colors on undesirable deciduous species are acceptable provided no major leaf drop has occurred. Use the following rates for conifer release to control or partially control the weeds listed in the "WEEDS CONTROLLED" section of this label.

For release of the following conifer species:

Douglas Fir	**Fir**	**Hemlock**	**Pines***	**Spruce**
Pseudotsuga menziesii	*Abies* spp.	*Tsuga* spp.	*Pinus* spp.	*Picea* spp.

*Includes all species except eastern white pine, loblolly pine or slash pine.

Apply 2.25 to 3 pints of this product per acre except in Washington and Oregon, west of the crest of the Cascade Mountains. For Spring treatments west of the crest of the Cascade Mountains, apply 1 quart of this product per acre before conifer bud swell for control of annual weeds. For Fall treatments in Washington and Oregon, west of the crest of the Cascade Mountains, apply 1.5 to 2.25 pints of this product per acre before any major leaf drop of deciduous species. Add 10 fluid ounces nonionic surfactant per 2 pints of this product. In Maine, up to 4.5 pints per acre may be used for the control of difficult weeds.

Note for Douglas fir release: Ensure that surfactant has been adequately tested for Douglas fir safety and follow manufacturer's specifications for rate of application.

For release of Western hemlock, apply 1 quart of this product per acre.

For release of the following conifer species:

Loblolly Pine	**Eastern white pine**	**Slash pine**
Pinus taeda	*Pinus strobus*	*Pinus elliottii*

Late Season Application - Apply 2-1/4 to 3 pints of this product in a minimum of 5 gallons of spray solution per acre during early autumn. Nufarm does not recommend the use of a crop oil concentrate or MSO (methylated seed oil) based surfactant for use in southern conifer species release with this product. The addition of a tested and approved southern conifer release surfactant is recommended. Applications made prior to September 1 or when conditions are conducive to rapid growth of conifers will create the potential for increased injury in the form of tip and/or needle burn. Injury may decrease with later applications. Some autumn colors are acceptable at time of application. Apply prior to frost or leaf drop of undesirable plants.

Applications made according to label directions will release loblolly pine, eastern white pine and slash pine by reducing competition from the following species:

Ash	**Hawthorn**	**Oak, Post**	**Poplar, yellow**	**Sumac, Smooth**
Fraxinus spp.	*Crataegus* spp.	*Quercus stellata*	*Liriodendron tulipfera*	*Rhus glabra*
Cherry, Black	**Locust, Black**	**Oak, Southern Red**	**Sassafras**	**Sumac, Winged**
Prunus serotina	*Robinia pseudoacacia*	*Quercus falcata*	*Sassafras aibidum*	*Rhus copallina*
Cherry, Pin	**Maple, Red**	**Oak, White**	**Sourwood**	**Sweetgum**
Prunus pensylvanica	*Acer rubra*	*Quercus alba*	*Oxydendrum arboreum*	*Liquidambar styraciflua*
Elm	**Oak, Black**	**Persimmon**	**Sumac, Poison**	
Ulmus spp.	*Quercus velutina*	*Diospyros* spp.	*Rhus vernix*	

Apply only to those sites where woody brush and trees listed in this label constitute the majority of the undesirable species.

For aerial application, do not exceed 8 quarts per acre per year.
The maximum aerial application rate is 7-1/2 quarts per application.

THIS PRODUCT PLUS SPYDER TANK MIXTURES FOR CONIFER RELEASE FROM HERBACEOUS WEEDS

To release Loblolly pines, Slash, Red pine and Virginia pine from herbaceous weeds, tank mixtures of this product with Spyder will provide control of annual weeds listed in the "WEEDS CONTROLLED" section of this and the Spyder label, and partial control of the perennial weeds listed below .

Apply 12 to 18 fluid ounces of this product plus 2 to 4 fluid ounces of Spyder in 10 to 30 gallons of spray solution per acre. Nufarm does not recommend the use of a crop oil concentrate or MSO (methylated seed oil) based surfactant for use in southern conifer species release with this product. The addition of a tested and approved southern conifer release surfactant is recommended. Make application to actively growing weeds as a broadcast spray over the top of the young Loblolly pine, Red pine, Slash pine and Virginia pine.

This tank mixture may be applied using aerial equipment. For aerial application, do not exceed 8 quarts of this product (8 lbs. ae glyphosate) per acre per year. The maximum aerial application rate is 7-1/2 quarts per application.

When applying by air, use the specified rate in 5 to 15 gallons of spray solution per acre. This product plus Spyder tank mixtures may not be applied by air in California.

For control of annual weeds below 12 inches in height (or runner length on annual vines), use the lower rates of both products.

Use the higher rates of both products when annual weeds are in more advanced stages of growth and approaching flower or seed formation.

Use the higher rates of both products for partial control of the following perennial weeds. Use the lower rates for suppression of growth.

Bahiagrass	**Dock, curly**	**Fescues, tall**	**Poorjoe***	**Vaseygrass**
Paspalum notatum	*Rumex crispus*	*Festuca arundinacea*	*Diodia teres*	*Paspalum urvillei*
Broomsedge	**Dogfennel**	**Johnsongrass***	**Trumpetcreeper****	**Vervain, blue**
Andropogon virginicus	*Eupatorium capilliflorium*	*Sorghum halepense*	*Campsis radicans*	*Verbena hastata*

*Control at the higher rates

**Suppression at the higher rates only.

Pine damage may occur or can be accentuated if treatment takes place when young trees are under stress from drought, flood water, insects or disease, or are in an active growth stage.

Read and observe the cautionary statements and all other information appearing on the labels of all herbicides used.

Note To User: This product must not be used in areas where adverse impact on federally designated endangered/threatened plant or aquatic species is likely. Prior to making applications, the user of this product must determine that no such species are located in or immediately adjacent to the area to be treated.

WILDLIFE HABITAT RESTORATION AND MANAGEMENT AREAS

This product is for the restoration and/or maintenance of native habitat and in wildlife management areas.

Habitat Restoration and Maintenance

When applied as directed, exotic and other undesirable vegetation may be controlled in habitat management areas. Applications may be made to allow recovery of native plant species, to open up water to attract waterfowl, and for similar broad-spectrum vegetation control requirements in habitat management areas. Spot treatments may be made to selectively remove unwanted plants for habitat enhancement. For spot treatments, care must be exercised to keep spray off of desirable plants.

Wildlife Food Plots

This product may be used as site preparation treatment prior to planting wildlife food plots. Apply as directed to control vegetation in the plot area. Any wildlife food species may be planted after applying this product, or native species may be allowed to re-infest the area. If tillage is needed to prepare a seedbed, wait 7 days after applying this product before tilling to allow for maximum effectiveness.

WIPER APPLICATIONS

For wick or wiper applications, mix 1 gallon of this product with 2 gallons of clean water to make a 33 percent solution. Addition of a nonionic surfactant at a rate of 10 percent by volume of total herbicide solution is recommended.

Wiper applications can be used to control or suppress annual and perennial weeds listed on this label. In heavy weed stands, a double application in opposite directions may improve results. See the “WEEDS CONTROLLED” section in this label for specified timing, growth stage and other instructions for achieving optimum results.

CUT STUMP APPLICATION

Woody vegetation may be controlled by treating freshly cut stumps of trees and resprouts with this product. Apply this product using suitable equipment to ensure coverage of the entire cambium. Cut vegetation close to the soil surface. **Apply a 50 to 100 percent solution of this product to the freshly-cut surface immediately after cutting.** Delay in application may result in reduced performance. For best results, make applications during periods of active growth and full leaf expansion.

When used according to directions for cut stump application, this product will control, partially control or suppress many types of woody brush and tree species, some of which are listed below:

Alder	**Eucalyptus**	**Maple**	**Reed, Giant**	**Sycamore**
Alnus spp.	*Eucalyptus* spp.	*Acer* spp.	*Arundo donax*	*Platanus occidentalis*
Coyote Brush	**Hickory**	**Oak**	**Salt cedar**	**Tan Oak**
Baccharis consanguinea	*Carya* spp.	*Quercus* spp.	*Tamarix* spp.	*Lithocarpus densiflorus*
Dogwood	**Madrone**	**Poplar**	**Sweet gum**	**Willow**
Cornus spp.	*Arbutus menziesii*	*Populus spp.*	*Liquidambar styraciflua*	*Salix* spp.

INJECTION AND FRILL APPLICATIONS

Woody vegetation may be controlled by injection or frill application of this product. Apply this product using suitable equipment which must penetrate into living tissue. Apply the equivalent of 1 ml of this product per 2 to 3 inches of trunk diameter. This is best achieved by applying 25 to 100 percent concentration of this product either to a continuous frill around the tree or as cuts evenly spaced around the tree below all branches. As tree diameter increases in size, better results are achieved by applying dilute material to a continuous frill or more closely spaced cuttings. Avoid application techniques that allow runoff to occur from frill or cut areas in species that exude sap freely after frills or cutting. In species such as these, make frill or cut at an oblique angle so as to produce a cupping effect and use undiluted material. For best results, make applications during periods of active growth and full leaf expansion.

Control		Suppression	
Oak	*Quercus* spp.	**Black Gum***	*Nyssa sylvatica*
Poplar	*Populus* spp.	**Dogwood**	*Cornus* spp.
Sweetgum	*Liquidambar styraciflua*	**Hickory**	*Carya* spp.
Sycamore	*Platanus occidentalis*	**Maple, Red**	*Acer rubrum*

*This product is not approved for this use on this species in the state of California.

INJECTION METHOD FOR CONTROL OF JAPANESE KNOTWEED *(Polygonum cuspidatum)* & GIANT KNOTWEED *(Polygonum polystachyum)*

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in any manner inconsistent with its labeling.

This label must be in the possession of the user at the time of application.

All applicable directions and precautions in the AquaNeat Herbicide label booklet must be followed.

See the ''PRODUCT INFORMATION'' and ''MIXING AND APPLICATION INSTRUCTIONS" sections of this product's label booklet for essential product performance information.

This product may be used for control of Japanese knotweed and giant knotweed using individual stem treatment. Individual knotweed stems may be treated by injecting up to 5 ml of this product, undiluted directly into the hollow stem just below a node. Make a hole suitable for injecting the herbicide through both sides of the stem using an awl or other convenient pointed tool about 6 inches above the ground, just below a node. (Nodes are circular thickenings or scars surrounding the stem where leaves are or were previously attached.) The herbicide is then injected into this hole. Each stem of the knotweed plant must be treated.

This product can be injected using any injection device capable of delivering a 5 ml dose. For convenience and accuracy, a hand-operated injection device designed to deliver repeated pre-measured doses from a supply reservoir is recommended.

Commercially available dose measuring equipment may be adapted for this purpose. Calibrate the devise to deliver a dose of 5 ml per injection cycle. A sharpened hollow probe for puncturing the stem and delivery of the herbicide can also be integrated into the delivery system.

Restriction: Do not apply more than 7.5 quarts of this product per acre. At 5 ml per stem, 7.5 quarts is sufficient to treat a maximum of 1,420 stems per acre.

RELEASE OF BERMUDAGRASS OR BAHIAGRASS ON NONCROP SITES
RELEASE OF DORMANT BERMUDAGRASS AND BAHIAGRASS

When applied as directed, this product will provide control or suppression of many winter annual weeds and tall fescue for effective release of dormant bermudagrass or bahiagrass. Make applications to dormant bermudagrass or bahiagrass.

For best results on winter annuals, treat when weeds are in an early growth stage (below 6 inches in height) after most have germinated. For best results on tall fescue, treat when fescue is in or beyond the 4- to 6-leaf stage.

WEEDS CONTROLLED

Rate for control or suppression of winter annuals and tall fescue are listed below.

Apply the specified rates of this product in 10 to 25 gallons of water per acre, plus 2 quarts nonionic surfactant per 100 gallons of total spray volume.

WEEDS CONTROLLED OR SUPPRESSED*

NOTE: C = Control
S = Suppression

	AQUANEAT AQUATIC HERBICIDE (FLUID OZ/ACRE)					
WEED SPECIES	**6**	**9**	**12**	**18**	**24**	**48**
Barley, little *Hordeum pusillum*	**S**	**C**	**C**	**C**	**C**	**C**
Bedstraw, catchweed *Galium aparine*	**S**	**C**	**C**	**C**	**C**	**C**
Bluegrass, annual *Poa annual*	**S**	**C**	**C**	**C**	**C**	**C**
Chervil *Chaerophyllum tainturieri*	**S**	**C**	**C**	**C**	**C**	**C**
Chickweed, common *Stellaria media*	**S**	**C**	**C**	**C**	**C**	**C**
Clover, crimson *Trifolium incarnatum*	**.**	**S**	**S**	**C**	**C**	**C**
Clover, large hop *Trifolium campestre*	**.**	**S**	**S**	**C**	**C**	**C**
Speedwell, corn *Veronica arvensis*	**S**	**C**	**C**	**C**	**C**	**C**
Fescue, tall *Festuca arundinacea*	**.**	**.**	**.**	**.**	**S**	**S**
Geranium, Carolina *Geranium carolinianum*	**.**	**.**	**S**	**S**	**C**	**C**
Henbit *Lamium amplexicaule*	**.**	**S**	**C**	**C**	**C**	**C**
Ryegrass, Italian *Lolium multiflorum*	**.**	**.**	**S**	**C**	**C**	**C**
Vetch, common *Vicia sativa*	**.**	**.**	**S**	**C**	**C**	**C**

*These rates apply only to sites where an established competitive turf is present.

RELEASE OF ACTIVELY GROWING BERMUDAGRASS

NOTE: USE ONLY ON SITES WHERE BAHIAGRASS OR BERMUDAGRASS ARE DESIRED FOR GROUND COVER AND SOME TEMPORARY INJURY OR YELLOWING OF THE GRASSES CAN BE TOLERATED.

When applied as directed, this product will aid in the release of bermudagrass by providing control of annual species listed in the "WEEDS CONTROLLED" section in this label, and suppression or partial control of certain perennial weeds.

For control or suppression of those annual species listed in this label, use 3/4 to 2-1/4 pints of this product as a broadcast spray in 10 to 25 gallons of spray solution per acre, plus 2 quarts of a nonionic surfactant per 100 gallons of total spray volume. Use the lower rate when treating annual weeds below 6 inches in height (or length of runner in annual vines). Use the higher rate as size of plants increases or as they approach flower or seedhead formation.

Use the higher rate for partial control or longer-term suppression of the following perennial species. Use lower rates for shorter-term suppression of growth.

Bahiagrass Johnsongrass**
Dallisgrass Trumpetcreeper*
Fescue (tall) Vaseygrass

*Suppression at the higher rate only.
**Johnsongrass is controlled at the higher rate.

Use only on well-established bermudagrass. Bermudagrass injury may result from the treatment but regrowth will occur under moist conditions. Do not make repeat applications in the same season, since severe injury may result.

BAHIAGRASS SEEDHEAD AND VEGETATIVE SUPPRESSION

When applied as directed in the "NONCROP SITES" section in this label, this product will provide significant inhibition of seedhead emergence and will suppress vegetative growth for a period of approximately 45 days with single applications and approximately 120 days with sequential applications.

Apply this product 1 to 2 weeks after full green-up of bahiagrass or after the bahiagrass has been mowed to a uniform height of 3 to 4 inches. Applications must be made prior to seedhead emergence. Apply 5 fluid ounces per acre of this product, plus 2 quarts of an approved nonionic surfactant per 100 gallons of total spray volume in 10 to 25 gallons of water per acre.

Sequential applications of this product plus nonionic surfactant may be made at approximately 45-day intervals to extend the period of seedhead and vegetative growth suppression. For continued vegetative growth suppression, sequential applications must be made prior to seedhead emergence.

Apply no more than 2 sequential applications per year. As a first sequential application, apply 3 fluid ounces of this product per acre plus nonionic surfactant. A second sequential application of 2 to 3 fluid ounces per acre plus nonionic surfactant may be made approximately 45 days after the last application.

ANNUAL GRASS GROWTH SUPPRESSION

For growth suppression of some annual grasses, such as annual ryegrass, wild barley and wild oats growing in coarse turf on roadsides or other industrial areas, apply 3 to 4 ounces of this product in 10 to 40 gallons of spray solution per acre. Mix 2 quarts of a nonionic surfactant per 100 gallons of spray solution. Make application when annual grasses are actively growing and before the seedheads are in the boot stage of development. Treatments made after seedhead emergence may cause injury to the desired grasses.

AQUATIC SITES

When applied as directed and under the conditions described in the "WEEDS CONTROLLED" section in this label, this product will control or partially control the labeled weeds growing in aquatic sites.

Aquatic Sites - This product may be applied to emerged weeds in all bodies of fresh and brackish water which may be flowing, non-flowing or transient. This includes lakes, rivers, streams, ponds, estuaries, rice levees, seeps, irrigation and drainage ditches, canals, reservoirs, wastewater treatment facilities, wildlife habitat restoration and management areas, and similar sites.

Wetland Sites - This product may be used in and around water (aquatic areas) and wetlands found in forestry and in power, telephone and pipeline rights-of-way sites including where these sites are adjacent to or surrounding domestic water supply reservoirs, supply streams, lakes and ponds. Read and observe the following before making applications in and around water.

If aquatic sites are present in the noncrop area and are part of the intended treatment, read and observe the following directions:

This product does not control plants which are completely submerged or have a majority of their foliage under water.

There is no restriction on the use of treated water for irrigation, recreation or domestic purposes.

Consult local state fish and game agency and water control authorities before applying this product in, around and to public water. Permits may be required to treat such water.

Do not spray open bodies of water where woody brush, trees and herbaceous weeds do not exist. The maximum application rate of 3.75 quarts per acre must not be exceeded in a single over-water broadcast application except as follows, where any specified rate may be applied:

- Stream crossings in utility right-of-way.
- Where applications will result in less than 20 percent of the total water area being treated.

Restrictions: Do not apply this product directly to water within 1/2 mile up-stream of an active potable water intake in flowing water (i.e., river, stream, etc.) or within 1/2 mile of an active potable water intake in a standing body of water such as lake, pond or reservoir. To make aquatic applications around and within 1/2 mile of active potable water intakes, the water intake must be turned off for a minimum period of 48 hours after the application. The water intake may be turned on prior to 48 hours if the glyphosate level in the intake water is below 0.7 parts per million as determined by laboratory analysis. These aquatic applications may be made ONLY in those cases where there are alternative water sources or holding ponds which would permit the turning off of an active potable water intake for a minimum period of 48 hours after the applications. This restriction does not apply to intermittent inadvertent overspray of water in terrestrial use sites.

For treatments after drawdown of water or in dry ditches, allow 7 or more days after treatment before reintroduction of water to achieve maximum weed control. Apply this product within 1 day after drawdown to ensure application to actively growing weeds. Floating Mats of vegetation may require retreatment. Avoid wash-off of sprayed foliage by spray boat or recreational boat backwash or by rainfall within 6 hours of application. Do not re-treat within 24 hours following the initial treatment.

Applications made to moving bodies of water must be made while traveling upstream to prevent concentration of this herbicide in water. When making any bankside applications, do not overlap more than 1 foot into open water. Do not spray in bodies of water where weeds do not exist.

Maximum Application Rate: Do not exceed 8 quarts per acre per year. The maximum application rate of 7-1/2 quarts per acre must not be exceeded in any single ground broadcast application or aerial broadcast application that is being made over water.

When emerged infestations require treatment of the total surface area of impounded water, treating the area in strips may avoid oxygen depletion due to decaying vegetation. Oxygen depletion may result in fish kill.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

PESTICIDE STORAGE: Do not store below 32ºF or above 100ºF. Store in original container in a well-ventilated area separately from fertilizer, feed, and food stuffs. Avoid cross-contamination with other pesticides.

PESTICIDE DISPOSAL: Pesticide wastes are toxic. Wastes resulting from this product may be disposed of on site or at an approved waste disposal facility. Improper disposal of excess pesticide, spray mix, or rinsate is a violation of federal law. If these wastes cannot be disposed of according to label instructions, contact the state agency responsible for pesticide regulation or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER HANDLING:
NOTE: This product is available in multiple containers. Refer to the Net Contents section of this products labeling for the applicable "Nonrefillable" or "Refillable" designation. Follow the container handling instructions below that apply to your container type / size.

Nonrefillable Containers 5 Gallons or Less: Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. **Triple rinse as follows:** Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities. Plastic containers are also disposable by incineration, or, if allowed by State and local authorities, by burning. If burned stay out of smoke

Nonrefillable containers larger than 5 gallons: Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available. Triple rinse or pressure rinse container (or equivalent) promptly after emptying. **Triple rinse as follows:** Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. **Pressure rinse as follows:** Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

Refillable containers larger than 5 gallons: Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or a mix tank. Fill the container about 10% full with water and, if possible, spray all sides while adding water. If practical, agitate vigorously or recirculate water with the pump for two minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

WARRANTY DISCLAIMER

The directions for use of this product must be followed carefully. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, (1) THE GOODS DELIVERED TO YOU ARE FURNISHED "AS IS" BY MANUFACTURER OR SELLER AND (2) MANUFACTURER AND SELLER MAKE NO WARRANTIES, GUARANTEES, OR REPRESENTATIONS OF ANY KIND TO BUYER OR USER, EITHER EXPRESS OR IMPLIED, OR BY USAGE OF TRADE, STATUTORY OR OTHERWISE, WITH REGARD TO THE PRODUCT SOLD, INCLUDING, BUT NOT LIMITED TO MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, USE, OR ELIGIBILITY OF THE PRODUCT FOR ANY PARTICULAR TRADE USAGE. UNINTENDED CONSEQUENCES, INCLUDING BUT NOT LIMITED TO INEFFECTIVENESS, MAY RESULT BECAUSE OF SUCH FACTORS AS THE PRESENCE OR ABSENCE OF OTHER MATERIALS USED IN COMBINATION WITH THE GOODS, OR THE MANNER OF USE OR APPLICATION, INCLUDING WEATHER, ALL OF WHICH ARE BEYOND THE CONTROL OF MANUFACTURER OR SELLER AND ASSUMED BY BUYER OR USER. THIS WRITING CONTAINS ALL OF THE REPRESENTATIONS AND AGREEMENTS BETWEEN BUYER, MANUFACTURER AND SELLER, AND NO PERSON OR AGENT OF MANUFACTURER OR SELLER HAS ANY AUTHORITY TO MAKE ANY REPRESENTATION OR WARRANTY OR AGREEMENT RELATING IN ANY WAY TO THESE GOODS.

LIMITATION OF LIABILITY

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, IN NO EVENT SHALL MANUFACTURER OR SELLER BE LIABLE FOR SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, OR FOR DAMAGES IN THEIR NATURE OF PENALTIES RELATING TO THE GOODS SOLD, INCLUDING USE, APPLICATION, HANDLING, AND DISPOSAL. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, MANUFACTURER OR SELLER SHALL NOT BE LIABLE TO BUYER OR USER BY WAY OF INDEMNIFICATION TO BUYER OR TO CUSTOMERS OF BUYER, IF ANY, OR FOR ANY DAMAGES OR SUMS OF MONEY, CLAIMS OR DEMANDS WHATSOEVER, RESULTING FROM OR BY REASON OF, OR RISING OUT OF THE MISUSE, OR FAILURE TO FOLLOW LABEL WARNINGS OR INSTRUCTIONS FOR USE, OF THE GOODS SOLD BY MANUFACTURER OR SELLER TO BUYER. ALL SUCH RISKS SHALL BE ASSUMED BY THE BUYER, USER, OR ITS CUSTOMERS. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BUYER'S OR USER'S EXCLUSIVE REMEDY, AND MANUFACTURER'S OR SELLER'S TOTAL LIABILITY SHALL BE FOR DAMAGES NOT EXCEEDING THE COST OF THE PRODUCT.

If you do not agree with or do not accept any of the directions for use, the warranty disclaimers, or limitations on liability, do not use the product, and return it unopened to the Seller, and the purchase price will be refunded.

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ALLIGARE

CHLORSULFURON 75

DRY FLOWABLE HERBICIDE

ACTIVE INGREDIENT:	**BY WEIGHT**
Chlorsulfuron: 2-Chloro-N-[(4-methoxy-6-methyl-1,3,5-triazin-2-yl)aminocarbonyl]benzenesulfonamide	75.0%
OTHER INGREDIENTS:	25.0%
TOTAL:	100.0%

EPA Reg. No. 81927-43

EPA Est. No. 279-CAN-001

KEEP OUT OF REACH OF CHILDREN

CAUTION

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS

Harmful if swallowed. Causes moderate eye irritation. Avoid contact with eyes or clothing. Remove and wash contaminated clothing before reuse.

See inside label booklet for First Aid, additional Precautionary Statements and Directions for Use.

Manufactured for: Alligare, LLC
1565 5th Avenue • Opelika, AL 36801

Net Weight: 1 lb.

EPA 20150218

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FIRST AID	
If swallowed:	• Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by the poison control center or doctor. • Do not give anything by mouth to an unconscious person.
If in eyes:	• Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
HOT LINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For emergency information concerning this product, call the National Pesticides Information Center (NPIC) at 1-800-858-7378 seven days a week, 6:30 am to 4:30 pm Pacific Time or your poison control center at 1-800-222-1222.	

PERSONAL PROTECTIVE EQUIPMENT

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for Category A on an EPA chemical-resistance category selection chart.

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of any waterproof material such as polyethylene or polyvinyl chloride
- Shoes plus socks

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

ENGINEERING CONTROL STATEMENTS

When handlers use closed systems or enclosed cabs in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

IMPORTANT: When reduced PPE is worn because a closed system is being used, handlers must be provided all PPE specified above for "Applicators and other handlers" and have such PPE immediately available for use in an emergency such as a spill or equipment break-down.

USER SAFETY RECOMMENDATIONS

Users should: Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.

ENVIRONMENTAL HAZARDS

Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment washwaters or wastes.

PESTICIDE HANDLING

- Calibrate sprayers only with clean water away from the well site.
- Make scheduled checks of spray equipment.
- Assure accurate measurement of pesticides by all operation employees.
- Mix only enough product for the job at hand.
- Avoid over-filling of spray tank.
- Do not discharge excess material on the soil at a single spot in the field/grove or mixing/loading station.
- Dilute and agitate excess solution and apply at labeled rates/uses.
- Avoid storage of pesticides near well sites.
- When triple rinsing the pesticide container, be sure to add the rinsate to the spray mix.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

Only use Alligare Chlorsulfuron 75 in accordance with directions on this label or in separately published Alligare, LLC supplemental labeling.

Alligare, LLC will not be responsible for losses or damages resulting from the use of this product in any manner not specifically approved by Alligare, LLC.

Do not apply this product through any type of irrigation system.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted-entry intervals. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 4 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls
- Chemical-resistant gloves made of any waterproof material
- Shoes plus socks

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

Use on noncrop sites is not within the scope of the Worker Protection Standard.

Do not enter or allow entry into treated areas until sprays have dried.

PRODUCT INFORMATION

Alligare Chlorsulfuron 75 contains the active ingredient chlorsulfuron which is a herbicide used for control of many broadleaf weeds found in pastures, ranges, Conservation Reserve Program (CRP) lands, and non-crop industrial sites (including industrial (unimproved) turf and for growth suppression and seedhead inhibition of established desirable grasses). Some non-crop industrial sites include airports, fence rows, government and private lands, military installations, petroleum tank farms, pipeline and utility rights-of-way, plant sites, pumping installations, railroads, roadsides and associated rights-of-way, and storage areas.

Some of these sites may contain temporary pools of surface water as a result of site management. Except in the state of New York, Alligare Chlorsulfuron 75 may be used to treat intermittent drainage, intermittently flooded low lying sites, seasonally dry flood plains and transitional areas between upland and lowland sites when no water is present. In addition, Alligare Chlorsulfuron 75 may be applied to bogs, marshes, and swamps after water has receded and to seasonally dry flood deltas, except in the state of New York. DO NOT make applications to natural or man-made bodies of water such as canals, lakes, ponds, reservoirs, and streams.

Both preemergent and postemergent applications of Alligare Chlorsulfuron 75 will control weeds although several factors (including use rate, weed growth stage at the time of application, and post-application weather conditions) will affect the range of weeds controlled and the length of residual activity. ***Annual weeds*** are best controlled from application of Alligare Chlorsulfuron 75 in the early stages of weed development. ***Perennial weeds*** are best controlled from application of Alligare Chlorsulfuron 75 when weeds are in the bud to bloom or fall rosette stage.

ENVIRONMENTAL CONDITIONS AND ACTIVATION OF ALLIGARE CHLORSULFURON 75

Alligare Chlorsulfuron 75 moves into plants by absorption through the roots and foliage and rapidly inhibits the growth of susceptible weeds. Within two to three weeks after application, the weed growth slows and the new growth changes to a red-purple color. By four to six weeks after application, discoloration of the leaf veins and leaves is apparent, and growing points subsequently die.

For optimum control of target weeds, Alligare Chlorsulfuron 75 needs to reach the weed roots. Rainfall or irrigation after an application moves the Alligare Chlorsulfuron 75 into the soil and the weed root zone. Under cold, dry conditions movement of Alligare Chlorsulfuron 75 into the root zone will be delayed. Alligare Chlorsulfuron 75 is less effective to weeds hardened off by cold weather or under stress from lack of water.

Under most normal conditions, Alligare Chlorsulfuron 75 will not harm labeled desirable grasses. Injury may result from application of Alligare Chlorsulfuron 75 to grasses that are growing under stress (due to extreme temperatures or moisture, abnormal soil conditions, or cultural practices) or to certain sensitive species of grass.

RESISTANCE

When herbicides that affect the same biological site of action are used repeatedly over several years to control the same weed species in the same field, naturally-occurring resistant biotypes may survive a correctly applied herbicide treatment, propagate, and become dominant in that field. Adequate control of these resistant weed biotypes cannot be expected. If weed control is unsatisfactory, it may be necessary to retreat the problem area using a product affecting a different site of action.

To better manage herbicide resistance through delaying the proliferation and possible dominance of herbicide resistant weed biotypes, it may be necessary to use tank-mix partners and/or sequential herbicide applications that have a different site of action. Weed escapes that are allowed to go to seed will promote the spread of resistant biotypes.

It is advisable to keep accurate records of pesticides applied to individual fields to help obtain information on the spread and dispersal of resistant biotypes. Consult your consultant, applicator, and/or Alligare representative for specific alternative herbicide recommendations available in your area.

INTEGRATED PEST MANAGEMENT

Alligare Chlorsulfuron 75 may be used as part of an Integrated Pest Management (IPM) program. This program relies on tillage (or other mechanical), biological, cultural, and chemical control practices to prevent economic pest damage. IPM principles and practices include field monitoring, historical information related to herbicide use and crop rotation, correct identification of target pests, population monitoring, and treatment when target pest populations reach a locally-determined action thresholds. Consult your state cooperative extension service, professional consultants or other qualified authorities to determine the action treatment threshold levels for treating specific pest/crop systems in your area.

PRECAUTIONS

Read the following precautions to avoid injury to or loss of desirable trees or other desirable plants or vegetation.

- To avoid severe injury or death, do not drain or flush equipment rinses on or near desirable trees or other plants, on areas where their roots may extend, or in areas where the product may be washed or moved into contact with desirable plant roots.

- To minimize off-site movement of product on treated soils which can lead to damage of susceptible crops, do not apply if soils are powdery, dry or light, or sandy and if rainfall is not expected soon after treatment. Treated soil particles may move off-site to non-target crop sites through wind or water. Low levels of Alligare Chlorsulfuron 75 may injure or kill most crops (except small grains), especially when crops are irrigated.
- The following conditions should be avoided during application to prevent runoff and movement of Alligare Chlorsulfuron 75 residues: periods of intense rainfall, soils already saturated with water, asphalt or concrete paved surfaces, frozen soils or soils through which rain water will not readily penetrate. Do not disturb treated soils to minimize the potential for Alligare Chlorsulfuron 75 movement by soil erosion from wind or water.
- Before using Alligare Chlorsulfuron 75, consult your state experimental station, university, or extension agent as to sensitivity of grass species or varieties to various herbicides. If the sensitivity of grass species or varieties is unknown, test Alligare Chlorsulfuron 75 on a small area of the grass species. Tolerance to Alligare Chlorsulfuron 75 of components in a grass seed mixture will vary and the final stand may not reflect the seed ratio.
- To avoid injury, do not apply Alligare Chlorsulfuron 75 to grasses growing under conditions of stress (severe weather conditions, drought, low fertility, water-saturated soils, disease, or insect damage). Injury to grasses is also possible if grasses are under stress before or after an application of Alligare Chlorsulfuron 75. Other weather conditions (such as heavy rainfall, high pH, prolonged cold weather, or wide fluctuations in day/night temperatures, drought, low fertility, water-saturated soils, disease, or insect damage) in effect before or after Alligare Chlorsulfuron 75 applications may result in temporary discolorations and/or grass injury.

- Pasture, range or CRP sites which are undersown with legumes may result in injury to the legumes after application of Alligare Chlorsulfuron 75 to these sites. Legumes in a seeding mixture may be severely injured or killed following an application of Alligare Chlorsulfuron 75.

RESTRICTIONS

- Do not use this product on lawns, walks, driveways, tennis courts, or similar areas.
- Do not apply this product in or on irrigation or drainage ditches or canals including their outer banks.
- Do not allow Alligare Chlorsulfuron 75 to drift or move into irrigation or drainage ditches.
- Do not apply though any type of irrigation system.
- Do not use this product in the following counties of Colorado: Saguache, Rio Grande, Alamosa, Costilla, and Conejos.
- Aquatic uses are not allowed in the State of New York.
- There are no hay harvest restrictions or grazing restrictions for livestock (including lactating animals) when Alligare Chlorsulfuron 75 is applied at rates up to 1 1/3 ounces per Acre.

INSTRUCTIONS FOR MIXING

1. Using clean fresh water, fill the spray tank 1/4 to 1/3 full.
2. Begin agitation and then add the required amount of Alligare Chlorsulfuron 75.
3. Allow the solution to agitate for 5 minutes to completely disperse the dry flowable Alligare Chlorsulfuron 75 formulation.
4. Continue agitation and fill the spray tank with the remaining water. Do not add any other material until the Alligare Chlorsulfuron 75 is thoroughly mixed with the water.

5. As the tank is filling with the remaining water, add any tank mix partners followed by the necessary volume of spray adjuvants. Always add the spray adjuvants last.
6. NOTE: Continuous agitation is required or settling will occur. Before spraying, reagitate the solution to ensure a uniform solution is sprayed.
7. Make only a sufficient amount of Alligare Chlorsulfuron 75 spray mixture that can be used within 24 hours of mixing. The product may degrade if allowed to sit unused.
8. For application of multiple loads of Alligare Chlorsulfuron 75 and a tank mix partner, make a pre-slurry of Alligare Chlorsulfuron 75 in clean water and then add to the spray tank. This pre-mix helps to prevent the tank mix partner from interfering with the dissolution of the Alligare Chlorsulfuron 75.

Do not mix Alligare Chlorsulfuron 75 with spray additives that reduce the pH of the spray solution below 5.0. Additional information is found in the section, Spray Adjuvants

HOW TO CLEAN SPRAYER EQUIPMENT

Clean all spray equipment before making an application of Alligare Chlorsulfuron 75.

Immediately after an application or multiple applications of Alligare Chlorsulfuron 75, clean all spray equipment using the cleanup procedures described on the labels of previously applied products. If there are no cleanup directions, use the following cleanup procedures.

Note: The directions for sprayer cleanup presented below is only effective for Alligare Chlorsulfuron 75 and for general uses specified under “Directions for Use”. Do not use the sprayer equipment on food crops (except wheat, barley and oats), feed crops (except range land, CRP and pasture), fine turf, ornamentals, and other desirable plants.

After spraying is completed at the end of the day, rinse the interior of the tank with fresh water. Partially refill the tank with fresh water and flush the boom and hoses. These rinses will prevent deposits of dried pesticide residues that can remain in the application equipment. Use the following steps to clean all mixing and spray equipment immediately following applications of Alligare Chlorsulfuron 75:

1. Drain the spray tank and then use fresh water to rinse the interior surfaces of the tank. Then flush the tank, boom, and hoses with water for at least 5 minutes.
2. Use fresh clean water to fill the tank and add a cleaning solution†. Flush the boom, hoses, and nozzles with the cleaning solution. Allow the equipment to sit for 15 minutes with agitation running, and then drain the tank.
3. Repeat Step 2.
4. Repeat Step 1.
5. Remove and clean the nozzles and screens separately. Traces of the cleaning solution can be removed by rinsing the tank thoroughly with clean water and flushing the water through the hoses and boom.

†Cleaning Solutions approved for spray equipment cleanup:

1. One gallon of 3% ammonia per 100 gallons of water.
2. “Nutra-sol” (carefully follow the directions for use on the “Nutra-sol” label).
3. Loveland Spray Tank Cleaner (carefully follow the directions for use on the Loveland Spray Tank Cleaner label).
4. “Tank-Cleaner” (carefully follow the directions for use on the “Tank-Cleaner” label).

TANK MIXTURES

Other herbicides which are registered for the same uses as Alligare Chlorsulfuron 75 (pasture, range, CRP Program, or non-crop sites) may be tank mixed with Alligare Chlorsulfuron 75. Use whichever label has the most restrictive directions for the tank mix. Do not tank mix Alligare Chlorsulfuron 75 with DuPont™ HYVAR® X-L herbicide.

Before preparing large amounts of the tank mix, perform a jar test to insure the tank-mix partners are compatible with Alligare Chlorsulfuron 75. A clear jar with a lid can be used to mix the tank mix ingredients in their relative proportions. After adding the ingredients, invert the jar several times and then allow the jar to stand for 30 minutes. The mixture is compatible if, after 30 minutes, the solution remains mixed, or, if separation occurs, if the solution readily mixes again after agitation. Signs of incompatibility include separation into layers which do not readily remix when agitated, the presence of flakes, precipitates, gels, or heavy oily film on the jar.

SPRAY EQUIPMENT

Pasture, Range or Conservation Reserve Program (CRP): Make applications of Alligare Chlorsulfuron 75 by ground equipment, fixed wing aircraft, or helicopter.

Non-crop sites: Make applications of Alligare Chlorsulfuron 75 using ground equipment only unless otherwise specified in Supplemental or Special Local Need Labeling.

Refer to the manufacturer's documentation for additional information on GPA, pressure, speed, nozzle types and arrangements, nozzle heights above the target canopy, etc.

Use calibrated air or ground equipment and apply in a spray volume and delivery system to ensure a thorough, uniform spray coverage of weed pests. Higher spray volumes will produce better coverage to dense canopies of weeds. Do not overlap sprays. To avoid injury to desirable species, turn off spray booms while starting, turning, slowing, or stopping.

Severe injury or death of crops (excluding pasture, range and small grains) may occur if the same equipment used to apply Alligare Chlorsulfuron 75 to pasture, range, CRP or non-crop sites is used to apply other products to crops. Traces of Alligare Chlorsulfuron 75 in the spray equipment may injure or kill the crops (except pasture, range, and small grains).

Do not make applications using equipment and/or spray volumes or under weather conditions that might cause spray drift onto nontarget sites. Additional information is provided in the section, Spray Drift Management.

Use application equipment that will ensure constant agitation of Alligare Chlorsulfuron 75 spray solutions.

NOTE: Using ammonia solution will help solubilize Alligare Chlorsulfuron 75. This reduces the need to agitate the tank mixture to prevent settling out. The product will usually remain stable in this solution for a maximum of one to three days under normal conditions. A pH range of 7 to 8 is ideal for this spray-mix solution. Mixing and spraying the product immediately will provide the best results.

Mix one fluid ounce (2 tablespoons) of ammonia solution (3% active) with every ounce (by weight) of Alligare Chlorsulfuron 75 used in the spray tank.

GROUND APPLICATION

BROADCAST APPLICATION

Apply Alligare Chlorsulfuron 75 at 20 to 40 GPA using calibrated ground broadcast application equipment. Optimum control is obtained when weeds are treated in a sufficient volume to receive a thorough, uniform coverage.

Industrial turf: Do not overlap sprays. To avoid injury to desirable species, turn off spray booms while starting, turning, slowing, or stopping.

HIGH VOLUME HANDGUN APPLICATION

Apply Alligare Chlorsulfuron 75 at up to 100 gallons of spray solution per acre (GPA). Mix Alligare Chlorsulfuron 75 at 1 to 3 ounces per acre plus an adjuvant. Add a foam reducing agent if needed. Use the higher rate for hard to control species but do not apply more than 3 ounces per acre. Apply evenly to ensure thorough coverage of the site and weed pest(s) to be treated.

INVERT SPRAY APPLICATION

Apply the high viscosity invert solution of Alligare Chlorsulfuron 75 at 10 to 40 GPA. Mix ¼ to 3 ounces of Alligare Chlorsulfuron 75 in the water phase of the invert solution for application to 1 Acre. The labeled use rate for target weeds is found in the section, **Weeds Controlled By Alligare Chlorsulfuron 75**. Follow all use directions and precautionary statements appearing on the labels of the inverting oils and additives or in the operator's manual of the inverting equipment.

SPOT APPLICATIONS

PASTURE, RANGE AND CONSERVATION RESERVE PROGRAM (CRP): Spot applications will aid in the control of weeds in pastures, ranges, and CRP land. Apply Alligare Chlorsulfuron 75 using equipment such as back pack sprayers to deliver the spray to the foliage and stems. The height and density of weeds and type of application equipment employed will determine the application volume. Optimum results are obtained from a thorough, uniform coverage of the foliage stems. Postemergence control of weeds improves from the addition of a spray adjuvant (0.25% volume, or use the manufacturer's labeled rate).

Mix 1 gram of Alligare Chlorsulfuron 75 and the surfactant with 1 gallon of water. Spray the weeds so that the entire surface of the weeds become wet. At this rate, approximately 35 gallons of solution will treat 1 acre.

NON-CROP SITES

Mix 1-3 ounces of Alligare Chlorsulfuron 75 with 100 gallons of water. Do not apply more than 300 gallons of the Alligare Chlorsulfuron 75 at the 1 ounce spray mix rate per Acre, and no more than 100 gallons of the Alligare Chlorsulfuron 75 of the 3 ounce spray mix rate per Acre.

SPRAY ADJUVANTS

Include a high quality spray adjuvant (but not LI-700 or other acidifying adjuvants) with the Alligare Chlorsulfuron 75 to improve postemergence weed control. Follow the manufacturer's labeled rate for the adjuvant.

SPRAY DRIFT CONTROL AGENTS

Include a spray drift control agent with the Alligare Chlorsulfuron 75 tank mix to reduce the chance of drift. Follow the manufacturer's labeled rate for the drift control agent.

CROP ROTATION

Do not treat all acres (pastures, rangeland or CRP) at the same time with Alligare Chlorsulfuron 75 if rotational crop plantback flexibility is desired.

FIELD BIOASSAY

When crop or grass species/varieties which are not listed on this label are to be planted to areas previously treated with Alligare Chlorsulfuron 75, a field bioassay test must be carried out to determine if this species can be replanted without injury. Test the crop or grass intended to be planted the year following a treatment with Alligare Chlorsulfuron 75 by growing the crop or grass in small plots which received the Alligare Chlorsulfuron 75 treatment. The crop or grass response will determine the feasibility of rotating this crop or grass to large areas which had been treated with Alligare Chlorsulfuron 75. Additional information on the procedures for carrying out field bioassays can be obtained from your local dealer or Alligare, LLC representative.

GRAZING/HAYING

No hay harvest restrictions or grazing restrictions for livestock (including lactating animals) apply when Alligare Chlorsulfuron 75 is applied at up to 1 1/3 ounces per Acre. Animals do not need to be enclosed.

AERIAL APPLICATION

Use nozzle types and arrangements that provide optimum spray distribution and maximum coverage.

Apply Alligare Chlorsulfuron 75 in a minimum of 3 GPA.

Solid stream nozzles which are oriented straight back must be used when applying Alligare Chlorsulfuron 75 by air in areas adjacent to sensitive crops. Avoid spray drift damage to sensitive crops downwind by adjusting the swath. To minimize spray drift, apply Alligare Chlorsulfuron 75 using ground equipment to treat border edges of fields. See additional information in the Spray Drift Management section, below.

SPRAY DRIFT MANAGEMENT

The interaction of many equipment and weather-related factors determines the potential for spray drift. The applicator is responsible for considering all these factors when making application decisions.

AVOIDING SPRAY DRIFT IS THE RESPONSIBILITY OF THE APPLICATOR.

IMPORTANCE OF DROPLET SIZE

The most effective way to reduce the drift potential is to apply large droplets (>150-200 microns). The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. The presence of sensitive species nearby, the environmental conditions, and pest pressure may affect how an applicator balances drift control and coverage. APPLYING LARGER DROPLETS REDUCES DRIFT POTENTIAL BUT WILL NOT PREVENT DRIFT IF APPLICATIONS ARE MADE IMPROPERLY OR UNDER UNFAVORABLE ENVIRONMENTAL CONDITIONS! See WIND TEMPERATURE AND HUMIDITY, and SURFACE TEMPERATURE INVERSIONS sections of this label.

CONTROLLING DROPLET SIZE-GENERAL TECHNIQUES

- Volume – Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- Pressure – Use the lower spray pressures recommended for the nozzle. Higher pressure reduces droplet size and does not improve canopy penetration. WHEN HIGHER FLOW RATES ARE NEEDED, USE A HIGHER-CAPACITY NOZZLE INSTEAD OF INCREASING PRESSURE.
- Nozzle Type – Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles.

CONTROLLING DROPLET SIZE – AIRCRAFT

- Number of Nozzles – Use the minimum number of nozzles with the highest flow rate that provide uniform coverage.
- Nozzle Orientation – Orientating nozzles so that the spray is emitted backwards, parallel to the airstream will produce larger droplets than other orientations.
- Nozzle Type – Solid stream nozzles (such as disc and core with swirl plate removed) oriented straight back produce larger droplets than other nozzle types.

BOOM LENGTH AND HEIGHT

- Boom length (aircraft) – The boom length must not exceed ¾ of the wing length, using shorter booms decreases drift potential. For helicopters use a boom length and position that prevents droplets from entering the rotor vortices.
- Boom Height (aircraft) – Application more than 10 ft. above the canopy increases the potential for spray drift.
- Boom Height (ground) - Setting the boom at the lowest height which provides uniform coverage reduces the exposure of droplets to evaporation and wind. The boom should remain level with the crop and have minimal bounce.

WIND

Drift potential increases at wind speeds of less than 3 mph (due to variable direction and inversion potential) or more than 10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given wind speed. AVOID APPLICATIONS DURING GUSTY OR WINDLESS CONDITIONS.

Note: Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they effect spray drift.

TEMPERATURE AND HUMIDITY

When making applications in hot and dry conditions, set up equipment to produce larger droplets to reduce effects of evaporation.

SURFACE TEMPERATURE INVERSIONS

Drift potential is high during a surface temperature inversion. Surface inversions restrict vertical air mixing, which causes small suspended droplets to remain close to the ground and move laterally in a concentrated cloud. Surface inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates a surface inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

AGRICULTURAL USES

PASTURE, RANGE, AND CONSERVATION RESERVE PROGRAM (CRP)

Directions for Application: To control or suppress weeds found in permanent (non-rotational) pastures, range and CRP lands, apply Alligare Chlorsulfuron 75 at the rates listed in the table below and follow all directions for use on this label. Apply by ground or air (fixed wing aircraft or helicopter) equipment. Up to 1/3 ounce Alligare Chlorsulfuron 75 may be applied only as a spot treatment for specific grasses only if the resulting injury and possible loss of forage is acceptable.

Timing: Optimum results are seen when ***perennial*** weeds are treated in the bud to bloom or the fall rosette stage and when ***annual*** weeds are treated at early growth stages.

Weeds: Refer to the section **Weeds Controlled by Alligare Chlorsulfuron 75.**

Restrictions: Do not apply more than 1 1/3 ounce of Alligare Chlorsulfuron 75 per acre per year.

NOTE: No hay harvest restrictions or grazing restrictions for livestock (including lactating animals) apply when Alligare Chlorsulfuron 75 is applied at up to 1 1/3 ounces per Acre. Animals do not need to be enclosed.

Precautions:

- Severe stunting and injury will occur from application of Alligare Chlorsulfuron 75 to sensitive broadleaf forage species (such as clover and alfalfa).
- Injury to forage grasses which are under stress (due to drought, insects, disease, cold temperature or poor fertility) may occur from Alligare Chlorsulfuron 75 applications.
- Do not apply Alligare Chlorsulfuron 75 to forage grasses unless well-established or the newly emerged seedlings of sensitive forage grasses will be injured.

- Tolerance of different varieties and species of forage grasses to Alligare Chlorsulfuron 75 may vary. Before using Alligare Chlorsulfuron 75 on a certain grass for the first time, only apply Alligare Chlorsulfuron 75 to a small area. Once it has been determined that injury will not occur, larger areas may be treated in the next season. Examples of varietal sensitivity to Alligare Chlorsulfuron 75 include,
    - abortion or suppression of seedheads by some cool season grasses if Alligare Chlorsulfuron 75 is applied before the initiation of flowering
    - possible severe injury in perennial and Italian ryegrasses
    - temporary stunting or yellowing of fescues

RATES FOR CONTROL OR SUPPRESSION OF WEEDS IN FORAGE GRASSES

¼ to ½ ounce per Acre of Alligare Chlorsulfuron 75	
Bluestems, big, little, plains, sand, ww spar (*Andropogon spp.)*	Kleingrass (*Panicum coloraturm)*††
Buffalograss (*Buchloe dactyloides)*	Lovegrasses, sand, weeping (*Eragrostis spp.*)
Fescue, tall, Kentucky, hard, creeping (*Festuca spp.)*†	Sideoats gramma (*Bouteloua curtipendula)*
Green needlegrasses (*Stipa viridula)*††	Switchgrass (*Panicum virgatum)*
Indiangrass (*Sorghastrum nutans)*	Wildrye (*Elymus spp.)*

¼ to 1 ounce per Acre of Alligare Chlorsulfuron 75	
Bahiagrass (*Paspalum notatum)*	Bromegrass, meadow, smooth (*Bromus spp.*)
Bermuda grass(*Cynodon dactylon)*	Orchardgrass†† (*Dactylis glomerata)*
Blue gramma (*Bouteloua gracilis)*	Wheatgrasses, crested, intermediate, pubescent, slender, streambank, tall, thick, spike, western, (*Agropyron spp.)*
Bluegrass (*Poa spp.)*	
†*For sensitive fescue, use the lower use rate.* ††*Do not use Alligare Chlorsulfuron 75 on this grass in California.*	

NON-AGRICULTURAL USES

NON-CROP SITES - INDUSTRIAL AREAS

To control annual, biennial and perennial broadleaf weeds found in non-crop, industrial areas (airports, fence rows, government and private lands, military installations, petroleum tank farms, pipeline and utility rights-of-way, plant sites, pumping installations, railroads, roadsides and associated rights-of-way, and storage areas), apply Alligare Chlorsulfuron 75 at the rates listed in the sections below and follow all directions for use on this label. Apply by ground equipment unless directed otherwise by Special Local Need or Supplemental labeling. Make preemergent or early postemergent spray applications of Alligare Chlorsulfuron 75 to actively germinating or growing ***annual*** weeds. ***Perennial weeds*** are best controlled from application of Alligare Chlorsulfuron 75 when weeds are in the bud to bloom or fall rosette stage.

INDUSTRIAL TURF (UNIMPROVED ONLY)

Directions for Application: To control weeds found in industrial turf (unimproved), on roadside or other non-crop sites, apply Alligare Chlorsulfuron 75 at the rates listed in the table below and follow all directions for use on this label. The higher Alligare Chlorsulfuron 75 rates will control weeds for longer periods of time compared with the lower Alligare Chlorsulfuron 75 rates. Temporary chlorosis of desirable grasses may occur when Alligare Chlorsulfuron 75 is applied at the higher rate or in combination with a surfactant.

Timing: Make applications of Alligare Chlorsulfuron 75 when desirable grasses have become well-established to avoid any top kill or stand reduction. Optimum results are seen if turf is treated at green-up.

Weeds: Refer to the section **Weeds Controlled by Alligare Chlorsulfuron 75**.

RATES FOR CONTROL OR SUPPRESSION OF WEEDS IN INDUSTRIAL TURF

¼ to ½ ounce per Acre of Alligare Chlorsulfuron 75	
Fescue (*Festuca* spp.*)*	Smooth brome (*Bromus invermis)*

½ ounce per Acre of Alligare Chlorsulfuron 75	
Bentgrass (*Agrostis spp.)*	Kleingrass (*Panicum coloratum)*
Bluestems, big, little, plains, sand, ww spar (*Andropogon* spp.)	Lovegrasses, sand, weeping (*Eragrostis* spp.*)*
Buffalograss (*Buchloe dactyloides)*	Prairie sandreed (*Calamovilfa longifolia)*
Galleta (*Hilaria jamesii)*	Sheep fescue (*Festuca ovina)*
Needlegrass, green (*Stipa viridula)*	Sideoats gramma (*Bouteloua curtipendula)*

½ ounce per Acre of Alligare Chlorsulfuron 75	
Green sprangletop (*Leptochloa dubia)*	Switchgrass (*Panicum virgatum)*
Indiangrass (*Sorghastrum nutans)*	Wildrye grasses, beardless, Russian (*Elymus spp.)*
Indian ricegrass (*Oryzopsis hymenoides)*	

¼ to 1 ounce per Acre of Alligare Chlorsulfuron 75	
Bahiagrass (*Paspalum notatum)*	Bromegrass, meadow, smooth (*Bromus spp.)*
Bermudagrass (*Cynodon dactylon)*	Orchardgrass (*Dactylis glomerata)*
Blue gramma (*Bouteloua gracilis)*	Wheatgrasses, crested, intermediate, pubescent, slender, streambank, tall, thick, spike, western (*Agropyron spp.)*
Bluegrass (*Poa spp.)*	

GROWTH SUPPRESSION AND SEEDHEAD INHIBITION

Directions for Application: To suppress grass growth (chemical mowing) and inhibit seedhead formation, apply Alligare Chlorsulfuron 75 as a tank mix with other herbicides registered for this use and at the rates listed in the table below. Follow all directions for use on this label. The higher Alligare Chlorsulfuron 75 rates will control weeds for longer periods of time compared with the lower Alligare Chlorsulfuron 75 rates.

Timing: Make applications of Alligare Chlorsulfuron 75 when desirable grasses have become well-established to avoid any top kill or stand reduction. Time application to occur at green-up and before seed-heads emerge (boot stage).

Weeds: Refer to the section **Weeds Controlled by Alligare Chlorsulfuron 75**.

Precautions:

- To avoid injury, do not use Alligare Chlorsulfuron 75 or Alligare Chlorsulfuron 75 in a tank mix with Embark® 2S on bahiagrass turf or turf that is under stress (due to drought, insects, disease, cold temperature, or poor fertility).
- To avoid injury, apply Alligare Chlorsulfuron 75 only to turf that has been established for at least 1 year.
- Wait 6 months after an application of Alligare Chlorsulfuron 75 before planting grass seed in treated areas. Cultivate the area before planting.
- To avoid turf injury, only make spot applications to control those weeds listed under the 1 to 3 oz rate in the Non-crop, Industrial Sites section of this label. Broadcast applications to turf at this 1 to 3 oz rate may cause excessive turf injury.

Restrictions:

- Broadcast applications: do not apply more than ½ ounce Alligare Chlorsulfuron 75 per Acre per year (12-months).

RATES FOR GROWTH SUPPRESSION AND SEEDHEAD INHIBITION

¼ ounce per Acre of Alligare Chlorsulfuron 75 PLUS ¼ to ½ pt Embark® 2S	
Fesuce (*Festuca* spp.*)*	Bluegrass (*Poa* spp.)

½ ounce per Acre of Alligare Chlorsulfuron 75 PLUS ½ to 1 pt Embark® 2S†	
Fescue (*Festuca spp.)*	Smooth brome (*Bromus invermis)*
Annual bluegrass (*Poa annua)*	Orchardgrass (*Dactylis glomerata)*
Perennial ryegrass (*Lolium perenne)*	Reed canarygrass (*Phalaris arundinacea)*
†For use in the Pacific Northwest Only	

WEEDS CONTROLLED BY ALLIGARE CHLORSULFURON 75

NOTE: The higher Alligare Chlorsulfuron 75 rates will control weeds for longer periods of time compared with the lower Alligare Chlorsulfuron 75 rates.

TABLE OF WEEDS CONTROLLED AT DIFFERENT ALLIGARE CHLORSULFURON 75 USE RATES

¼ to ½ ounce per Acre of Alligare Chlorsulfuron 75	
Annual sowthistle (*Sonchus oleraceus)*	London rocket (*Sisymbrium irio)*[†]
Blue mustard (*Chorispora tenella)*	Mayweed (*Anthemis cotula)*[†]
Common chickweed (*Stellaria media)*	Miner's lettuce (*Montia perfoliata)*[†]
Common speedwell (*Veronic officinalis)*	Pineapple-weed (*Matricaria matricarioides)*[†]
Common spikeweed (*Hemizonia pungens)*[†]	Prostrate pigweed (*Amaranthus blitoides)*[†]
Conical catchfly (*Silene conoidea)*[†]	Redroot pigweed (*Amaranthus retroflexus)*
Cutleaf eveningprimrose (*Oenothera laciniata)*[†]	Shepherd's purse (*Capsella bursa-pastoris)*[†]
Fiddleneck, tarweed (*Amsinckia lycopsoides)*[†]	Smooth pigweed (*Amaranthus chlorostachys)*[†]
Field pennycress (*Thlaspi arvense)*	Treacle mustard (*Erysimum spp.)*[††]
Flixweed (*Descurainia Sophia)*	Tumble mustard, Jim Hill (*Sisymbrium altissimum)*
Hempnettle (*Galeopsis spp.)*[†]	Wild mustard (*Sinapis arvensis)*
Henbit (*Lamium amplexicaule)*	

½ to 1 ounce per Acre of Alligare Chlorsulfuron 75	
Bouncingbet (*Saponaria officinalis)*	Halogeton (*Halogeton glomeratus*)
Bur beakchervil (*Anthriscus caucalis)*†	Musk thistle (*Carduus nutans)*
Buttercup (*Ranunculus spp.)*	Sicklepod (*Senna obtusifolia*)
Carolina geranium (*Geranium carolinianum)*†	Smallseed falseflax (*Camelina microcarpa)*†
Common lambsquarter (*Chenopodium album)*	Sweet clover (*Melilotus spp.)*††
Common sunflower (*Helianthus annuus)*	Tumble pigweed (*Amaranthus albus)*†
Dandelion, common (*Taraxacum officinale)*††	Turkey mullein (*Eremocarpus setigerus)*††
Erect knotweed (*Polygonum erectum)*†	Whitetop, hoary cress (*Cardaria draba)*†††
Goldenrod (*Solidago spp.)*	Wild buckwheat (*Polygonum convolvulus)*†
Groundsel, common (*Senecio vulgaris)*†	Wild parsnip (*Pastinaca sativa)*

1 to 3 ounces per Acre of Alligare Chlorsulfuron 75	
Asters (*Aster spp.)*	Horsetail (*Equisetum spp.*)
Bedstraw (*Galium spp.)*††	Houndstongue, common (*Cynoglossum officinale*)
Black mustard (*Brassica nigra)*	Italian ryegrass (*Lolium multiflorum)*††
Bull thistle (*Cirsium vulgare)*	Marestail/horseweed (*Conyza canadensis)*
Burclover (*Medicago spp.)*	Pepperweed (*Lepidium spp.)*†
Canada thistle (*Cirsium arvense)*	Pepperweed (perennial) (*Lepidium latifolium)*
Common cinquefoil (*Potentilla canadensis)*	Poison-hemlock (*Conium maculatum)*
Common mallow (*Malva neglecta)*	Prostrate knotweed (*Polygonum aviculare)*

½ to 1 ounce per Acre of Alligare Chlorsulfuron 75	
Common mullein (*Verbascum thapsus)*	Puncturevine (*Tribulus terrestris)*
Common ragweed (*Ambrosia elatior)*††	Red clover (*Trifolium pretense)*†
Common tansy (*Tanacetum vulgare)*	Russian knapweed (*Acroptilon repens)*†††
Common teasel (*Dipsacus fullonum)*	Scotch thistle (*Onopordum acanthium)*
Common yarrow (*Achillea millefolium)*	Scouringrush (*Equisetum hyemale)*
Corn spurry (*Spergula arvensis)*	Spreading orach (*Atriplex patula)*
Cow cockle (*Vaccaria pyramidata)*	Tansymustard (*Descurainia pinnata)*
Curly dock (*Rumex crispus)*	Tansy ragwort (*Senecio jacobaea)*†
Dyer's woad (*Isatis tinctoria)*	White clover (*Trifolium repens)*
False chamomile (*Matricaria maritime)*†	Wild carrot (*Daucus carota)*
Foxtails (*Setaria spp.)*††	Wild garlic/wild onion (*Allium vineale)*
	Yellow starthistle (*Centaurea solstitalis)*††
†*Do not use Alligare Chlorsulfuron 75 on this weed in California.* ††*Alligare Chlorsulfuron 75 provides only partial control of this weed.* †††*Time application to occur at prebloom to bloom and fall rosette stage.*	

ADDITIONAL DIRECTIONS FOR SPECIFIC WEEDS

Dalmation Toadflax *(Linaria genistifolia)*: For optimum control, apply in the fall at a rate of 2 to 3 ounces of Alligare Chlorsulfuron 75 per acre as a high volume foliar spray (minimum of 24 gallons of water per acre) plus a surfactant (refer to Spray Adjuvants section, above).

Kochia, Russian Thistle, and Prickly Lettuce: For optimum results, apply after the weeds have emerged but before mature seeds form. Use a tank mix of Alligare

Chlorsulfuron 75 with herbicides with different modes of action (such as 2, 4-D plus dicamba).

Yellow Toadflax *(Linaria vulgaris*): For optimum control, use a minimum of 1.5 ounces of Alligare Chlorsulfuron 75 per acre.

Yellow Starthistle *(Centaurea solstitialis):* Use a tank mix of Alligare Chlorsulfuron 75 at ½ to 3 oz per Acre with other herbicides registered for this use (such as, Transline®, or Tordon® 22K or 2,4-D) at the tank-mix partner label rates. Refer to the Tank Mix section, above. Add a surfactant to improve control of emerged weeds (refer to Spray Adjuvants section, above). For preemergence control of this weed (early emergence to bolting stage of growth), apply when rainfall is expected so that residues of Alligare Chlorsulfuron 75 reach the root zone. Note: the higher Alligare Chlorsulfuron 75 rates will control weeds for longer periods of time compared with the lower Alligare Chlorsulfuron 75 rates.

TIMING FOR REPLANTING OF GRASSES

Non-crop areas that were treated in the spring or early summer with Alligare Chlorsulfuron 75 may be replanted with grasses after the minimum time periods noted in the tables below have elapsed. If an application of Alligare Chlorsulfuron 75 is made in late summer or early fall, replanting may be carried out after the minimum time periods noted in the tables below have elapsed ***starting from the spring after the application took place.*** When replanting grasses, the tolerance of different grass varieties and species to soils treated with Alligare Chlorsulfuron 75 may differ. If a grass species to be seeded is not listed in the tables below, carry out a field bioassay test (see section Field Bioassay, above) to determine if this species can be replanted without injury.

Species	Alligare Chlorsulfuron 75 Rate (oz per Acre)	Replant Interval, Days
For soils with a pH of 7.5 or less:		
Brome, meadow (*Bromus erectus*)	1/2-1 1-2	30 60
Brome, smooth (*Bromus invermis)*	1/2-1 1-2	60 120
Fescue, alta/tall (*Festuca arundinacea)*	1/2 1 2	60 90 150
Fescue, sheep (*Festuca ovina)*	1/2-1 1-2	60 120
Foxtail, meadow (*Alopecurus pratensis)*	1/2 1 2	90 120 180
Needlegrass, green (*Stip viridula)*	1/2-2	30
Orchardgrass (*Dactylis glomerata)*	1/2 1-2	60 90
Russian wildrye (*Elymus* spp.*)*	1/2-2	30
Switchgrass (*Panicum virgatum)*	1/2-2	90
Timothy (*Phleum pretense)*	1/2 1 2	60 120 180
Wheatgrass, western (*Agropyron smithii*)	1/2 1 2	30 60 120

Species	Alligare Chlorsulfuron 75 Rate (oz per Acre)	Replant Interval, Days
For soils having a pH of 7.5 and greater:		
Alkali sacaton (*Sporobolus airoides*)	1/2 1 2	30 90 >90
Bluestem, Big (*Andropogon gerardii*)	1/2	90
Brome, Mountain (*Bromus marginatus*)	1/2 1 2	30 60 >90
Gramma, Blue (*Bouteloua gracilis*)	1/2 1 2	30 60 >90
Gramma, Sideoats (*Bouteloua curtipendula*)	1-2	>90
Switchgrass (*Panicum virgatum*)	1-2	>90
Wheatgrass, Bluebunch (*Agropyron spicatum*)	1 1/3	30
Wheatgrass, Crested *(Agropyron cristatum)*	2/3	30
Wheatgrass, Intermediate *(Agropyron intermedium)*	1 1/3	30
Wheatgrass, Slender *(Elymus trachycaulum)*	1 1/3	30
Wheatgrass, Siberian *(Agropyron fragile)*	1 1/3	30
Wheatgrass, Streambank *(Agropyron riparium)*	1 1/3	30
Wheatgrass, Thickspike *(Agropyron dasystachyum)*	1/2-2	30
Wheatgrass, Western *(Agropyron smithii)*	1/2 1 2	30 60 120

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage and disposal.

PESTICIDE STORAGE: Store product in original container only. Do not contaminate water, other pesticides, fertilizer, food or feed in storage.

PESTICIDE DISPOSAL: Wastes resulting from the use of this product may be disposed of on site or at an approved wasted disposal facility.

CONTAINER DISPOSAL: Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

CONDITION OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

To the extent consistent with applicable law, upon purchase or use of this product, purchaser and user agree to the following terms:

Warranty: Alligare, LLC (the Company) warrants that this product conforms to the chemical description on the label in all material respects and is reasonably fit for the purpose referred to in the directions for use, subject to the exceptions noted below, which are beyond the Company's control. To the extent consistent with applicable law, the Company makes no other representation or warranty, express or implied, concerning the product, including no implied warranty of merchantability or fitness for a particular purpose. To the extent consistent with

applicable law, no such warranty shall be implied by law, and no agent or representative is authorized to make any such warranty on the Company's behalf.
Terms of Sale: The Company's directions for use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, and the manner of use or application (including failure to adhere to label directions), all of which are beyond the Company's control. To the extent consistent with applicable law, all such risks are assumed by the user.
Limitation of Liability: To the extent consistent with applicable law, the exclusive remedy against the Company for any cause of action relating to the handling or use of this product is a claim for damages, and in no event shall damages or any other recovery of any kind exceed the price of the product which caused the alleged loss, damage, injury or other claim. To the extent consistent with applicable law, under no circumstances shall the Company be liable for any special, indirect, incidental or consequential damages of any kind, including loss of profits or income. Some states do not allow the exclusion or limitation of incidental or consequential damages.
The Company and the seller offer this product, and the purchaser and user accept this product, subject to the foregoing warranty, terms of sale and limitation of liability, which may be varied or modified only by an agreement in writing signed on behalf of the Company by an authorized representative.

EPA 20150218

GROUP 4 HERBICIDE

ALLIGARE

DICAMBA 4

Specimen Label

Herbicide For Weed Control In Corn, Cotton, Sorghum, Soybean, Small Grains, Pasture, Hay, Rangeland, Farmstead (Non-Cropland), Fallow, Sugarcane, Asparagus, Turf And Grass

ACTIVE INGREDIENT:

Dimethylamine salt of dicamba (3,6-dichloro-O-anisic acid)* 50.2%
OTHER INGREDIENTS: 49.8%
TOTAL: 100.0%

*This product contains 41.7% 3,6-dichloro-o-anisic acid (dicamba) or 4 pounds per gallon (480 g/L).

EPA Reg. No. 81927-55

KEEP OUT OF REACH OF CHILDREN

WARNING/AVISO

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.
(If you do not understand the label, find someone to explain it to you in detail.)

FIRST AID	
IF IN EYES:	• Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present after the first 5 minutes, then continue rinsing eye. • Call poison control center or doctor for treatment advice.
IF SWALLOWED:	• Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by a poison control center or doctor. • Do not give anything by mouth to an unconscious person.
IF ON SKIN OR CLOTHING:	• Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
HOT LINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-424-9300 for emergency medical treatment information.	

Manufactured for:
Alligare, LLC • 13 N. 8th Street • Opelika, AL 36801

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS
WARNING / AVISO

Causes substantial but temporary eye injury. Do not get in eyes, on skin, or on clothing. Harmful if swallowed. Avoid breathing spray mist. Harmful if absorbed through skin.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are made of any waterproof material.

All mixers, loaders, applicators and other handlers must wear:

- Long-sleeved shirt and long pants,
- Shoes plus socks,
- Goggles or faceshield, and
- Chemical-resistant gloves (e.g. barrier laminate, butyl rubber ≥14 mils, nitrile rubber ≥14 mils, neoprene rubber ≥14 mils, natural rubber ≥14 mils, polyethylene, polyvinyl chloride (PVC) ≥14 mils, or Viton® ≥14 mils)

See engineering controls for additional requirements.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

ENGINEERING CONTROLS STATEMENTS

Pilots must use an enclosed cockpit in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4-6)].

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

USER SAFETY RECOMMENDATIONS

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters or rinsate.

Apply this product only as directed on label.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and green-houses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water is:

- Coveralls worn over short-sleeve shirt and short pants
- Chemical-resistant footwear plus socks
- Chemical-resistant gloves (e.g. barrier laminate, butyl rubber ≥14 mils, nitrile rubber ≥14 mils, neoprene rubber ≥14 mils, natural rubber ≥14 mils, polyethylene, polyvinyl chloride (PVC) ≥14 mils, or Viton® ≥14 mils)
- Chemical-resistant headgear for overhead exposure
- Protective eyewear

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to the uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, in nurseries, in forests, or in greenhouses.

Do not enter or allow others to enter the treated areas until the spray has dried.

Before applying Alligare Dicamba 4, read all directions and precautions appearing on the container label and in this booklet. Failure to follow all directions and precautions may result in unsatisfactory weed control, crop injury, or illegal residues.

PRODUCT INFORMATION

The following directions apply to all uses of Alligare Dicamba 4. Additional precautions and restrictions will be found in each specific use section.

RESTRICTIONS:

Do not treat irrigation ditches or water used for crop irrigation or domestic uses.

Do not apply this product through any type of irrigation system.

Do not exceed the maximum single application rate of 2 pints (1.0 lb. a.i.) Alligare Dicamba 4 per application with no more than 2 applications per year.

RESISTANCE MANAGEMENT

Alligare Dicamba 4 is a Group 4 herbicide. Any weed population may contain or develop plants naturally resistant to Alligare Dicamba 4 and other Group 4 herbicides. Weed species with acquired resistance to Group 4 may eventually dominate the weed population if Group 4 herbicides are used repeatedly in the same field or in successive years as the primary method of control for targeted species. This may result in partial or total loss of control of those species by Alligare Dicamba 4 or other Group 4 herbicides.

To delay herbicide resistance consider:

- Avoiding the consecutive use of Alligare Dicamba 4 or other target site of action Group 4 herbicides that have a similar target site of action, on the same weed species.
- Using tank-mixtures or premixes with herbicides from different target site of action Groups as long as the involved products are all registered for the same use, have different sites of action, and are both effective at the tank mix or prepack rate on the weed(s) of concern.
- Basing herbicide use on comprehensive IPM program.
- Monitoring treated weed populations for loss of field efficacy.
- Contacting your local extension specialist, certified crop advisors, and/or manufacturer for herbicide resistance management and/or integrated weed management recommendations for specific crops and resistant weed biotypes.

MIXING AND APPLICATION

UNLESS OTHERWISE SPECIFIED UNDER THE INDIVIDUAL USE HEADINGS OF THIS BOOKLET, THE FOLLOWING DIRECTIONS APPLY TO ALL CROP AND NON-CROP USES OF ALLIGARE DICAMBA 4. REFER TO INDIVIDUAL USE SECTIONS FOR ADDITIONAL PRECAUTIONS, RESTRICTIONS, APPLICATION RATES AND TIMINGS.

Alligare Dicamba 4 is a water-soluble formulation that can be applied using water or sprayable fluid fertilizer as the carrier. If a fluid fertilizer is to be used, a compatibility test (See COMPATIBILITY TEST) should be made prior to tank mixing.

Ground or aerial application equipment, which will give good spray coverage of weed foliage, should be used. HOWEVER, DO NOT USE AERIAL APPLICATION EQUIPMENT IF SPRAY PARTICLES CAN BE CARRIED BY WIND INTO AREAS WHERE SENSITIVE CROPS OR PLANTS ARE GROWING OR WHEN TEMPERATURE INVERSIONS EXIST.

Apply 3 to 50 gallons of diluted spray per treated acre when using ground application equipment or 1 to 10 gallons of diluted spray per treated acre (2 to 20 gallons of diluted spray per acre for preharvest uses) in a water-based carrier when using aerial application equipment. Use the higher level of the listed spray volumes when treating dense or tall vegetation. Use coarse sprays.

Select nozzles designed to produce minimal amounts of fine spray particles. Spray with nozzles as close to the weeds as is practical for good weed coverage.

To avoid uneven spray coverage, Alligare Dicamba 4 should not be applied during periods of gusty wind or when wind is in excess of 15 mph.

Avoid disturbing (e.g., cultivating or mowing) treated areas for at least 7 days following application.

BEST STEWARDSHIP PRACTICES

Alligare Dicamba 4 provides effective broadleaf weed and brush control when properly applied. Best stewardship practices in all mixing, loading, and application operations not only maximize weed control, but also protect ground and surface waters and minimize off-target movement.

This chemical is known to leach through the soil into ground water under certain conditions as a result of agricultural use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

GROUND AND SURFACE WATERS PROTECTION

1) Point source contamination - To prevent point source contamination, do not mix, load this pesticide product within 50 feet of wells (including abandoned wells and drainage wells), sink holes, perennial or intermittent streams and rivers, and natural or impounded lakes and reservoirs. Do not apply pesticide product within 50 feet of wells. This setback does not apply to properly capped or plugged abandoned wells and does not apply to impervious pad or properly diked mixing/loading areas as described below.

Mixing, loading, rinsing, or washing operations performed within 50 feet of a well are allowed only when conducted on an impervious pad constructed to withstand the weight of the heaviest load that may be on or move across the pad. The pad must be self-contained to prevent surface water flow over or from the pad. The pad capacity must be maintained at 110% that of the largest pesticide container or application equipment used on the pad and have sufficient capacity to contain all product spills, equipment or container leaks, equipment wash waters, and rainwater that may fall on the pad. The containment capacity does not apply to vehicles delivering pesticide shipments to the mixing/loading site. States may have in effect additional requirements regarding wellhead setbacks and operational containment.

Care must be taken when using this product to prevent: a) back siphoning into wells, b) spills or c) improper disposal of excess pesticide, spray mixtures or rinsates. Check valves or anti-siphoning devices must be used on all mixing equipment.

2) Movement by surface runoff or through soil - Do not apply under conditions which favor runoff. Do not apply to impervious substrates such as paved or highly compacted surfaces in areas with high potential for ground water contamination. Ground water contamination may occur in areas where soils are permeable or coarse and ground water is near the surface. Do not apply to soils classified as sand with less than 3% organic matter and where ground water depth is shallow (less than 8 feet in Arizona). To minimize the possibility of ground water contamination, carefully follow application rate recommendations as affected by soil type in the **Product Information** section of this label.

3) Movement by water erosion of treated soil - Do not apply or incorporate this product through any type of irrigation equipment nor by flood or furrow irrigation. Ensure treated areas have received at least one-half inch rainfall (or irrigation) before using tailwater for subsequent irrigation of other fields.

SENSITIVE CROP PRECAUTIONS

Alligare Dicamba 4 may cause injury to desirable trees and plants, particularly beans, cotton, flowers, fruit trees, grapes, ornamentals, peas, potatoes, soybeans, sunflowers, tobacco, tomatoes, and other broadleaf plants when contacting their roots, stems or foliage. These plants are most sensitive to Alligare Dicamba 4 during their development or growing stage. FOLLOW THE PRECAUTIONS LISTED BELOW WHEN USING ALLIGARE DICAMBA 4.

- Do not treat areas where either possible downward movement into the soil or surface washing may cause contact of Alligare Dicamba 4 with the roots of desirable plants such as trees and shrubs.
- Avoid making applications when air currents may carry spray particles to areas where sensitive crops and plants are growing, or when temperature inversions exist. Do not spray near sensitive plants if wind is gusty or in excess of 5 mph and moving in the direction of adjacent sensitive crops. Leave an adequate buffer zone between area to be treated and sensitive plants. Coarse sprays are less likely to drift out of the target area than fine sprays.
- Use coarse sprays to avoid potential herbicide drift. Select nozzles, which are designed to produce minimal amounts of fine spray particles. Examples of nozzles designed to produce coarse sprays via ground application are Delavan Rain-drops, Spraying Systems XR flat fans, or large capacity flood nozzles such as D10, TK10, or greater capacity tips. Keep the spray pressure at or below 20 psi and the spray volume at or above 20 GPA, unless otherwise required by the manufacturer of drift-reducing nozzles. Consult your spray nozzle supplier concerning the choice of drift-reducing nozzles.
- Agriculturally approved drift-reducing additives may be used.
- Do not apply Alligare Dicamba 4 adjacent to sensitive crops when the temperature on the day of application is expected to exceed 85°F as drift is more likely to occur.
- To avoid injury to desirable plants, equipment used to apply Alligare Dicamba 4 should be thoroughly cleaned (See PROCEDURE FOR CLEANING SPRAY EQUIPMENT) before reusing to apply any other chemicals.

All crop uses of Alligare Dicamba 4 are intended for a normal growing interval between planting and harvest. No crop rotation restrictions exist if normal harvest of treated crop has occurred. If this interval is shortened, such as in cover crops that will be plowed under, do not follow up with the planting of a sensitive crop.

Crops growing under stress conditions such as drought, poor fertility, or foliar damage due to hail, wind or insects, can exhibit various injury symptoms that may be more pronounced if herbicides are applied.

Consult your local or state authorities for possible application restrictions and advice concerning these and other special local use situations. Tank mix recommendations are for use only in states where the tank mix product and application site are registered.

BAND TREATMENTS

Alligare Dicamba 4 may be applied as a band treatment. Use the formulas below to determine the appropriate rate and volume per treated acre.

$$\frac{\text{Band width in inches}}{\text{Row width in inches}} \times \text{Broadcast RATE per treated acre} = \text{Band RATE per treated acre}$$

$$\frac{\text{Band width in inches}}{\text{Row width in inches}} \times \text{Broadcast VOLUME per treated acre} = \text{Band VOLUME per treated acre}$$

COMPATIBILITY TEST

Before mixing in the spray tank, it is advisable to test compatibility by mixing all components in a small container in proportionate quantities (see following table).

Amount of Herbicide to Add to One Pint of Spray Carrier (Assuming Volume is 25 Gallons per Acre)

HERBICIDE FORMULATIONS	RATE PER ACRE	LEVEL TEASPOONS
Dry	1lb.	1 1/2
Liquid	1 pt.	1/2

If herbicide(s) do not ball-up or form flakes, sludge, gels, oily films or layers, or other precipitates, then the tested spray mix is compatible. Usually, incompatibility in any of the above-described forms will occur with 5 minutes after mixing.

If components are incompatible, the use of a compatibility agent is recommended. Rerun the above COMPATIBILITY TEST with a suitable compatibility agent (1/4 teaspoon is equivalent to 2 pints per 100 gallons of fluid fertilizer).

PROCEDURE FOR CLEANING SPRAY EQUIPMENT

The steps listed below are suggested for thorough cleaning of spray equipment following applications of Alligare Dicamba 4 or tank mixes of Alligare Dicamba 4 or tank mixes of Alligare Dicamba 4 plus 2,4-D amine.

1) Hose down thoroughly the inside as well as outside surfaces of equipment while filling the spray tank half full of water. Flush by operating sprayer until the system is purged of the rinse water.
2) Fill tank with water while adding 1 quart of household ammonia for every 25 gallons of water. Operate the pump to circulate the ammonia solution through the sprayer system for 15 to 20 minutes and discharge a small amount of the ammonia solution through the boom and nozzles. Let the solution stand for several hours, preferably overnight.
3) Flush the solution out of the spray tank through the boom.
4) Remove the nozzles and screens and flush the system with two full tanks of water.

The steps listed below are suggested for thorough cleaning of spray equipment used to apply Alligare Dicamba 4 as a tank mix with wettable powders (WP), emulsifiable concentrates (EC), or other types of water-dispersible formulations. Alligare Dicamba 4 tank mixes with water-dispersible formulations require the use of a water/detergent rinse.

5) Complete step 1.
6) Fill tank with water while adding 2 lbs. of detergent for every 40 gallons of water. Operate the pump to circulate the detergent solution through the sprayer system for 5 to 10 minutes and discharge a small amount of the solution through the boom and nozzles. Let the solution stand for several hours, preferably overnight.
7) Flush the detergent solution out of the spray tank through the boom.
8) Repeat step 1, and follow with steps 2, 3 and 4.

WEED LIST

This is a general list of weeds which may be treated with Alligare Dicamba 4 in accordance with this label as specified under the rates and timing sections of the Individual Use headings. Proper usage of this product will give control or growth suppression of many ANNUAL, BIENNIAL, and PERENNIAL broadleaf weeds, and many WOODY brush and vine species including:

ANNUAL			
Amaranth, Spiny (Spiny Pigweed)	Evening Primrose, Cutleaf	Pennycress, Field (Fanweed,	Sicklepod
Aster, Slender	Fleabane, Annual	Frenchweed, Stinkweed)	Sida, Prickly (Teaweed)
Bedstraw	Goosefoot, Nettleleaf	Pepperweed, Virginia	Smartweed, Green
Beggarweed, Florida	Henbit	(Peppergrass)	Smartweed, Pennsylvania
Broomweed, Common	Jimsonweed	Pigweed, Prostrate	Sneezeweed, Bitter
Buckwheat, Wild	Knotweed	Pigweed, Redroot	Sowthistle, Annual
Buffalobur	Kochia	(Carelessweed)	Sowthistle, Spiny
Burclover, California	Ladysthumb	Pigweed, Rough	Spikeweed, Common
Burcucumber	Lambsquarters Common	Pigweed, Smooth	Spurge, Prostrate
Buttercup, Roughseed	Lambsquarters (triazine resistant)	Pigweed (triazine resistant)	Spurry, Corn
Carpetweed	Lettuce, Prickly	Pigweed, Tumble	Starbur, Bristly
Catchfly, Nightflowering	Mallow, Common	Poorjoe	Sumpweed, Rough
Chamomile, Corn	Mallow, Venice	Puncturevine	Sunflower, Common (Wild)
Chickweed, Common	Mare's Tail (Horseweed)	Purslane, Common	Sunflower, Volunteer
Clovers (Annual)	Mayweed	Pusley, Florida	Thistle, Russian
Cockle, Corn	Morning-glory, Ivyleaf	Radish, Wild	Velvetleaf
Cockle, Cow	Morning-glory, Tall	Ragweed, Common	Waterhemp
Cocklebur, Common	Mustard, Tansy	Ragweed, Giant	Waterprimrose, Winged
Croton, Tropic	Mustard, Wild	(Buffaloweed)	Wormwood, Annual
Croton, Woolly	Mustard (Yellowtops)	Ragweed, Lance-Leaf	
Daisy, English	Nightshade, Black	Rubberweed, bitter (Bitterweed)	
		Sesbania, Hemp	
		Shepherdspurse	

BIENNIALS			
Burdock, Common	Geranium, Carolina	Plantain, Bracted	Thistle, Bull
Carrot, Wild (Queen Anne's Lace)	Gromwell	Ragwort, Tansy	Thistle, Milk
Cockle, White	Knapweed, Diffuse	Starthistle, Yellow	Thistle, Musk
Evening Primrose, Common	Knapweed, Spotted	Sweetclover	Thistle, Plumeless
	Mallow, Dwarf	Teasel	
PERENNIALS			
*Alfalfa	*Dock Broadleaf (Bitterdock)	Milkweed, Western Whorled	Sundrop, Halfshrub (Evening Primrose)
Artichoke, Jerusalem	*Dock, Curly	Nettle, Stinging	Thistle, Canada
Aster, Spiny	Dogbane, Hemp	Nightshade, Silverleaf	Toadflax, Dalmation
Aster, Whiteheath	*Dogfennel (Cypressweed)	(White Horsenettle)	Tropical Soda Apple
Bedstraw, Smooth	Fern, Bracken	Onion, Wild	Trumpetcreeper (Buckvine)
Bindweed, Field	Garlic, Wild	*Plantain, Broadleaf	Vetch
Bindweed, Hedge	Goldenrod, Canada	*Plantain, Buckhorn	Waterhemlock
Blueweed, Texas	Goldenrod, Missouri	Pokeweed	Waterprimrose, Creeping
*Bursage, (Bur Ragweed, Lakeweed, Povertyweed)	Goldenweed, Common	Ragweed, Western	*Woodsorrel, Creeping
Buttercup, Tall	Hawkweed	Redvine	Common Yellow Wormwood, Common
Campion, Bladder	Henbane, Black	Sericia Lespedeza	Wormwood, Louisiana
Chickweed, Field	Horsenettle, Carolina	Smartweed, Swamp	*Yankeeweed
Chickweed (Mouseear,Canada)	Ironweed	Snakeweed, Broom	Yarrow, Common
Chicory	Knapweed, Black	*Sorrel, Red (Sheep Sorrel)	
*Clover, Hop	Knapweed, Russian	Sowthistle	
*Dandelion, Common	Milkweed, Climbing	Sowthistle, Perennial	
	Milkweed, Common	Spurge, Leafy	
	Milkweed, Honeyvine		

*Noted perennials may be controlled using Alligare Dicamba 4 at rates lower than those recommended for other listed perennial weeds. (See application rates and timing sections in this label.)

WOODY			
Alder	*Dewberry	Locust, Black	Sagebrush, Fringed
Ash	*Dogwood	Maple	Sassafras
Aspen	Elm	Mesquite	Serviceberry
Basswood	Grape	Oak	Spicebush
Beech	*Hawthorn (Thornapple)	Oak, Poison	Spruce
Birch	Hemlock	Olive, Russian	Sumac
*Blackberry	Hickory	Persimmon, Eastern	*Sweetgum
*Blackgum	Honeylocust	Pine	Sycamore
*Cedar	Honeysuckle	*Plum, Sand (Wild Plum)	Tarbush
Cherry	Hornbeam	Poplar	Willow
Chinquapin	Huckleberry	Rabbitbrush	Witchhazel
Cottonwood	Huisache	*Redcedar, Eastern	*Yaupon
*Creosotebush	Ivy, Poison	*Rose, McCartney	*Yucca
Cucumbertree	Kudzu	*Rose, Multiflora	

*Growth suppression

FIELD, SEED*, POPCORN* AND SILAGE CORN

IMPORTANT: Observe all restrictions, precautions, mixing and application instructions.

RESTRICTIONS:

- Do not apply Alligare Dicamba 4 to seed corn or popcorn without first verifying with your local seed corn company (supplier) the Dicamba selectivity on your inbred line or variety of popcorn. This precaution will help avoid potential injury of sensitive varieties.
- Alligare Dicamba 4 is not registered for use on sweet corn.
- Direct contact of Alligare Dicamba 4 with corn seed must be avoided. If corn seeds are less than 1 1/2 inches below the surface, delay application until corn has emerged.
- Up to 2 applications of Alligare Dicamba 4 may be made during a growing season. Do not exceed a total of 1 1/2 pints of Alligare Dicamba 4 per treated acre per crop year. Allow two weeks or more between applications of Alligare Dicamba 4. See appropriate section for rate information. For combination options or sequential treatments, refer to appropriate section.
- Do not use adjuvants containing penetrants such as petroleum-based oils after crop emergence or crop injury may result.
- Corn may be harvested or grazed for feed once the crop has reached the ensilage (milk) stage or later in maturity.

PRECAUTIONS:

- Applications of Alligare Dicamba 4 to corn during periods of rapid growth may result in temporary leaning. Corn will usually become erect within 3 to 7 days. Cultivation should be delayed until after corn is growing normally to avoid breakage.
- Agriculturally approved surfactants or sprayable fertilizers (1/2 to 1 gallon per acre of 28%, 30% or 32% urea ammonium nitrate or 2.5 pounds per acre spray grade ammonium sulfate) may be added to the spray mixture to improve postemergence weed control, particularly in dry growing conditions.
- Several synthetic pyrethroid insecticides are labeled for tank mix applications of dicamba. Refer to their label for specific directions, restrictions and precautions.

WEEDS CONTROLLED

Alligare Dicamba 4 will control many ANNUAL broadleaf weeds or give growth suppression of many PERENNIAL broadleaf weeds commonly found in corn. (Refer to the WEED LIST).

For best performance, make application when weeds have emerged and are actively growing.

Preemergence control of cocklebur, velvetleaf, and jimsonweed may be reduced if conditions such as low temperature or lack of soil moisture cause delayed or deep germination of weeds.

PREPLANT/PREEMERGENCE IN NO-TILLAGE CORN

Applications of Alligare Dicamba 4 may be made before, during, or after planting to emerged and actively growing broadleaf weeds. Apply Alligare Dicamba 4 at 1 pint per treated acre on medium or fine textured soils containing 2% or greater organic matter. Use 1/2 pint per treated acre on coarse textured soils (sand, sandy loam, and loamy sand) or medium and fine textured soils with less than 2% organic matter.

When planting into a legume sod (e.g., alfalfa or clover), apply Alligare Dicamba 4 after 4 to 6 inches of regrowth has occurred.

PREEMERGENCE IN CONVENTIONAL OR REDUCED TILLAGE CORN

Alligare Dicamba 4 may be applied after planting and prior to corn emergence. Application at 1 pint per treated acre may be made to medium or fine textured soils, which contain 2% or greater organic matter. DO NOT apply to coarse textured soils (sand, sandy loam, and loamy sand) until after crop emergence (see Early Postemergence uses below).

Preemergence application of Alligare Dicamba 4 does not require mechanical incorporation to become active. A shallow mechanical incorporation is recommended if application is not followed by adequate rainfall or sprinkler irrigation. Avoid tillage equipment (e.g., drags, harrows) which concentrates treated soil over seed furrow.

EARLY POSTEMERGENCE (ALL TILLAGE SYSTEMS)
(Spike through 8-inch tall corn)

Alligare Dicamba 4 at 1 pint per treated acre may be applied during the period from corn emergence through the five leaf stage or 8 inches tall, whichever comes first. Reduce the rate to 1/2 pint per treated acre if corn is growing on coarse textured soils (sand, sandy loam, and loamy sand). See LATE POSTEMERGENCE APPLICATIONS given below if the 6th true leaf is emerging from whorl or corn is greater than 8 inches tall.

LATE POSTEMERGENCE (ALL TILLAGE SYSTEMS)
(8 to 36 inch tall corn)

Application of Alligare Dicamba 4 at 1 /2 pint per treated acre may be made from 8 to 36 inch tall corn or 15 days before tassel emergence, whichever comes first. For best performance, make applications when weeds are less than 3 inches tall.

Make directed spray application when (1) corn leaves prevent proper spray coverage; (2) sensitive crops are growing nearby; (3) tank mixing with 2,4-D. It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions and precautionary language of the products in the mixture (for example, first aid from one product, spray drift management from another).

RESTRICTIONS:

DO NOT apply Alligare Dicamba 4 when soybeans are growing nearby if any of these conditions exist:

- corn is more than 24 inches tall
- soybeans are more than 10 inches tall
- soybeans have begun to bloom

OVERLAY (SEQUENTIAL) TREATMENTS

Alligare Dicamba 4 may be applied to ground previously treated with one or more of the following herbicides registered for use in corn:

acetochlor	glyphosate
alachlor (Lasso® , Lasso MT®, Partner®)	halosulfuron (Battalion ®, Permit®, Lariat®)
atrazine	metolachlor
Broadstrike®	paraquat
butylate (Sutan®)	pendimethalin
dimethenamid (Frontier®)	propachlor (Ramrod®)
EPTC	simazine

Apply Alligare Dicamba 4 at 1/2 pint per treated acre to ground previously treated with full rates of Clarity or Marksman herbicides. Allow at least 2 weeks between applications.

READ AND FOLLOW LABEL DIRECTIONS FOR EACH OF THE ABOVE PRODUCTS.

TANK MIX TREATMENTS FOR CORN

Alligare Dicamba 4 may be tank mixed with one or more of the following herbicides for control of grasses or additional broadleaf weeds. It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions and precautionary language of the products in the mixture (for example, first aid from one product, spray drift management from another).

	RATES AND TIMINGS				
Alligare Dicamba 4 Plus	**Preplant/ Preemergent (No Tillage Corn)**	**Pre-emergent (Conventional or Reduced Tillage Corn)**	**Early Post-Emergent (All Tillage Systems)**	**Late Post-Emergent (All Tillage Systems)**	**Additional Directions**
Accent® (nicosulfuron)	-	-	1/2-1 oz a.i./A	1/2-1 oz a.i./A (To improve spray coverage of weeds and reduce risk of corn injury, use drop pipes to direct spray beneath corn leaves when corn is greater than 8 inches tall)	Application may be made to emerged weeds before corn is greater than 24 inches tall. Use non-ionic surfactant at 0.25% (v/v) with this tank mixture.
Atrazine	1 1/4-2 lbs a.i./A	1 1/4 -2 lbs a.i./A	1 1/4-2 lbs. a.i./A Crop oil concentrates may be used with this mixture if corn is 5 inches or less in height.	1 1/4-2 lbs. a.i./A Do not apply if corn is greater than 12 inches tall.	Application may be made before grasses are 1 1/2" tall. Follow all state and Federal restrictions pertaining to atrazine applications.
Beacon® (primisulfuron)	-	-	0.31-0.62 oz a.i./A	0.31-0.62 oz a.i./A (To improve spray coverage of weeds and reduce risk of corn injury, use drop pipes to direct spray beneath corn leaves when corn is greater than 8 inches tall)	Application may be made to emerged weeds when corn is 4 to 24 inches tall. Use non-ionic surfactant at 0.25% (v/v) with this tank mixture.
Metolachlor	1 1/2-3 lbs a.i./A	1 1/2-3 lbs a.i./A (Use only on fine or medium textured soils with 2 1/2% or greater organic matter.)	1 1/2-3 lbs. a.i./A	-	Application may be made before grasses reach the 2 leaf stage and before corn is greater than 3 inches tall.
Frontier® (dimethenamid)	13-25 fl oz/A	13-25 fl oz/A (Use only on fine or medium textured soils with 2.5% or greater organic matter.)	13-25 fl. oz./A	-	Application may be made up to 8 inch tall corn. This treatment must be combined with a herbicide that provides post- emergence control of grass weeds if they are greater than 1 inch tall at the time of application.

RATES AND TIMINGS					
Alligare Dicamba 4 Plus	**Preplant/ Preemergent (No Tillage Corn)**	**Pre-emergent (Conventional or Reduced Tillage Corn)**	**Early Post-Emergent (All Tillage Systems)**	**Late Post-Emergent (All Tillage Systems)**	**Additional Directions**
Frontier® 6.0 (dimethenamid)	16-32 fl oz/A	16-32 fl oz/A (Use only on fine or medium textured soils with 2.5% or greater organic matter.)	-	-	Application may be made up to 8 inch tall corn. This treatment must be combined with a herbicide that provides post- emergence control of grass weeds if they are greater than 1 inch tall at the time of application.
Paraquat	1/4-1 lb a.i./A	1/4-1 lb a.i./A	-	-	Application may be made to emerged weeds but prior to corn emergence.
Acetochlor	1 1/2-3 lbs a.i./A	1 1/2-3 lbs a.i./A (Use only on fine textured soils with greater than 2.5% organic matter)	-	-	Application should be made prior to corn emergence.
Lasso® (alachlor)	1 1/2-4 lbs a.i./A	1 1/2-4 lbs a.i./A (Use only on fine textured soils with greater than 2.5% organic matter.)	1 1/2-4 lbs a.i./A	-	Application may be made before grasses reach the 2 leaf stage and before corn is greater than 3 inches tall. If microencapsulated forms of alachlor are used (Lasso MT Partner), applications must be made prior to grass emergence.
Simazine	2.0-3.0 lbs a.i./A	2.0-3.0 lbs a.i./A	-	-	Application may be made prior to corn or weed emergence.
Pendimethalin	-	3/4-1 1/2 lbs a.i./A (Use only on fine or medium textured soils with 2 1/2% or greater organic matter.)	3/4-1 1/2 lbs a.i./A	-	Application may be made immediately after planting but prior to weed emergence. Corn should not be beyond the 2 leaf stage of growth.
Glyphosate	1.0-3.0 lbs a.i./A	1.0-3.0 lbs a.i./A	-	-	Application may be made to emerged weeds but prior to corn emergence.
Clopyralid	-	-	0.035-0.07 lb a.i./A	0.035-0.07 lb a.i./A	Application may be made any time after corn emergence through 24 inch tall corn. Use drop nozzles to direct spray after corn exceeds the 8 inch stage. Apply when the majority of the thistle- plants have emerged and are at least 4 inches in height, but before bud stage. Use higher rates listed for stand reduction or larger thistle plants or heavier infestations. Lower rates listed may provide seasonal thistle suppression only.
Tough® (pyridate)	-	-	0.47 lb a.i./A	0.47 lb a.i./A	Application may be made to emerged, actively growing weeds. Directed applications are recommended when corn is large enough to prevent proper spray coverage.
2,4-D	1/4-1/2 lb a.i./A	1/4-1/2 lb a.i./A	Not recommended	1/8 lb a.i./A	Drop pipes are to be used when corn height is 8 inches or greater. Keeping the spray off the corn leaves and out of the whorl will reduce the likelihood of crop injury and improve spray coverage of weed foliage.

COTTON
EXCEPT CALIFORNIA

IMPORTANT: Observe all restrictions, precautions, mixing, and application instructions.

PREPLANT APPLICATION: Apply up to 8 fluid ounces of Alligare Dicamba 4 per acre to control emerged broadleaf weeds prior to planting cotton in conventional or conservation tillage systems.

For best performance, apply Alligare Dicamba 4 when weeds are in the 2 - 4 leaf stage and rosettes are less than 2" across.

RESTRICTIONS:

- Do not apply preplant to cotton west of the Rockies.
- Do not make Alligare Dicamba 4 preplant applications to geographic areas with average annual rainfall less than 25".
- If applying a spring preplant treatment following application of a fall preplant (postharvest) treatment, then the combination of both treatments may not exceed 2 pounds acid equivalent per acre.
- Following application of Alligare Dicamba 4 and a minimum accumulation of 1" of rainfall or overhead irrigation, a waiting interval of 21 days is required per 8 fluid ounces per acre or less. These intervals must be observed prior to planting cotton.

COTTON TANK MIXES

For control of grasses or additional broadleaf weeds, Alligare Dicamba 4 may be tank mixed with prometryn, paraquat, and glyphosate herbicides. It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions and precautionary language of the products in the mixture (for example, first aid from one product, spray drift management from another).

SORGHUM (MILO)

IMPORTANT: Observe all restrictions, precautions, mixing, and application instructions.

RESTRICTIONS:

- **Pre-Harvest Interval (PHI):** Grain sorghum (PHI): 30 days; Fodder (PHI): 30 days; Forage (PHI): 20 days
- Do not graze or feed treated sorghum forage or silage prior to mature grain stage. If sorghum is grown for pasture or hay, refer to the pasture use section of this label.
- Do not apply Alligare Dicamba 4 to sorghum grown for seed production.
- Make no more than one application per growing season.

PRECAUTION:

- Applications of Alligare Dicamba 4 to sorghum during periods of rapid growth may result in temporary leaning of plants or rolling of leaves. These effects are usually outgrown within 10 to 14 days.

WEEDS CONTROLLED

Alligare Dicamba 4, when applied at the listed rate for sorghum, will control many actively growing ANNUAL broadleaf weeds and will reduce competition from established PERENNIAL broadleaf weeds as well as control their seedlings. (Refer to WEED LIST).

RATES AND TIMINGS

Alligare Dicamba 4 may be applied to emerged and actively growing weeds at least 15 days prior to planting. Postemergence application of Alligare Dicamba 4 must be made after sorghum is in the spike stage (all sorghum emerged) but before sorghum is 15 inches tall. For best performance, make applications when sorghum is in the 3 to 5 leaf stage and weeds are small (less than 3 inches tall). Use drop pipes (drop nozzles) if sorghum is taller than 8 inches. Keeping the spray off the sorghum leaves and out of the whorl will reduce the likelihood of crop injury and improve spray coverage of weed foliage.

Broadcast rate per treated acre: 1/2 pint (1/4 lb. a.i.)

TANK MIX TREATMENTS

Alligare Dicamba 4 may be tank mixed with the products listed below. It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions and precautionary language of the products in the mixture (for example, first aid from one product, spray drift management from another).

Alligare Dicamba 4 plus Atrazine:

For improved control of emerged, actively growing broadleaf weeds including triazine resistant species and added suppression of perennial broadleaf weeds, tank mix 1/2 pint Alligare Dicamba 4 with 0.5 to 1.25 lbs. a.i. atrazine per treated acre. For control of grasses (less than 1.5 inches tall), tank mix 1/2 pint Alligare Dicamba 4 with 2 lbs. a.i. atrazine per treated acre. For best performance and minimal crop injury, make application when sorghum is 3-8 inches tall and when broadleaf weeds are small (less than 6 inches tall). Application of atrazine must be made before sorghum is beyond 12 inches tall. The atrazine rate will depend upon soil texture and length of residual weed control desired. Follow all state and Federal restrictions pertaining to atrazine applications.

Alligare Dicamba 4 plus bromoxynil:

For improved control of broadleaf weeds, tank mix 1/2 pint Alligare Dicamba 4 with 1 - 1 1/2 pints bromoxynil herbicide per treated acre. Make application at 4 leaf to 15-inch tall sorghum. Use drop nozzles to direct spray beneath sorghum leaves when sorghum is greater than 8 inches tall.

OVERLAY (SEQUENTIAL) TREATMENTS

Alligare Dicamba 4 may be applied to ground previously treated with one or more of the following herbicides:

Herbicide	Maximum Rate Per Treated Acre (lbs. a.i.)
alachlor (Lasso®) (Screen® - treated seed)	4
atrazine[1]	2.5
metolachlor	2.5
propachlor (Ramrod®)	5

[1] Maximum use rate for atrazine is determined by soil type, tillage practices used, surface residue, and state or local restrictions. Follow the more restrictive requirements when determining the maximum use rate for atrazine.

PREHARVEST USES

FOR USE ONLY IN THE STATES OF TEXAS AND OKLAHOMA

Alligare Dicamba 4 may be applied for weed suppression any time after the sorghum has reached the soft dough stage. An agriculturally approved surfactant may be used to improve performance. For aerial applications use at least 2 gallons of water-based carrier per treated acre.

Do not harvest until 30 days after treatment.

Broadcast rate per treated acre: 1/2 pint (1/4 lb. a.i.)

SMALL GRAINS (WHEAT, BARLEY AND OATS)
NOT UNDERSEEDED TO LEGUMES

IMPORTANT: Observe all precautions and restrictions. Read and follow cleaning, mixing and application instructions.

RESTRICTIONS:

Pre-Harvest Interval (PHI): Grain (PHI) 7 days

If small grains are used for pasture or hay, the following restrictions apply:

- Animals cannot be removed from treated area for slaughter prior to 30 days after last application.
- There is no waiting period between treatment and grazing for non-lactating dairy animals.
- Treated areas may not be grazed by lactating dairy animals until 7 days after treatment.
- Do not harvest hay from treated areas until 37 days after treatment.

PRECAUTION:

- Observe all precautions and restrictions on the labels of products used in tank mix treatments.

WEEDS CONTROLLED

Alligare Dicamba 4 or combinations with listed tank mix partners will provide control or suppression of the annual broadleaf weeds listed below. For improved control of listed weeds, it is recommended that Alligare Dicamba 4 be applied in a tank mix with other herbicides. Refer to specific crop for tank mix options.

	Knawel (German Moss)	Pigweed, Tumble
Alkanet [1]	Knotweed, Prostrate	Pineappleweed [1]
Bedstraw, Catchweed [1]	Kochia	Plantain, Broadleaf [2]
Bindweed, Field [2]	Ladysthumb	Poppy, Red Horned [1]
Buckwheat Tartary	Lambsquarters, Common	Puncturevine [1]
Buckwheat, Wild		
Carpetweed [1]	Lettuce, Miners [1]	Purslane, Common
Chamomile, Corn	Lettuce, Prickly	Radish, Wild [1]
Chervil, Bur [1]	Mallow, Common	Ragweed, Common
Chickweed, Common [1]	Mayweed, Chamomile	Ragweed, Giant
Cockle, Corn	(Dogfennel) [1]	(Buffaloweed) [1]
Cockle, Cow	Mustard, Blue	Rocket, London [1]
Cocklebur, Common	(Purple)[1]	Rocket, Yellow [1]
Cornflower	Mustard, Tansy	Salsify (Goatsbeard) [1]
(Bachelorbutton) [1]	Mustard Treacle [1]	Shepherdspurse [1]
Dandelion, Common [2]	Mustard, Tumble	Smartweed, Green
Dock, Curly [2]	(Jim Hill) [1]	Smartweed, Pennsylvania
Dragonhead, American [1]	Mustard, Wild [1]	Sorrel, Red
Evening Primrose,	Nightshade, Black	(Sheep Sorrel) [1]
Cutleaf [1]	Nightshade, Cutleaf [1]	Sowthistle, Annual
Falseflax, Smallseeded [1]	Nightshade Silverleaf [2]	Starthistle, Yellow [1]
Fiddleneck, (Tarweed) [1]	(White Horsenettle)	Sunflower, Common (Wild)
Flixweed [1]	Pennycress, Field	Thistle, Canada [2]
Fumitory [1]	(Fanweed, Frenchweed,	Thistle, Russian
Gromwell, Corn [1]	Stinkweed)	Velvetleaf
Groundsel, Common [1]	Pepperweed, Peppergrass [1]	Vetch [1]
Hempnettle [1]	Pigweed, Redroot	Yarrow, Common [2]
Henbit	(Carelessweed)	
Jacobs Ladder [1]	Pigweed, Rough	

[1] These weeds will be controlled with Alligare Dicamba 4 tank mixtures. Refer to tank mix label for specific weeds controlled.

[2] Alligare Dicamba 4 tank mixes will provide suppression of established broadleaf weeds and control their seedlings.

RATES AND TIMINGS

Application of Alligare Dicamba 4 may be made before, during or after planting small grains. For best performance, make applications when weeds are in the 2-3 leaf stage and rosettes are less than 2 inches across. Application of Alligare Dicamba 4 to small grains during periods of rapid growth may result in crop leaning. This condition is temporary and will not reduce crop yields.

Use Alligare Dicamba 4 at 2 to 4 fluid ounces per treated acre in wheat, fall seeded barley, and oats, and at 2 to 3 fluid ounces per treated acre in spring seeded barley. Use the higher level of listed rate ranges when treating difficult to control weeds such as kochia, wild buckwheat, cow cockle, prostrate knotweed, Russian thistle, and prickly lettuce or when dense vegetative growth occurs.

Alligare Dicamba 4 used in a tank mix with other herbicides offers the best spectrum of weed control and herbicide tolerant or resistant weed management. Refer to specific crop for Alligare Dicamba 4 rate and application timing.

For applications prior to the emergence of weeds or when sulfonylurea resistant weeds are present or suspected, use a minimum of 3 fluid ounces per treated acre of Alligare Dicamba 4 with a tank mix herbicide. Non-sulfonylurea herbicides such as 2,4-D or MCPA tank mixed with Alligare Dicamba 4 will offer more consistent control of sulfonylurea resistant weeds.

When tank mixing with sulfonylurea herbicides, such as Ally®, Amber®, Express®, Finesse®, Glean® and Harmony® Extra, use an agriculturally approved surfactant of at least 80% active ingredient at the rate of 1-4 pints/100 gallons of spray or not more than 0.25-0.5% by volume. Use the highest rate of surfactant when using the lower rate ranges of the tank mix and/or when treating more mature and difficult to control weeds or dense vegetative growth.

FALL AND SPRING SEEDED WHEAT

ALLIGARE DICAMBA 4 MUST BE APPLIED TO FALL SEEDED WHEAT PRIOR TO THE JOINTING STAGE. APPLICATIONS TO SPRING SEEDED WHEAT MUST BE MADE BEFORE WHEAT REACHES THE 6 LEAF STAGE.

NOTE: Early developing wheat varieties such as TAM 107, MADISON, or WAKEFIELD must receive application between early tillering and the jointing stage. Care should be taken in staging these varieties to be certain that the application occurs prior to the jointing stage.

TANK MIX TREATMENTS

Alligare Dicamba 4 may be tank mixed with one or more of the following herbicides. Read and follow the label of each tank mix product used for precautionary statements, directions for use, weeds controlled, geographic and other restrictions. It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions and precautionary language of the products in the mixture (for example, first aid from one product, spray drift management from another).

Broadcast rate per treated acre:

Apply 2-4 fluid ounces Alligare Dicamba 4 with:

Product	Active Ingredient	Formulation	Amount of Product Per Acre
2,4-D Amine or Ester	2,4-D	4 lb/gal	8-12 fluid oz (0.25-0.375 lb a.i./A)[1]
MCPA Amine or Ester	MCPA	4 lb/gal	8-12 fluid oz (0.25-0.375 lb a.i./A)[1]
Ally®	metsulfuron-methyl	60% DF	1/10 oz
Amber®	triasulfuron	75% DF	0.28 oz
Express®	thifensulfuron + tribenuron-methyl	75% DF	1/6 oz
Finesse®	chlorsulfuron + metsulfuron-methyl	75% DF	1/3 oz
Glean®	chlorsulfuron	75% DF	1/6 oz
Harmony® Extra	thifensulfuron + tribenuron-methyl	75% DF	1/3 oz
bromoxynil	bromoxynil	2 lb/gal	1-1.5 pts
Bronate®	bromoxynil + MCPA	4 lb/gal	1-2 pts
Curtail®	clopyralid+ 2,4-D	2.38 lb/gal	2-2 2/3pts
clopyralid	clopyralid	3 lb/gal	1/4-1/3 pt
diuron [2]	diuron	80% DF	1/2-1.5 lbs
metribuzin [2]	metribuzin	75% DF	1-10 oz
Dakota® [3]	fenoxaprop-ethyl+MCPA	3.1 lb/gal	16 fluid oz
Tiller® [3]	fenoxaprop-ethyl + MCPA + 2,4D	2.7 lb/gal	1-1.7 pts

[1] When using formulations other than 4 lbs/gal use pounds active/acre listed.

[2] Tank mixtures for fall seeded wheat only.

[3] Use 2 fluid ounces of Alligare Dicamba 4 only. Do not use if wild oats is the target weed. Do not use Alligare Dicamba 4 as a tank mix treatment with Dakota® or Tiller® on Durum wheat.

SPECIAL USE TANK MIXES FOR SPRING AND FALL SEEDED WHEAT
(See Footnotes for Applicable Uses)

Alligare Dicamba 4 may be tank mixed with one or more of the following herbicides. It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions and precautionary language of the products in the mixture (for example, first aid from one product, spray drift management from another).

Broadcast rate per treated acre:

Apply 3-4 [1] fluid ounces Alligare Dicamba 4 with:

Product [2]	Active Ingredient	Formulation	Amount of Product Per Acre
2,4-D or MCPA Amine	2,4-D or MCPA	4 lb/gal	1-2 pts [3] (0.5-1.0 lb a.i./A) [4]
2,4-D or MCPA Ester	2,4-D or MCPA	4 lb/gal	1-1.5 pts [3] (0.5-.75 lb a.i./A) [4]
Ally®	metsulfuron-methyl	60% DF	1/20-1/10 oz
Amber®	triasulfuron	75% DF	0.14-0.28 oz
Express®	thifensulfuron + tribenuron-methyl	75% DF	1/12-1/6 oz
Finesse®	chlorsulfuron + metsulfuron-methyl	75% DF	1/6-1/3 oz
Glean	chlorsulfuron	75% DF	1/6 oz
Harmony® Extra	thifensulfuron + tribenuron-methyl	75% DF	1/6-1/3 oz
Metsulfuron-methyl + 2,4-D Amine or Ester [5]	Metsulfuron-methyl + 2,4-D	60% DF + 4 lb/gal	1/20-1/10 oz + 8 fl oz
Amber® + 2,4-D Amine or Ester [5]	triasulfuron + 2,4-D	75% DF + 4 lb/gal	0.14-0.28 oz + 8 fl oz
Express® + 2,4-D Amine or Ester [5]	(thifensulfuron + tribenuron-methyl)+ 2,4-D	75% DF + 4 lb/gal	1/12-1/6 oz + 8 fl oz
Finesse® + 2,4-D Amine or Ester [5]	(chlorsulfuron + metsulfuron-methyl)+2,4-D	75% DF + 4 lb/gal	1/6-1/3 oz + 8 fl oz
Glean® + 2,4-D Amine or Ester [5]	chlorsulfuron + 2,4-D	75% DF + 4 lb/gal	1/6 + 8 fl oz
Harmony® Extra+2,4-D Amine or Ester [5]	(thifensulfuron + tribenuron-methyl)+ 2,4-D	75% DF + 4 lb/gal	1/6-1/3 oz + 8 fl oz
Glyphosate [6]	glyphosate	3.0 lb/gal	12-16 fl oz

[1] Alligare Dicamba 4 may be used at 6 fluid ounces on fall seeded wheat in Western Oregon as a spring application only. In CO, KS, NM, OK and TX up to 8 fluid ounces of Alligare Dicamba 4 may be applied on fall seeded wheat after it exceeds the 3 leaf stage for suppression of perennial weeds, such as field bindweed. Applications may be made in the fall following a frost but before a killing freeze. Alligare Dicamba 4 may be tank mixed with 2,4-D amine at 8 fluid ounces after wheat begins to tiller. Periods of extended stress such as cold and wet weather may enhance the possibility of crop injury. For fall applications only, do not use if the potential for crop injury is not acceptable.

[2] Do not use low rates of sulfonylurea herbicides, such as Metsulfuron-methyl, Amber, Express, Finesse, Glean, and Harmony Extra on more mature weeds and/or on dense vegetative growth.

[3] NOTE: For use on Fall Seeded Wheat only. Do not use unless potential crop injury will be acceptable.

[4] When using formulations other than 4 lb/gal use pounds active/acre listed.

[5] Use for improved control of Russian thistle, flixweed, gromwell, mayweed and fiddleneck.

[6] Alligare Dicamba 4 may be applied at 2 fluid ounces with any glyphosate formulation labeled for use as a preplant application to small grains with no waiting period prior to planting. Read and follow label directions of the tank mix product for adjuvant use recommendations.

FALL SEEDED BARLEY

ALLIGARE DICAMBA 4 MUST BE APPLIED TO FALL SEEDED BARLEY PRIOR TO THE JOINTING STAGE.

NOTE: For spring barley varieties that are seeded during the winter months or later, follow the rates and timings given for Spring Seeded Barley.

TANK MIX TREATMENTS

Alligare Dicamba 4 may be tank mixed with one or more, but not limited to, the following herbicides. It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions and precautionary language of the products in the mixture (for example, first aid from one product, spray drift management from another).

Broadcast rate per treated acre:

Apply 2-4 fluid ounces Alligare Dicamba 4 with:

Product [1]	Active Ingredient	Formulation	Amount of Product Per Acre
2,4-D Amine or Ester	2,4-D	4 lb/gal	8 fluid oz (0.25 lb a.i./A) [2]
MCPA Amine or Ester	MCPA	4 lb/gal	8-12 fluid oz (0.25-0.375 lb a.i./A)
metsulfuron-methyl	metsulfuron-methyl	60% DF	1/20-1/10 oz
Amber®	triasulfuron	75% DF	0.14-0.28 oz
Express®	thifensulfuron + tribenuron-methyl	75% DF	1/12-1/6 oz
Finesse®	chlorsulfuron + metsulfuron-methyl	75% DF	1/6-1/3 oz
Glean®	chlorsulfuron	75% DF	1/6 oz
Harmony® Extra	thifensulfuron + tribenuron-methyl	75% DF	1/6-1/3 oz
metribuzin	metribuzin	75% DF	1-10 oz
bromoxynil	bromoxynil	2 lb/gal	1-1 1/2 pts
Bronate®	bromoxynil + MCPA	4 lb/gal	3/4-1 1/2 pts

[1] Do not use low rates of sulfonylureas (metsulfuron-methyl, Amber®, Express®, Finesse®, Glean®, and Harmony® Extra) on more mature weeds and/or on dense vegetative growth.

[2] When using formulations other than 4 lb/gal use pounds active/acre listed.

SPRING SEEDED BARLEY

ALLIGARE DICAMBA 4 MUST BE APPLIED BEFORE SPRING SEEDED BARLEY EXCEEDS THE 4 LEAF STAGE.

TANK MIX TREATMENTS

Alligare Dicamba 4 may be mixed with one or more of the following herbicides. It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions and precautionary language of the products in the mixture (for example, first aid from one product, spray drift management from another).

Broadcast rate per treated acre:

Apply 2-4 fluid ounces Alligare Dicamba 4 with:

Product [1]	Active Ingredient	Formulation	Amount of Product Per Acre
MCPA Amine or Ester	MCPA	4 lb/gal	8-12 fluid oz (0.25-0.375 lb a.i./A)[2]
metsulfuron-methyl	metsulfuron-methyl	60% DF	1/20-1/10 oz
Amber®	triasulfuron	75% DF	0.14-0.28 oz
Express®	thifensulfuron + tribenuron-methyl	75% DF	1/12-1/6 oz
Finesse®	chlorsulfuron + metsulfuron-methyl	75% DF	1/6-1/3 oz
Glean®	chlorsulfuron	75% DF	1/6 oz
Harmony® Extra	thifensulfuron + tribenuron-methyl	75% DF	1/6-1/3 oz
metribuzin	metribuzin	75% DF	1-10 oz
bromoxynil	bromoxynil	2 lb/gal	1-1 1/2 pts
Bronate®	bromoxynil + MCPA	4 lb/gal	3/4-1 1/2 pts

[1] Do not use low rates of sulfonylureas (metsulfuron-methyl, Amber®, Express®, Finesse®, Glean®, and Harmony® Extra) on more mature weeds and/or on dense vegetative growth.

[2] When using formulations other than 4 lb/gal use pounds active/acre listed.

FALL AND SPRING SEEDED OATS

ALLIGARE DICAMBA 4 MUST BE APPLIED BEFORE SPRING SEEDED OATS EXCEED THE 5 LEAF STAGE. APPLICATIONS TO FALL SEEDED OATS MUST BE MADE PRIOR TO THE JOINTING STAGE.

TANK MIX TREATMENTS

Alligare Dicamba 4 may be tank mixed with one or more of the following herbicides. It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions and precautionary language of the products in the mixture (for example, first aid from one product, spray drift management from another).

Broadcast rate per treated acre:

Apply 2-4 fluid ounces Alligare Dicamba 4 with:

Product	Active Ingredient	Formulation	Amount of Product Per Acre
MCPA Amine or Ester	MCPA	4 lb/gal	8-12 fluid oz (0.25-0.375 lb a.i./A)[1]

[1] When using formulations other than 4 lb/gal use pounds active/acre listed.

FALL AND SPRING SEEDED TRITICALE EXCEPT CALIFORNIA

EARLY SEASON APPLICATIONS

Apply 2-4 fluid ounces of Alligare Dicamba 4 to triticale.

Early season applications to fall-seeded triticale must be made prior to jointing stage.

Early season applications to spring-seeded triticale must be made before triticale reaches the 6-leaf stage.

TANK MIXES

Alligare Dicamba 4 may be tank mixed with bromoxynil. It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions and precautionary language of the products in the mixture (for example, first aid from one product, spray drift management from another).

SUGARCANE

IMPORTANT: Observe all restrictions, precautions, mixing, and application instructions.

Consult your local or state authorities for possible application restrictions, especially concerning aerial applications and advice concerning special local use situations.

Application made over the top of actively growing sugarcane may result in crop injury. When possible, direct the spray beneath the sugarcane canopy in order to minimize the likelihood of crop injury. The use of directed sprays will also aid in maximizing spray coverage of weed foliage.

RESTRICTION:

- Do not exceed the maximum single application rate of 2 pints (1.0 lb. a.i.) Alligare Dicamba 4 with no more than 2 applications per year.

WEEDS CONTROLLED

Alligare Dicamba 4, when applied at specified rates, will control many ANNUAL, BIENNIAL and PERENNIAL broadleaf weeds commonly found in sugarcane. (Refer to WEED LIST).

RATES AND TIMINGS

Application of Alligare Dicamba 4 may be made any time after weeds have emerged and are actively growing but before the close-in stage of sugarcane. Application rates and timing of Alligare Dicamba 4 are given below. Use the higher level of listed rate ranges when treating dense vegetative growth.

Weed Stage & Type	Broadcast Rate Per Treated Acre		PHI
	Amount of Formulated Alligare Dicamba 4 (pints)	Equivalent Lbs. a.i.	
Annual			
- Small, actively growing	1/2-1	1/4-1/2	87 days
- Established weed growth	1-1 1/2	1/2-3/4	
Biennial	1-2	1/2-1	
Perennial	2	1[1]	

[1] Application made over the top of actively growing sugarcane may result in crop injury.

TANK MIX TREATMENTS

Alligare Dicamba 4 may be tank mixed with one or more of the following herbicides for control of grasses or additional broadleaf weeds. It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions and precautionary language of the products in the mixture (for example, first aid from one product, spray drift management from another).

Herbicide	Rate Per Treated Acre (lbs. a.i.)
ametryn	2/5-8
asulam	2-3 1/3
atrazine	2/5-4
2,4-D	1 /2-3*

*Application of Alligare Dicamba 4 plus 2,4-D tank mix at the higher listed rate ranges may result in crop injury.

PASTURE, HAY, RANGELAND, AND FARMSTEAD (Non-Cropland)

IMPORTANT: Observe all precautions and restrictions. Read and follow mixing and application instructions.

Alligare Dicamba 4 may be used on pasture, hay, rangeland, farmstead (non-cropland) (including fence rows and non-irrigation ditchbanks) for broadleaf weed and brush control. Alligare Dicamba 4 may also be applied to non-cropland areas for the control of broadleaf weeds in Noxious Weed Control Programs, Districts or Areas including broadcast or spot treatment of roadsides and highways, utilities, railroad and pipeline rights-of-way. Noxious weeds must be recognized at the state level but programs may be administered at state, county or other level.

Alligare Dicamba 4 uses described in this section also pertain to small grains (such as barley, forage sorghum, oats, rye, sudangrass or wheat) grown for pasture use only.

PRECAUTIONS:

- NEWLY SEEDED AREAS, including small grains grown for pasture may be severely injured if rates of Alligare Dicamba 4 greater than 1 pint/A are applied.
- ESTABLISHED GRASS CROPS growing under stress can exhibit various injury symptoms that may be more pronounced if herbicides are applied.
- Bentgrass, carpetgrass, buffalograss and St. Augustine grass may be injured at rates exceeding 1 pint Alligare Dicamba 4 (1/2 lb a.i.) per treated acre. Usually colonial bentgrasses are more tolerant than creeping types. Velvetgrasses are most easily injured. Treatments will kill or injure alfalfa, clovers, lespedeza, wild winter peas, vetch and other legumes.

RESTRICTIONS:

- ANIMALS CANNOT BE REMOVED FROM TREATED AREA FOR SLAUGHTER PRIOR TO 30 DAYS AFTER LAST APPLICATION.
- THERE IS NO WAITING PERIOD BETWEEN TREATMENT AND GRAZING FOR NON-LACTATING ANIMALS.
- Do not exceed the maximum single application rate of 2 pints (1.0 lb. a.i.) Alligare Dicamba 4 per acre with no more than 2 applications per year.

TIMING RESTRICTIONS FOR LACTATING DAIRY ANIMALS FOLLOWING TREATMENT:

Alligare Dicamba 4 Rate Per Treated Acre	Days Before Grazing	Days Before Hay Harvest
Up to 1 pint (1/2 lb. a.i.)	7 days	37 days
Up to 2 pints (1 lb. a.i.)	21 days	51 days

MIXING AND APPLICATION

Alligare Dicamba 4 can be applied using water, oil in water emulsions including invert systems, or sprayable fluid fertilizer as a carrier. A COMPATIBILITY TEST (see COMPATIBILITY TEST section) should be made prior to tank mixing.

To prepare oil in water emulsions, half-fill spray tank with water, then add appropriate amount of emulsifier. With continuous agitation, slowly add the herbicide and then the oil (such as diesel oil or fuel oil) or a premix of oil plus additional emulsifier to spray tank. Complete filling of spray tank with water. Maintain vigorous agitation during spray operation to prevent oil and water from forming separate layers.

Alligare Dicamba 4 may be applied broadcast using either ground or aerial application equipment. When using ground equipment, apply 3 to 600 gallons of diluted spray per treated acre. Volume of spray applied will depend on the height, density, and type of weeds or brush being treated and on the type of equipment being used. When using aerial equipment apply 2 to 40 gallons of diluted spray per treated acre in a water-based carrier.

Alligare Dicamba 4 may be applied to individual clumps or small areas (SPOT TREATMENT) of undesirable vegetation using handgun or similar types of application equipment. Apply diluted sprays to allow complete wetting (up to run off) of foliage and stems.

Herbicide adjuvants or other spray additives (emulsifiers, surfactants, wetting agents, drift control agents, or penetrants) may be used for wetting, penetration, or drift control. Spray additives must be agriculturally approved when used in pasture applications. If spray additives are used, read and follow all use recommendations and precautions on product label.

WEEDS CONTROLLED

Alligare Dicamba 4, when applied at specified rates, will give control of many ANNUAL, BIENNIAL, and PERENNIAL broadleaf weeds, and many WOODY brush and vine species commonly found in pasture, hay, rangeland, and farmstead (non-cropland) areas. (Refer to WEED LIST). Noted (*) PERENNIAL weeds may be controlled with lower rates of either Alligare Dicamba 4 or Alligare Dicamba 4 plus 2,4-D. See the following RATES AND TIMINGS section.

RATES AND TIMINGS

Application rates and timing of Alligare Dicamba 4 are given below. Use the higher level of listed rate ranges when treating dense or tall vegetative growth.

Weed Stage & Type	Broadcast Rate Per Treated Acre	
	Amount of Formulated Alligare Dicamba 4 (pints)	Equivalent Lbs. a.i.
Annual		
Small, actively growing	1/2-1	1/4-1/2
Established weed growth	1-1 1/2	1/2-3/4
Biennial[1]		
Rosette diameter		
Less than 3 inches	1/2-1	1/4-1/2
3 inches or more	2	1
Bolting	2	1
Perennial		
Suppression or top growth control	1-2	1/2-1
Noted (*) Perennials	2	1
Other Perennials	2	1
Woody Brush & **Vines**		
Top Growth Suppression	1-2	1/2-1
Top Growth Control[2]	2	1
Stems and Stem Suppression	2	1

[1] For best performance, make application when BIENNIAL WEEDS are in the rosette stage.

[2] Species noted in WEED LIST section will require tank mixtures for adequate control.

* Rates above 1.0 lb a.i./A are spot treatments only.

TANK MIX TREATMENTS

Alligare Dicamba 4 may be tank mixed with one or more of the following herbicides for control of grasses, additional broadleaf weeds, and woody brush and vines. It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions and precautionary language of the products in the mixture (for example, first aid from one product, spray drift management from another).

Herbicide	Rate Per Treated Acre (lbs. a.i.)
Pasture, hay, rangeland and farmstead (non-cropland) use:	
glyphosate	3/4 - 3 3/4
metsulfuron methyl	0.0038-0.011
paraquat	1/2 - 1
picloram	1/8 - 3
triclopyr	3/4 - 9
2,4-D	1/4 - 6

Due to the variations that may occur in formulated products and specific use ingredients (e.g. water supplies), a COMPATIBILITY TEST is recommended prior to actual tank mixing.

CUT SURFACE TREE TREATMENTS

Alligare Dicamba 4 may be applied as a cut surface treatment for control of unwanted trees and prevention of sprouts of cut trees. A mix of 1 part Alligare Dicamba 4 with 1 to 3 parts water should be used in application. Use the lower dilution when treating difficult-to-control species.

FRILL OR GIRDLE TREATMENTS: Make a continuous cut or a series of overlapping cuts using an axe to girdle tree trunk. Spray or paint cut surface with the Alligare Dicamba 4/water mix.

STUMP TREATMENTS: Spray or paint freshly cut surface with the water mix. The area adjacent to the bark should be thoroughly wet.

Note: For more rapid foliar effects, 2,4-D may be added to the Alligare Dicamba 4/water mix.

DORMANT APPLICATIONS FOR CONTROL OF MULTIFLORA ROSE

Alligare Dicamba 4 can be applied when plants are dormant as an undiluted SPOT-CONCENTRATE directly to the soil or as a LO-OIL BASAL BARK treatment using an oil-water emulsion solution.

SPOT-CONCENTRATE applications of Alligare Dicamba 4 should be applied directly to the soil as close as possible to the root crown but within 6-8 inches of the crown. On sloping terrain, application should be made to the uphill side of the crown. Do not make application when snow or water prevents applying Alligare Dicamba 4 directly to the soil. The use rate of Alligare Dicamba 4 is dependent on the canopy diameter of the multiflora rose. Examples: Use Alligare Dicamba 4 at 1/4, 1 or 2 1/4 fluid ounces of product respectively, for 5, 10 or 15 feet canopy diameters. Do not exceed a total of 2 quarts Alligare Dicamba 4 per acre per year.

LO-OIL BASAL BARK applications of Alligare Dicamba 4 should be applied to the basal stem region from the ground line up to a height of 12 to 18 inches. Spray until runoff, with special emphasis on covering the root crown. For best results, make application when plants are dormant. Do not make application after bud break or when plants are showing signs of active growth. Do not make application when snow or water prevents applying Alligare Dicamba 4 to the ground line. Refer to Mixing and Applications above in this section for method of preparing oil-in-water emulsion. Example for making approximately 2 gallons of a LO-OIL spray solution mixture: combine 1 1/2 gallons water plus 1 ounce emulsifier plus 1 pint Alligare Dicamba 4 plus 2 1/2 pints of No. 2 diesel fuel. Adjust amounts of materials used proportionately to the amount of final spray solution desired. Do not exceed 8 gallons of spray solution mix applied per acre per year.

CONSERVATION RESERVE PROGRAM (CRP) ACRES

IMPORTANT: Observe all precautions, restrictions, mixing and application directions.

Alligare Dicamba 4 can be used on both newly seeded and established grasses grown in Conservation Reserve or Federal Set-Aside Programs. For program lands, such as Conservation Reserve Program, consult program rules to determine whether grass or hay may be used. The more restrictive requirements of the program rules or this label must be followed.

Agriculturally approved surfactants may be added to the spray mixture to improve postemergence weed control, particularly in dry growing conditions.

NEWLY SEEDED AREAS

Alligare Dicamba 4 may be applied either preplant or postemergence to newly seeded grasses or small grains such as barley, oats, rye, sudangrass, wheat, or other grain species grown as a cover crop. Postemergence applications may be made after seedling grasses exceed the 3-leaf stage. Rates of Alligare Dicamba 4 greater than 1 pint per treated acre may severely injure newly seeded grasses. Preplant applications - injury to new seedings may occur if intervals between application and grass planting is less than 45 days per pint of Alligare Dicamba 4 per treated acre West of the Mississippi River or 20 days per pint East of the Mississippi River.

ESTABLISHED GRASS STANDS

Established grass stands are perennial grasses planted one or more seasons prior to treatment. Certain species: bentgrass, carpetgrass, smooth brome, buffalograss or St. Augustine grass may be injured when treated with Alligare Dicamba 4 at rates exceeding 1 pint per treated acre.

WEEDS CONTROLLED

Alligare Dicamba 4, when applied at specified rates, will control many annual and biennial weeds and provide control or suppression of many perennial weeds. (Refer to WEED LIST).

RATES AND TIMINGS

Application rates and timing of Alligare Dicamba 4 treatment are given below. Use the higher rate of the rate range when vegetation is either dense or tall, or when weeds are growing under stressed conditions such as drought or cool temperature.

RESTRICTIONS:

- Do not exceed the maximum single application rate of 2 pints (1.0 lb. a.i.) Alligare Dicamba 4 per acre with no more than 2 applications per year.
- Do not use adjuvants containing penetrants such as petroleum based oils after grass emergence on newly seeded grasses.

PRECAUTION:

- Alligare Dicamba 4 treatment will injure or may kill alfalfa, clovers, lespedeza, wild winter peas, vetch, and other legumes.

Weed Stage & Type	Broadcast Rate Per Treated Acre		PHI
	Amount of Formulated Alligare Dicamba 4 (pints)	Equivalent lbs. a.i.	
Annual			
Small, actively growing	1/4-1	1/8-1/2	For grass forage: 0 days
Established weed growth	1	1/2	
Biennial [1, 2]			For grass hay: 7 days
Rosette diameter			
Less than 3 inches	1/2-1	1/4-1/2	
3 inches or greater	1-2	1/2-1	
Bolting biennial	2	1	
Perennial [2]			
Suppression/Control	2	1	

[1] For best results, treat Biennial weeds with Alligare Dicamba 4 when they are in the rosette stage of growth.

[2] Biennial and Perennial weeds will require follow-up (sequential) treatments for seedling control and escapes.

TANK MIX TREATMENTS

To control grasses and additional broadleaf weeds, Alligare Dicamba 4 may be tank mixed with other herbicides registered for use in Conservation Reserve Programs such as 2,4-D, glyphosate, paraquat, metsulfuron, and others. It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions and precautionary language of the products in the mixture (for example, first aid from one product, spray drift management from another).

ASPARAGUS

FOR USE ONLY IN THE STATES OF CALIFORNIA, OREGON, AND WASHINGTON

IMPORTANT: Observe all restrictions, precautions, mixing, and application instructions.

NOTE: If spray contacts emerged spears, crooking (twisting) of some spears may result. If such crooking occurs, discard affected spears.

RESTRICTIONS:

- Do not harvest prior to 24 hours after treatment.
- Do not use in the Coachella Valley of California.
- A retreatment may be made if needed; however, DO NOT EXCEED a total of 1 pint (1/2 lb. a.i.) of Alligare Dicamba 4 per treated acre per crop year.

RATES AND TIMINGS

Apply Alligare Dicamba 4 to emerged and actively growing weeds in 40 to 60 gallons of diluted spray per treated acre immediately after cutting the field, but at least 24 hours before the next cutting.

TANK MIXING

Alligare Dicamba 4 may be applied in a tank mixture with either 2,4-D or glyphosate herbicide for improved control of noted (*) weeds. It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions and precautionary language of the products in the mixture (for example, first aid from one product, spray drift management from another).

Weeds	Rate Per Treated Acre
Mustard, Black Pigweed, Redroot (Carelessweed) Sowthistle, Annual *Thistle, Canada Thistle, Russian	1/2-1 pt. (1/4-1/2 lb. a.i.)
*Bindweed, Field Chickweed, Common Goosefoot, Nettleleaf Radish, Wild Thistle, Milk	1 pt. (1/2 lb. a.i.)

TURF AND LAWNS

FOR USE IN FARMSTEAD (NON-CROPLAND) AND SOD FARMS

IMPORTANT: Observe all restrictions, precautions, mixing, and application instructions.

To avoid injury to newly seeded grasses, application of Alligare Dicamba 4 should be delayed until after the second mowing. Further-more, application rates in excess of 1 pint (1/2 lb. a.i.) per treated acre may cause noticeable stunting or discoloration of sensitive grass species such as bentgrass, carpetgrass, buffalograss, and St. Augustine grass.

In areas where roots of sensitive plants extend, do not apply in excess of 1/4 pint (1/8 lb. a.i.) of Alligare Dicamba 4 per treated acre on coarse textured (sandy-type) soils, or in excess of 1/2 pint (1/4 lb. a.i.) per treated acre on fine textured (clayey-type) soils. Do not make repeat applications in these areas for 30 days and until previous applications of Alligare Dicamba 4 have been activated in the soil by rain or irrigation.

WEEDS CONTROLLED

Alligare Dicamba 4, when applied at specified rates, will give control of many ANNUAL, BIENNIAL, and noted (*) PERENNIAL broadleaf weeds commonly found in turf. Alligare Dicamba 4 will also give growth suppression of many other listed PERENNIAL broadleaf weeds and WOODY brush and vine species. (Refer to WEED LIST).

MIXING AND APPLICATION

Apply 30 to 200 gallons of diluted spray per treated acre (3 qts. to 4 1/4 gals. per 1,000 sq. ft.), depending on density or height of weeds treated and on the type of equipment used.

RATES AND TIMINGS

Use the higher level of listed rate ranges when treating dense vegetative growth. For best performance, apply when weeds are emerged and actively growing.

RESTRICTION:

- Do not exceed the maximum single application rate of 2 pints (1.0 lb. a.i.) of Alligare Dicamba 4 per acre with no more than 2 applications per year.

Weed Stage & Type	Alligare Dicamba 4		
	Pints per treated acre	Lbs. a.i. per treated acre	Teaspoons per 1,000 sq. ft.
Annual			
Small, actively growing	1/4-1	1/4-1/2	1-2 1/4
Established weed growth	1-1 1/2	1/2-3/4	2 1/4-3 1/4
Biennial Rosette diameter			
Less than 3 inches	1/2-1	1/4-1/2	1-2 1/4
3 inches or more	1-2	1/2-1	2 1/4-4 1/2
Perennial and Woody			
Brush and Vines	1-2	1/2-1	2 1/4-4 1/2

TANK MIX TREATMENTS

Alligare Dicamba 4 may be tank mixed with 2,4-D, MCPA, MCPP, or bromoxynil for control of additional weeds listed on the tank mix product label. It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions and precautionary language of the products in the mixture (for example, first aid from one product, spray drift management from another).

Apply 1/5 to 1/2 pint (1/10 to 1/4 lb. a.i.) of Alligare Dicamba 4 per treated acre with the labeled rate of 2,4-D, MCPA, MCPP, or bromoxynil.

RESTRICTION:

- Repeat treatments may be made as needed; however, DO NOT EXCEED 2 pints (1 lb. a.i.) of Alligare Dicamba 4 per treated acre during the growing season.

GRASS SEED CROPS

GRASSES GROWN FOR SEED SUCH AS BERMUDA GRASS, BLUEGRASS, FESCUE AND RYEGRASS

IMPORTANT: Observe all restrictions, precautions, mixing, and application instructions.

Refer to the PASTURE, HAY, RANGELAND, AND FARMSTEAD (NONCROPLAND AREAS) section for possible grazing and feeding restrictions.

WEEDS CONTROLLED

Alligare Dicamba 4 will provide control or suppression of annual broadleaf weeds listed below. For improved control of listed weeds plus additional weeds, it is recommended that Alligare Dicamba 4 be applied in a tank mix with other herbicides.

Alfalfa [1]	Clover	Ladysthumb
Bedstraw, Catchweed	Cockle, White	Lambsquarters, Common
Bindweed, Field	Dock, Broadleaf	Lettuce, Prickly
Buttercup, Corn	Dock, Curly	Mayweed (Dogfennel)
Buttercup, Creeping	Hemlock, Poison	Ragwort, Tansy
Buttercup, Western Field	Knapweed, Russian [1]	Sorrel, Red (Sheep Sorrel)
Catchfly, Nightflowering	Knawel	Sowthistle, Annual
Chamomile, Corn	Kochia	Starwort, Little
Chickweed, Common	Knotweed, Prostrate	Thistle, Canada[1]
Chickweed, Mouseear		

[1] Top growth control only

RATES AND TIMINGS

Apply 1/2 to 1 pint of Alligare Dicamba 4 per treated acre on SEEDLING GRASS after the crop reaches the 3-5 leaf stage.

Apply up to 2 pints of Alligare Dicamba 4 on well-established perennial grass. DO NOT APPLY AFTER THE GRASS SEED CROP BEGINS TO JOINT. For best performance, make applications when weeds are in the 2-4 leaf stage and rosettes are less than 2 inches across. Use the higher level of listed rate ranges when treating more mature weeds or dense vegetative growth.

RESTRICTIONS:

- Do not exceed the maximum single application rate of 2 pints (1.0 lb. a.i.) of Alligare Dicamba 4 per acre with no more than 2 applications per year.
- Do not use on bentgrass unless possible crop injury can be tolerated.

TANK MIX TREATMENTS

For control of grasses or additional broadleaf weeds, Alligare Dicamba 4 may be tank mixed with all broadleaf herbicides registered for use in Grass Seed Production. It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions and precautionary language of the products in the mixture (for example, first aid from one product, spray drift management from another).

Broadcast Rate Per Treated Acre:

Apply 1/2 to 2 pints Alligare Dicamba 4 with:

Product	Active Ingredient	Formulation	Amount of Product Per Acre
2,4-D Amine or Ester	2,4-D	4 lb/gal	1-4 pts. (0.5-2.0 lb a.i./A) [1]
MCPA Amine	MCPA	4 lb/gal	1-2 pts (0.5-1.0 lb a.i./A) [1]
bromoxynil	bromoxynil	2 lb/gal	1-2 pts
Curtail®	clopyralid + 2,4-D	2.38 lb/gal	1 ¾-4 pts
diuron	diuron	80% DF	2-4 lbs
clopyralid	clopyralid	3 lb/gal	1/4-1 pt

[1] When using formulations other than 4 lb/gal use pounds active/acre listed.

ANNUAL GRASS CONTROL

For suppression of ANNUAL GRASS WEEDS such as:
Brome, Downy (Cheatgrass)
Brome, Ripgut
Fescue, Rattail
Windgrass

Apply up to 2 pints (1lb. a.i.) of Alligare Dicamba 4 per treated acre in the fall or late summer after harvest and burning of established grass seed crops (maximum of 2 treatments per year). Applications should be made immediately following first irrigation when the soil is moist and before weeds have more than 2 leaves.

PREPLANT DIRECTIONS (POST HARVEST/FALLOW/CROP STUBBLE/SET-A-SIDE) FOR BROADLEAF WEED CONTROL BEFORE WHEAT, CORN, SORGHUM, SOYBEANS

IMPORTANT: Observe all restrictions, precautions, mixing, and application instructions.

WEEDS CONTROLLED

Alligare Dicamba 4 may be applied alone or in tank mix combinations with other herbicides registered for this use.

Alligare Dicamba 4 can be applied either POST HARVEST in the fall, spring or summer during the FALLOW period or to CROP STUBBLE/SET-A-SIDE acres. Alligare Dicamba 4, when applied at the specified rates, will control many ANNUAL broadleaf weeds; see the WEEDS CONTROLLED section under small grains. In addition, Alligare Dicamba 4 will control or suppress the following BIENNIAL and PERENNIAL broadleaf weeds:

Alfalfa [1]	Dock, Curly [1]	Sowthistle, perennial [1]
Artichoke, Jerusalem	Dogbane, Hemp	Spurge, leafy
Bindweed, Field	Garlic, Wild [2]	Thistle Bull
Bindweed, Hedge	Horsenettle, Carolina	Thistle, Canada [2]
Blueweed, Texas	Knapweed, Diffuse	Thistle, Milk
Bursage	Knapweed, Spotted	Thistle, Musk
(Bur Ragweed)	Nightshade, Silverleaf	Thistle, Plumeless
(Povertyweed)	Redvine	Thistle, Scotch
(Lakeweed) [1]	Smartweed, Swamp	Trumpetcreeper (Buckvine)
Dandelion, Common [1]		

[1] Perennials may be controlled using Alligare Dicamba 4 at rates lower than those listed for other listed perennial weeds. (See RATES AND TIMINGS under this heading.)
[2] See the SPECIAL TANK MIX TREATMENTS section under this heading for specific control programs for these weeds.

RATES AND TIMINGS

Apply Alligare Dicamba 4 as a broadcast or spot treatment to emerged and actively growing weeds after crop harvest (post harvest) and before a killing frost or in the fallow cropland or crop stubble the following spring or summer. Agriculturally approved spray additives, such as surfactants or oils, may be used to enhance spray coverage and the herbicide's penetration of weed foliage. See Cropping restrictions for recommended interval between application and planting to prevent crop injury.

For best performance, make application when ANNUAL weeds are less than 6 inches tall, when BIENNIAL weeds are in the rosette stage and to PERENNIAL weed regrowth in late summer or fall following a mowing or tillage treatment. Most effective control of upright perennial broadleaf weeds, such as Canada thistle and Jerusalem artichoke, occurs if application is made when the majority of weeds, such as field bindweed and hedge bindweed, are best controlled when weeds are in or beyond the full bloom stage.

Avoid disturbing treated areas following application. Treatments may not kill weeds which develop from seed or underground plant parts, such as rhizomes or bulblets, after the effective period for Alligare Dicamba 4. For seedling control, a follow-up program or other cultural practices could be instituted. For small grain in-crop uses of Alligare Dicamba 4, see the RATE AND TIMINGS section under the SMALL GRAINS heading for details.

ALLIGARE DICAMBA 4 RATES PER TREATED ACRE

RESTRICTION:

- Do not exceed the maximum single application rate of 2 pints (1.0 lb. a.i.) of Alligare Dicamba 4 per acre with no more than 2 applications per year.

WEED TYPE	AMOUNT OF PRODUCT PER ACRE PER APPLICATION
Annual	1/2-1 pt (8-16 fl. oz.)
Biennial	1-2 pts (16-32 fl. oz.)
Perennial	1-4* pts (16-64 fl. oz.)
Perennial suppression	1-2 pts (16-32 fl. oz.)
Noted (1) perennials	2 pts (32 fl. oz.)
Other perennials	2 pts (32 fl. oz.)

TANK MIX TREATMENTS

Alligare Dicamba 4 may be tank mixed with one or more of the following herbicides for control of grasses or additional broadleaf weeds. It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions and precautionary language of the products in the mixture (for example, first aid from one product, spray drift management from another).

ALLIGARE DICAMBA 4 BROADCAST RATE PER TREATED ACRE FOR ANNUAL WEED CONTROL:
Apply 1/4 to 1 pint Alligare Dicamba 4 with:

Product	Active Ingredient	Formulation	Amount of Product Per Acre
Atrazine[1]	atrazine	4 lb/gal	1/2-6 pts
		90% DF	1/2-3.3 lbs
metsulfuron-methyl [2]	metsulfuron-methyl	75% DF	0.1 oz
Amber® [2]	triasulfuron	75% DF	0.28-0.35 oz
paraquat	paraquat	2 lb/gal	1-2 pts
		2.5 lb/gal	1.5 pts
Finesse® [2]	chlorsulfuron + metsulfuron-methyl	75% DF	0.2 oz
pronamide [1]	pronamide	50-W	1/2-1.0 lb
Fallow Master®	glyphosate + dicamba	1.6 lb/gal	22-44 fluid oz
Landmaster® BW	glyphosate + 2,4-D	2.4 lb/gal	27-54 fluid oz
glyphosate	glyphosate	3 lb/gal	8-48 fluid oz
metribuzin [1]	metribuzin	75% DF	1/2-1 lb
		4 lb/gal	3/4-1 1/2 pts
2,4-D	2,4-D	4 lb/gal	1-2 pts (0.5-1 lb a.i./A) [3]

[1] Tank mixes of Alligare Dicamba 4 with these products may be subject to special restrictions. See the Product Label of the tank mix partner for intended use rates, restrictions and other precautions.
[2] When tank mixing with sulfonylurea herbicides, refer to the product label for rates and restrictions. Use a surfactant of at least 80% active ingredient at the rate of 1-2 quarts/100 gallons of spray or not more than 0.25-0.5% by volume. Use the highest rate of surfactant when using the lower rate ranges of the tank mix and/or when treating more mature weeds or dense vegetative growth. Sulfonylurea resistant weeds may not be controlled by tank mixes of Alligare Dicamba 4 and a sulfonylurea. Refer to the Alligare Dicamba 4 tank mix section for alternative tank mixes.
[3] When using formulations other than 4 lb/gal use pounds active/acre listed.

ALLIGARE DICAMBA 4 BROADCAST RATE PER TREATED ACRE FOR BIENNIAL AND PERENNIAL WEED CONTROL:
Apply 1 to 2 pints (0.5-1.0 lb. a.i.) of Alligare Dicamba 4 with:

Product	Active Ingredient	Formulation	Amount of Product Per Acre
Curtail®	clopyralid + 2,4-D	2.38 lb/gal	2-4 pts
2,4-D	2,4-D	4 lb/gal	2-6 pts (1.0-3 lb a.i./A) [1]
Landmaster® BW	glyphosate +2,4-D	2.4 lb/gal	54 fluid oz
glyphosate	glyphosate	3.0 lb/gal	1-5 qts
picloram	picloram	2 lb/gal	1/2-1 pt

[1] When using formulation other than 4 lb/gal use pounds active/acre listed.

SPECIAL TANK MIX TREATMENTS
For suppression of perennial weeds, apply 1/2-1 pint of Alligare Dicamba 4 with 8-16 fluid ounces of glyphosate herbicide per treated acre.

For wild garlic control, apply 1 pint Alligare Dicamba 4 with 3 pints of 2,4-D LV Ester (4 lb/gal) per treated acre. Apply when wild garlic is 4 to 8 inches tall.

For Canada thistle control, use Alligare Dicamba 4, or Alligare Dicamba 4 plus Curtail® or Alligare Dicamba 4 plus glyphosate herbicide or glyphosate tank mix treatments.

Application may be made during fallow periods for control of volunteer barley, bulbous bluegrass, downy brome, jointed goatgrass, common rye and volunteer wheat when they are actively growing. Use 1 pint Alligare Dicamba 4 with 1/2-1 lb pronamide 50W. Fall seeded wheat may be planted 9 months or more after application. For best performance, make application between mid-October and mid-December, prior to soil freeze up.

During fallow periods, apply Alligare Dicamba 4 plus Landmaster® BW or Fallow Master® herbicide to give improved control of kochia, wild buckwheat, prickly lettuce, field bindweed and Canada thistle. Use 1/8-1/4 pint of Alligare Dicamba 4 plus 22 to 54 fluid ounces of Landmaster® BW or Fallow Master® herbicide for annual weed control or 1/4 to 1/2 pint Alligare Dicamba 4 plus 22 to 54 fluid ounces of Landmaster® BW or Fallow Master® herbicide for perennial weed suppression.

CROPPING RESTRICTIONS
The following use directions are based on a maximum single application rate of 1.0 lb. ae per acre and a maximum annual rate of 2.0 lbs. ae per acre per year.

CORN, SORGHUM and SOYBEANS may be planted in the spring following applications made during the previous year. If less than 1 inch of rainfall occurs between application and first killing frost, cultivate treated areas to allow herbicide to come in contact with moist soil. Cultivation may take place before or immediately after ground thaw.

Soybean injury may occur if the interval between application and planting is less than specified. In areas with greater than 30 inches of rainfall, delay planting for 30 days per pint of Alligare Dicamba 4 per treated acre. In areas with less than 30 inches of rainfall, delay planting for 45 days per pint of Alligare Dicamba 4 per treated acre. Exclude days when ground is frozen.

WHEAT may be planted in the fall or spring following applications. Also, spot applications may be made any time prior to crop emergence if crop injury can be tolerated in treated areas. Wheat injury may occur if the interval between application and planting is less than specified.

East of the Mississippi River, the interval is 20 days per pint of Alligare Dicamba 4 per treated acre or 1.25 days per 1 ounce. Moisture is essential for Alligare Dicamba 4 degradation. Exclude days when ground is frozen.

West of the Mississippi River, the interval is 45 days per pint of Alligare Dicamba 4 per treated acre or 3 days per ounce. Moisture is essential for Alligare Dicamba 4 degradation. Exclude days when ground is frozen.

Following a normal harvest of barley, oats, or wheat, any rotation crop may be planted. If the interval before harvest is shortened, such as when cover crops will be plowed under, do not follow up with the planting of a sensitive crop (beans, cotton, flowers, fruit trees, grapes, ornamentals, peas, potatoes, soybeans, sunflowers, tobacco and tomatoes).

CONTROL OF PERENNIAL BROADLEAF WEEDS IN CROPLAND (SPOT APPLICATION ONLY)

FOR USE ONLY IN THE STATES OF IDAHO, MONTANA, NEVADA, OREGON, UTAH AND WASHINGTON.

IMPORTANT: Observe all restrictions, precautions, mixing, and application instructions.

RESTRICTIONS:

- Do not treat sub-irrigated cropland or areas where the soil remains saturated with water throughout the year.
- Do not exceed the maximum single application rate of 2 pints (1.0 lb. a.i.) of Alligare Dicamba 4 per acre with no more than 2 applications per year.

NOTE: Do not use unless injury to wheat or rotated barley will be acceptable. Application may be made up to one month prior to planting of wheat.

WEEDS CONTROLLED
Alligare Dicamba 4, when applied at specified rates, will control many broadleaf weeds including:

Bindweed, Field	Knapweed, Russian
Dock, Broadleaf (Bitterdock)	Ragwort, Tansy
Dock, Curly	Spurge, Leafy
Knapweed, Black	Thistle, Canada

RATES AND TIMINGS
Alligare Dicamba 4 may be applied at any time following a crop harvest to stubble, fallow or other cropland. Application should be made when weeds are actively growing and prior to a killing frost.

Barley, oats, corn, sorghum (milo), annual or perennial grass crops may be planted into treated areas one year after application. Crops grown for seed (other than perennial grass seed) should not be planted into treated areas until three years after application. Do not plant broadleaf crops such as alfalfa, beans, peas, potatoes, or sugarbeets into treated areas until two years after application.

In most cases, treatments will not kill perennial weed seedlings, which germinate from seed one or two years after treatment. Once the effect of the chemical has been lost, a follow-up program for seedling control or other cultural practices should be instituted.

WIPER APPLICATION USES

IMPORTANT: Observe all restrictions, precautions, mixing, and application instructions.

Alligare Dicamba 4 may be applied through wiper application equipment to control or suppress actively growing broadleaf weeds, brush and vines. Use a solution containing 1 part Alligare Dicamba 4 to 1 part water. Do not contact desirable vegetation with herbicide solution. Make wiper application only to crops (including pastures) and non-cropland areas described in this label with the exception of Grain Sorghum (Milo).

RIGHTS-OF-WAY, UTILITY AND INDUSTRIAL AREAS, AND FENCEROWS

Alligare Dicamba 4 may be used for use on non-crop land areas such as rights-of-way (such as roadways, rest areas, utility, railroad, highway, pipeline, and rights-of-way that run through pasture and rangeland), utility facilities (such as substations, pipelines, tankfarms, pumping stations, parking and storage areas, fencerows, and non-irrigated ditchbanks), brush control for forest site preparation or maintenance.

Observe all Precautions on this label. Read and follow the Mixing and Application section.

RESTRICTION:

- Retreatments may be made as needed, however, do not exceed a total of 4 pts (2 lbs a.i) of Alligare Dicamba 4 per treated acre during a growing season.

PRECAUTION:

- Herbicide adjuvants or other spray additives (emulsifiers, spreader stickers, surfactants, wetting agents, drift control agents, or penetrants) may be used for wetting, penetration, or drift control. Spray additives must be agriculturally approved when used in pasture applications. If spray additives are used, read and follow all use recommendations and precautions on product label.

Rights-of-Way
Alligare Dicamba 4 can be used to control many broadleaf weeds on rights-of-way. This use includes applications to roadside, roadway and highways, to areas along utilities such as cable and powerlines, railroad track and embankment, highways, highway medians, bridge abutments, pipelines, and rights-of-way that run through pasture and rangeland. Use controlled application techniques that minimize the risk of off-target movement.

Utility and Industrial Areas
Alligare Dicamba 4 can be used to control many broadleaf weeds and brush in noncrop areas on or surrounding substations, pipelines, tankfarms, pump stations, production facilities, and bareground situations. It may also be used on parking and storage areas (refer to Best Stewardship Practices to avoid direct runoff from impervious surfaces).

Fencerows
Alligare Dicamba 4 can be used to control many broadleaf weeds and brush in fencerows.

Mixing and Application
Alligare Dicamba 4 can be applied using water, oil in water emulsions including invert systems, or sprayable fluid fertilizer as a carrier. A compatibility test (see Compatibility Test section) should be made prior to tank mixing.

To prepare oil in water emulsions, half-fill spray tank with water, then add the appropriate amount of emulsifier. With continuous agitation, slowly add the herbicide and then the herbicidal oil or a pre-mix of oil plus additional emulsifier to spray tank. Complete filling of spray tank with water. Maintain vigorous agitation during spray operation to prevent oil and water from forming separate layers.

Alligare Dicamba 4 may be applied broadcast using either ground or aerial application equipment. When using ground equipment, apply low or high volume sprays of between 3-600 gals, of diluted spray per treated acre. Volume of spray applied will depend on the height, density, and type of weeds or brush being treated and on the type of equipment being used. When using aerial equipment, apply 5-40 gals, of diluted spray per treated acre.

Alligare Dicamba 4 may be applied to individual clumps or small areas (spot treatment) of undesirable vegetation using handgun or similar types of application equipment. Apply diluted spray to allow complete wetting (up to runoff) of foliage and stems.

Weeds and Brush Controlled
Alligare Dicamba 4, when applied at specified rates, will give control of many annual, biennial, and perennial broadleaf weeds, and many woody brush and vine species commonly found in non-crop land areas (Refer to Weed List). Noted (*) perennial weeds may be controlled with lower rates of either Alligare Dicamba 4 or Alligare Dicamba 4 plus tank mix combinations. See Rates and Timings below.

Rates and Timings
Application rates and timings of Alligare Dicamba 4 are given below. Use the higher level of listed rate ranges when treating dense or tall vegetative growth.

Weed Stage and Type	Amount of Product Per Acre	Gals of Spray Mixture Per Acre**	Spray Concentration for Low Volume Application**** (% vol/vol)
Annual			
Small, Actively Growing	½ - 1 pt	25 - 50	3
Established weed growth	1 – 1 ½ pts	50 - 75	3
Biennial* - Rosette diameter			
Less than 3”	½ - 1 pt	25 - 50	3 – 4
3” or more	1 – 2 pts	50 -100	3 – 4
Bolting	2 -3 pts	100 – 150	3 – 4
Perennial			
Suppression or top growth	½ - 1 pt	50 -100	4
control	2 – 4 pts	100 – 200	4
Noted (*) Perennials	4 pts	200	5
Woody Brush and Vines***			
Top Growth Stems	½ - 4 pts	50 -200	5
And Roots	4 pts	200	5

* For best performance, make application when biennial weeds are in the rosette stage.
**Assuming typical application rate of 1 qt of Alligare Dicamba 4/100 gals.
***Tank mixes may be required for optimal control. Refer to Weed List.
****Low volume rates must not exceed 4 pts of Alligare Dicamba 4 maximum per acre per year (5% volume/volume = 10 gals, maximum solution per acre per year).

Tank Mix Options for Rights-Of-Way, Utility, and Industrial Areas, and Fencerows
Alligare Dicamba 4 may be tank mixed with other herbicides for additional weed control. The following table lists example options, but does not limit tank mix options.

It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions and precautionary language of the products in the mixture (for example, first aid from one product, spray drift management from another).

Herbicide	Rates Per Treated Acre (lbs a.i.)
norflurazon (Predict®)	Consult product labels for rate recommendations.
prodiamine (Endurance®, Alligare Prodiamine 65 WG Herbicide, Alligare Prodiamine 4L)	
glufosinate (Finale®)	
glyphosate (Roundup®, Accord®, Glyphosate 5.4, Glyphosate 4 Plus, Alligare Glyphosate 4)	
metsulfuron methyl (Escort®, Alligare MSM 60)	
pendimethalin (Pendulum®)	
triclopyr (Redeem®, Garlon®, Alligare Triclopyr 4, Alligare Triclopyr 3, Boulder)	
clopyralid (Transline®, Alligare Clopyralid 3)	
bromacil (Hyvar®, Bromacil 80)	
chlorsulfuron (Telar®, Alligare Chlorsulfuron 75)	
diquat (Reward®, Alligare Diquat Herbicide)	
simazine (Princep®)	
diuron (Karmex®, Alligare Diuron 80DF, Alligare Diuron 4L)	
fosamine ammonium (Krenite®)	
hexazinone (Velpar®, Alligare Hexazinone 75 ULW Herbicide)	
imazapyr (Arsenal®, Alligare Rotary 2 SL, Alligare Ecomazapyr 2 SL, Alligare Imazapyr 2 SL, Alligare Imazapyr 4 SL)	
Imazapic-ammonium (Plateau®, Panoramic 2SL)	
sulfometuron methyl (Oust®, Alligare SFM 75)	
sulfosate (Touchdown®)	
tebuthiuron (Spike®, Alligare Tebuthiuron 80 WG, Alligare Tebuthiuron 20 P)	
2,4-D	

Due to the differences that may occur between specific formulated products and specific use ingredients (e.g., water supplies), a compatibility test (see Compatibility Test section) is recommended prior to actual tank mixing.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

PESTICIDE STORAGE

Store in original containers in a well-ventilated area separately from fertilizer, feed and foodstuffs. Avoid cross-contamination with other pesticides. Spillage or leakage should be contained and absorbed with clay granules, sawdust, or equivalent material for disposal.

PESTICIDE DISPOSAL

Triple rinse pesticide from containers and use rinsates in the pesticide application. Wastes which cannot be used according to label instructions may be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL Non-refillable container. Plastic or Metal. Do not reuse or refill this container. Offer for recycling, if available, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities, such as burning of plastic containers. If burned, stay out of smoke. Triple rinse or pressure rinse container (or equivalent) promptly after emptying. Triple rinse as follows:

Non-refillable container less than or equal to 5 gallons: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into formulation equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

Non-refillable container greater than 5 gallons: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution for 30 seconds. Stand the container on its end and tip back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into formulation equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

Pressure rinse as follows (all sizes): Empty the remaining contents into formulation equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over formulation equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

Refillable container: Refill this container with pesticide only. Do not reuse this container for any other purpose. Empty containers retain vapor and product residue. Observe all labeled safeguards until container is cleaned, reconditioned or destroyed. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller.

To clean the container before final disposal, empty the remaining contents from the container into formulation equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with pump for 2 minutes. Pour or pump rinsate into formulation equipment or rinsate collection system. Repeat this rinsing process two more times.

CONDITION OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

To the extent consistent with applicable law, upon purchase or use of this product, purchaser and user agree to the following terms:

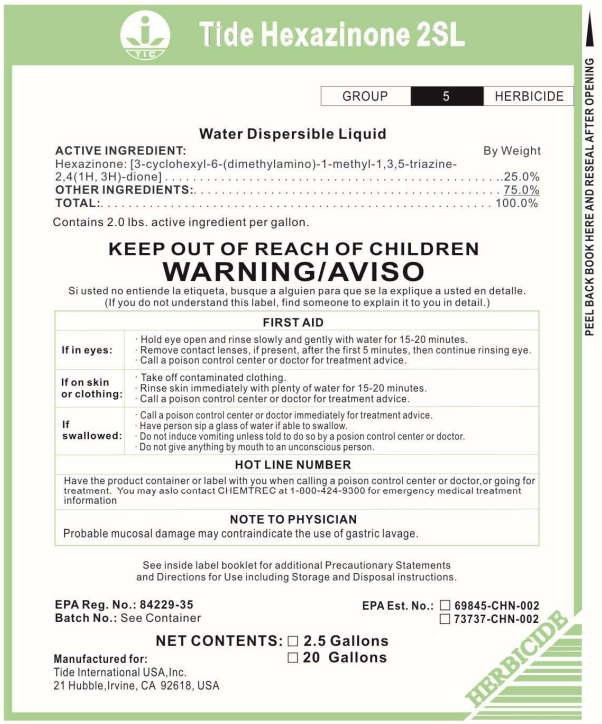
Warranty: Alligare, LLC (the Company) warrants that this product conforms to the chemical description on the label in all material respects and is reasonably fit for the purpose referred to in the directions for use, subject to the exceptions noted below, which are beyond the Company's control. To the extent consistent with applicable law, the Company makes no other representation or warranty, express or implied, concerning the product, including no implied warranty of merchantability or fitness for a particular purpose. To the extent consistent with applicable law, no such warranty shall be implied by law, and no agent or representative is authorized to make any such warranty on the Company's behalf.

Terms of Sale: The Company's directions for use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, and the manner of use or application (including failure to adhere to label directions), all of which are beyond the Company's control. To the extent consistent with applicable law, all such risks are assumed by the user.

Limitation of Liability: To the extent consistent with applicable law, the exclusive remedy against the Company for any cause of action relating to the handling or use of this product is a claim for damages, and in no event shall damages or any other recovery of any kind exceed the price of the product which caused the alleged loss, damage, injury or other claim. To the extent consistent with applicable law, under no circumstances shall the Company be liable for any special, indirect, incidental or consequential damages of any kind, including loss of profits or income. Some states do not allow the exclusion or limitation of incidental or consequential damages.

The Company and the seller offer this product, and the purchaser and user accept this product, subject to the foregoing warranty, terms of sale and limitation of liability, which may be varied or modified only by an agreement in writing signed on behalf of the Company by an authorized representative.

EPA 20160204



PROOF
Proof date:02/01/2019
Customer: Tide USA
Job number: TIC-HER8422935
Label size: 145× 185mm
Leaflet flat size: 306× 185mm
Leaflet folded size: 161× 185mm
Label colors: PANTONE Process Black C , PANTONE 359 C
Leaflet "in" colors: Black
Leaflet "out" colors: PANTONE Process Black C , White PANTONE 359 C

Tide Hexazinone 2SL

GROUP	5	HERBICIDE

PEEL BACK BOOK HERE AND RESEAL AFTER OPENING

Water Dispersible Liquid

ACTIVE INGREDIENT: By Weight

Hexazinone: [3-cyclohexyl-6-(dimethylamino)-1-methyl-1,3,5-triazine-2,4(1H, 3H)-dione] 25.0%

OTHER INGREDIENTS: 75.0%

TOTAL: 100.0%

Contains 2.0 lbs. active ingredient per gallon.

KEEP OUT OF REACH OF CHILDREN

WARNING/AVISO

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.
(If you do not understand this label, find someone to explain it to you in detail.)

FIRST AID	
If in eyes:	· Hold eye open and rinse slowly and gently with water for 15-20 minutes. · Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. · Call a poison control center or doctor for treatment advice.
If on skin or clothing:	· Take off contaminated clothing. · Rinse skin immediately with plenty of water for 15-20 minutes. · Call a poison control center or doctor for treatment advice.
If swallowed:	· Call a poison control center or doctor immediately for treatment advice. · Have person sip a glass of water if able to swallow. · Do not induce vomiting unless told to do so by a posion control center or doctor. · Do not give anything by mouth to an unconscious person.
HOT LINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor,or going for treatment. You may aslo contact CHEMTREC at 1-800-424-9300 for emergency medical treatment information	
NOTE TO PHYSICIAN	
Probable mucosal damage may contraindicate the use of gastric lavage.	

See inside label booklet for additional Precautionary Statements
and Directions for Use including Storage and Disposal instructions.

EPA Reg. No.: 84229-35
Batch No.: See Container

EPA Est. No.: ☐ **69845-CHN-002**
☐ **73737-CHN-002**

NET CONTENTS: ☐ **2.5 Gallons**
☐ **20 Gallons**

Manufactured for:
Tide International USA,Inc.
21 Hubble,Irvine, CA 92618, USA

HERBICIDE

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS
WARNING

Causes substantial but temporary eye injury. Harmful if swallowed or absorbed thorough skin. Do not get in eyes, on skin or on clothing. Wear protective eyewear such as goggles, face shield or safety glasses. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Shoes plus socks
- Protective eyewear
- Chemical resistant gloves

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining personal PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

USER SAFETY RECOMMENDATIONS

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and put on clean clothing.

ENVIRONMENTAL HAZARDS

Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters.

The active ingredient hexazinone, in this product is known to leach through soil into ground water under certain conditions as a result of agricultural use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground-water contamination.

PHYSICAL OR CHEMICAL HAZARDS

FLAMMABLE. Keep away from heat and open flame. Do not mix or allow contact with oxidizing agents. Hazardous chemical reaction may occur.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Tide Hexazinone 2SL must be used only in accordance with instructions on this label, or in supplemental Tide International, USA, Inc. labeling.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

The correct use rates by crop and geographical area, specified on the label, and proper mixing/loading site considerations and application procedures must be followed to minimize potential for hexazinone movement into ground water. Users are encouraged to consult with their state Department of Agriculture, Extension Service, or other pesticide lead agency for information regarding soil permeability, aquifer vulnerability, and best management practices for their area.

PRODUCT INFORMATION

Tide Hexazinone 2SL is a water-dispersible liquid that is mixed in water and applied as a spray for weed control in certain crops, Christmas trees, forestry site preparation and release areas, and industrial areas. It may also be applied undiluted as a basal soil treatment for brush control in reforestation areas, rangeland, pastures and noncrop areas or by stem injection for brush control.

Tide Hexazinone 2SL is an effective general herbicide providing both contact and residual control of many annual, biennial and perennial weeds and woody plants.

Tide Hexazinone 2SL is noncorrosive to equipment.

Care must be exercised when applying Tide Hexazinone 2SL near desirable trees or shrubs as they can absorb Tide Hexazinone 2SL through roots extending into treated areas.

This product may be applied on agricultural and non-agricultural sites that contain areas of temporary surface water caused by collection of water between planting beds, in equipment ruts, or in other depressions created by management activities. It is permissible to treat intermittent drainage, intermittently flooded low lying sites, seasonally dry flood plains and transitional areas between upland and lowland sites when no water is present. It is also permissible to treat marshes, swamps and bogs after water has receded, as well as seasonally dry flood deltas. DO NOT make applications to natural or man-made bodies of water such as lakes, reservoirs, ponds, streams and canals.

ENVIRONMENTAL CONDITIONS AND BIOLOGICAL ACTIVITY

Tide Hexazinone 2SL is absorbed through the roots and foliage. Moisture is required to activate Tide Hexazinone 2SL in the soil. Best results are obtained when the soil is moist at the time of application and ¼ - ½ inches of rainfall occurs within 2 weeks after application.

For best results, apply Tide Hexazinone 2SL preemergence or postemergence when weeds are less than 2 inches in height or diameter. Foliar activity is most effective under conditions of high temperature (above 80°F), high humidity, and good soil moisture. Foliar activity may be reduced when vegetation is dormant, semi-dormant, or under stress.

On herbaceous plants, symptoms usually appear within 2 weeks after application under warm, humid conditions, while 4-6 weeks may be required when weather is cool or dry, or when plants are under stress. If rainfall after application is inadequate to activate Tide Hexazinone 2SL in the soil, plants may recover from contact effects and continue to grow.

On woody plants, symptoms usually appear within 3-6 weeks after sufficient rainfall has carried the herbicide into the root zone during periods of active growth. Defoliation and refoliation may occur, but susceptible plants are killed.

The degree and duration of control will depend on the following:

- Use rate
- Weed spectrum and size at time of application
- Environmental conditions at and following treatment

Where a rate range is shown, use the higher levels of the dosage range on hard-to-control species, fine-textured soils, or soils containing greater than 5% organic matter or carbon. Use the lower levels of the dosage range on coarse-textured soils and/or on soils low in organic matter. Refer to specific uses for rate ranges.

APPLICATION INFORMATION

Tide Hexazinone 2SL may be applied by ground equipment and where permitted, aerial equipment. Use rates, minimum spray gallonage, and other application information are described for various uses.

Dispose of the equipment washwater by applying it to a use-site listed on this label or in accordance with directions given in the STORAGE AND DISPOSAL section of this label.

Before spraying, calibrate equipment to determine the quantity of water necessary to uniformly and thoroughly cover the vegetation and soil in a measured area to be treated.

TANK MIXTURES

Tide Hexazinone 2SL may be tank mixed with other herbicides and/or adjuvants registered for the uses (crops) specified on this label.

Refer to the label of the tank mix partner(s) for any additional use instructions or restrictions. The most restrictive label provisions apply. If other label instructions conflict with this label, do not tank mix the herbicide and/or adjuvant with Tide Hexazinone 2SL.

When the air temperature is around 32°F, tank mixtures of paraquat dichloride plus Tide Hexazinone 2SL may form a hard sludge in the spray tank. This effect is most likely to occur when the tank mixture comes into contact with aluminum.

INVASIVE SPECIES MANAGEMENT

This product may be considered for use on public, private, and tribal lands to treat certain weed species infestations that have been determined to be invasive, consistent with the Federal Interagency Committee for the Management of Noxious and Exotic Weeds (FICMNEW) National Early Detection and Rapid Response (EDRR) System for invasive plants. Effective EDRR systems address invasions by eradicating the invader where possible, and controlling them when the invasive species is too established to be feasibly eradicated. Once an EDRR assessment has been completed and action is advised, a Rapid Response needs to be taken to quickly contain, deny reproduction, and if possible eliminate the invader. Consult your appropriate state extension service, forest service, or

regional multidisciplinary invasive species management coordination team to determine the appropriate Rapid Response provisions and allowed treatments in your area.

MODE OF ACTION

Hexazinone is a Group 5 herbicide based on the mode of action classification system of the Weed Science Society of America and a C1 photosynthesis photosystem II inhibitor as classified by the Herbicide Resistance Action Committee (HRAC).

RESISTANCE

When herbicides that affect the same biological site of action are used repeatedly over several years to control the same weed species in the same field, naturally-occurring resistant biotypes may survive a correctly applied herbicide treatment, propagate, and become dominant in that field.

Adequate control of these resistant weed biotypes cannot be expected. If weed control is unsatisfactory, it may be necessary to retreat the problem area using a product affecting a different site of action.

To better manage herbicide resistance through delaying the proliferation and possible dominance of herbicide resistant weed biotypes, it may be necessary to change cultural practices within and between crop seasons such as using a combination of tillage, retreatment, tank-mix partners and/or sequential herbicide applications that have a different site of action. Weed escapes that are allowed to go to seed will promote the spread of resistant biotypes.

It is advisable to keep accurate records of pesticides applied to individual fields to help obtain information on the spread and dispersal of resistant biotypes. Consult your agricultural dealer, consultant, applicator, and/or appropriate state agricultural extension service representative for specific alternative cultural practices or herbicide instructions available in your area.

INTEGRATED PEST MANAGEMENT

This product may be used as a part of an Integrated Pest Management (IPM) program that can include biological, cultural, and genetic practices aimed at preventing economic pest damage. IPM principles and practices include field scouting or other detection methods, correct target pest identification, population monitoring, and treating when target pest populations reach locally determined action thresholds. Consult your state cooperative extension service, professional consultants or other qualified authorities to determine appropriate action treatment threshold levels for treating specific pest/crop systems in your area.

SPRAY TANK CLEAN OUT

Thoroughly clean all traces of Tide Hexazinone 2SL from application equipment immediately after use. Flush the tank, pump, hoses, and boom with several changes of water after removing nozzle tips and screens (clean these parts separately).

AGRICULTURAL USES

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 48 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls
- Chemical-resistant gloves made of any waterproof material
- Shoes plus socks
- Protective eyewear

SPRAY DRIFT MANAGEMENT

The interaction of many equipment and weather-related factors determines the potential for spray drift. The applicator is responsible for considering all these factors when making application decisions. Preventing spray drift is the responsibility of the applicator.

IMPORTANCE OF DROPLET SIZE

The most effective drift management strategy is to apply the largest droplets which are consistent with pest control objectives. The presence of sensitive species nearby, the environmental conditions, and pest pressure may affect how an applicator balances drift control and coverage. Applying larger droplets reduces drift potential, but will not prevent drift if applications are made improperly or under unfavorable environmental conditions.

A droplet size classification system describes the range of droplet sizes produced by spray nozzles. The American Society of Agricultural and Biological Engineers (ASABE) provide a Standard that describes droplet size spectrum categories defined by a number of reference nozzles (fine, coarse, etc.). Droplet spectra resulting from the use of a specific nozzle may also be described in terms of volume mean diameter (VMD). Coarser droplet size spectra have larger VMD's and lower drift potential.

CONTROLLING DROPLET SIZE –GROUND APPLICATION

- **Nozzle Type –** Select a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. The use of low-drift nozzles will reduce drift potential.
- **Pressure –** The lowest spray pressures recommended for the nozzle produce the largest droplets. Higher pressure reduces droplet size and does not improve canopy penetration. When higher flow rates are needed, using a higher capacity nozzle instead of increasing pressure results in the coarsest droplet spectrum.
- **Flow Rate/Orifice Size –** Using the highest flow rate nozzles (largest orifice) that are consistent with pest control objectives reduces the potential for spray drift. Nozzles with higher rated flows produce coarser droplet spectra.

CONTROLLING DROPLET SIZE – AIRCRAFT

- **Nozzle Type –** Solid stream, or other low drift nozzles produce the coarsest droplet spectra.
- **Number of Nozzles –** Using the minimum number of nozzles with the highest flow rate that provide uniform coverage will produce a coarser droplet spectrum.
- **Nozzle Orientation –** Orienting nozzles in a manner that minimizes the effects of air shear will produce the coarsest droplet spectra. For some nozzles such as solid stream, pointing the nozzles straight back parallel to the airstream will produce a coarser droplet spectrum than other orientations.
- **Pressure –** Selecting the pressure that produces the coarsest droplet spectrum for a particular nozzle and airspeed reduces spray drift potential. For some nozzle types such as solid streams, lower pressures can produce finer droplet spectra and increase drift potential.

BOOM LENGTH (AIRCRAFT), AND APPLICATION HEIGHT

- **Boom Length (aircraft) –** Using shorter booms decreases drift potential. Boom lengths are expressed as a percentage of an aircraft's wingspan or a helicopter's rotor blade diameter. Shorter boom length and proper positioning can minimize drift caused by wingtip or rotor vortices.
- **Application Height (aircraft) -** Applications made at the lowest height that are consistent with pest control objectives and the safe operation of the aircraft will reduce the potential for spray drift.
- **Application Height (ground) –** Applications made at the lowest height consistent with pest control objectives, and that allow the applicator to keep the boom level with the application site and minimize bounce, will reduce the exposure of spray droplets to evaporation and wind, and reduce spray drift potential.

WIND

Drift potential is lowest when applications are made in light to gentle sustained winds (2-10 mph), which are blowing in a constant direction. Many factors, including droplet size and equipment type also determine drift potential at any given wind speed. DO NOT APPLY DURING GUSTY OR WINDLESS CONDITIONS.

Local terrain can also influence wind patterns. Every applicator is expected to be familiar with local wind patterns and how they affect spray drift.

TEMPERATURE AND HUMIDITY

Setting up equipment to produce larger droplets to compensate for droplets can reduce spray drift potential. Droplet evaporation is most severe when conditions are both hot and dry.

SURFACE TEMPERATURE INVERSIONS

Drift potential is high during a surface temperature inversion. Surface inversions restrict vertical air mixing, which may cause small, suspended droplets to remain close to the ground and move laterally in a concentrated cloud. Surface inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Mist or fog may indicate the presence of an inversion in humid areas. Inversions may also be identified by producing smoke and observing its behavior. Smoke that remains close to the ground, or moves laterally in a concentrated cloud under low wind conditions indicates a surface inversion. Smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

SHIELDED SPRAYERS

Shielding the boom or individual nozzles can reduce the effects of wind. However, it is the responsibility of the applicator to verify that the shields are minimizing drift potential, and not interfering with uniform deposition of the product.

AIR ASSISTED (AIR BLAST) FIELD CROP SPRAYERS

Air assisted field crop sprayers carry droplets to the target via a downward directed air stream. Some may reduce the potential for drift, but if a sprayer is unsuitable for the application and/or set up improperly, high drift potential can result. It is the responsibility of the applicator to determine that a sprayer is suitable for the intended application, that it is configured properly, and that drift potential has been minimized.

Air assisted field sprayers can affect product performance by affecting spray coverage and canopy penetration. Read the specific crop use and application equipment instructions to determine if an air assisted field crop sprayer can be used.

SENSITIVE AREAS

Making applications when there is a sustained wind moving away from adjacent sensitive areas (e.g., residential area, bodies of water, known habitat for threatened or endangered species, non-target crops) is an effective way to minimize the effect of spray drift.

DRIFT CONTROL ADDITIVES

Using product compatible drift control additives can reduce drift potential. When a drift control additive is used, read and carefully observe cautionary statements and all other information on the additive's label. If using an additive that increases viscosity, ensure that the nozzles and other application equipment will function properly with a viscous spray solution. Preferred drift control additives have been certified by the Chemical Producers and Distributors Association (CPDA).

CHEMIGATION

Apply this product through irrigation equipment **only** to crops and diseases for which the chemigation use is specified. Apply this product only through center pivot or linear-move sprinkler irrigation systems. Do not apply Tide Hexazinone 2SL through any other type of irrigation system. Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water. Therefore, to ensure that the mixture is applied evenly at the labeled rate, use sufficient water, apply the mixture for the proper length of time and ensure sprinkler produces a uniform water pattern. Do not permit run-off during chemigation. If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.

Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place. A person knowledgeable of the chemigation system and responsible for its operation or under the; supervision of the responsible person, must shut the system down and make necessary adjustments should the need arise.

The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent flow of fluid back toward the injection pump.

The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.

The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

Maintain continuous agitation in mix tank during mixing and application to assure a uniform suspension. Allow sufficient time for pesticide to be flushed through all lines and all nozzles before turning off irrigation water. Pesticide may be applied continuously for the duration of the water application.

POSTING OF AREAS TO BE TREATED

Posting of areas to be chemigated is required when 1) any part of a treated area is within 300 feet of sensitive areas such as residential areas, labor camps, businesses, daycare centers, hospitals, in-patient clinics, nursing homes, or any public areas such as schools, parks, playgrounds, or other public facilities not including public roads, or 2) when the chemigated area is open to the public such as golf courses or retail greenhouses.

Posting must conform to all the following requirements:

- Treated areas shall be posted with signs at all usual points of entry and along likely routes of approach from the listed sensitive areas. When there are no usual points of entry, signs must be posted in the corners of the treated areas and in any other location affording maximum visibility to sensitive areas.
- The printed side of the sign must face away from the treated area towards the sensitive area. The signs shall be printed in English.
- Signs must be posted prior to application and must remain posted until foliage has dried and soil surface water has disappeared. Signs may remain in place indefinitely as long as they are composed of materials to prevent deterioration and maintain legibility for the duration of the posting period.
- All words shall consist of letters at least 2 ½ inches tall, and all letters and the symbol shall be a color which sharply contrasts with their immediate background. At the top of the sign shall be the words “KEEP OUT”, followed by an octagonal stop sign symbol at least 8 inches in diameter containing the word “STOP”. Below the symbol shall be the words “PESTICIDE IN IRRIGATION WATER”.
- Posting required for chemigation does not replace other posting and reentry requirements for farm worker safety.

ALFALFA

Tide Hexazinone 2SL is labeled for control of certain weeds in established alfalfa grown for hay or seed production.

USE RESTRICTIONS - ALFALFA

- Do not apply within 30 days of harvest (cutting for hay), or feeding of forage or grazing.
- Do not exceed 6 pints per acre per application.
- Do not exceed 6 pints (1.5 pounds active ingredient hexazinone) per acre per year.

APPLICATION INFORMATION

NON-DORMANT AND SEMI-DORMANT VARIETIES

In the following states, make a single application of Tide Hexazinone 2SL during the winter months when alfalfa plants are in the least active stage of growth.

Arizona	Montana	Oklahoma	Washington
California	Nebraska	Oregon	Wyoming
Colorado	Nevada	South Dakota	
Idaho	New Mexico	Texas	
Kansas	North Dakota	Utah	

In the following states, make a single application of Tide Hexazinone 2SL either in the spring before new growth exceeds 2 inches in height or to alfalfa stubble after cutting, following hay removal and before regrowth exceeds 2 inches in height.

Arkansas	Maine	New Jersey	Vermont
Connecticut	Maryland	New York	Virginia
Delaware	Massachusetts	North Carolina	West Virginia
Illinois	Michigan	Ohio	Wisconsin
Indiana	Minnesota	Pennsylvania	
Iowa	Missouri	Rhode Island	
Kentucky	New Hampshire	Tennessee	

PRECAUTION: Severe alfalfa injury may result following application, if after cutting the regrowth is more than 2 inches high, or there is significant stubble left after cutting or grazing, or the air temperature is above 90ºF.

DORMANT VARIETIES

Make a single application of Tide Hexazinone 2SL after alfalfa becomes dormant and before new growth exceeds 2 inches in height in the spring. Where weeds have emerged, use a surfactant.

USE RATES

Use higher rates on hard-to-control species, (see **Weeds Controlled** section below) fine textured soils, soils containing greater than 5% organic matter, or under adverse environmental conditions such as temperature extremes or when weeds are stressed due to low rainfall.

For dormant alfalfa, use a surfactant approved for crops at the rate of 0.25% v/v (1 quart per 100 gallons of spray solution).

Select the appropriate rate for soil texture and organic matter content as follows:

	Tide Hexazinone 2SL (pints/acre) Percent Organic Matter in Soil		
Soil Texture Description	**<1%**	**1-5%**	**>5%**
Coarse Loamy sand, sandy loam	2-3	2-3	4-6
Medium Loam, silt loam, silt, clay loam, sandy clay loam	2-3	3-6	4-6
Fine Silty clay loam, sandy clay, silty clay, clay	3-6	3-6	4-6

RESTRICTIONS:

- In the states of MT, ND, SD, and WY, do not exceed a use rate of 4 pints per acre on medium and fine textured soils.
- In the state of Montana (MT), do not apply to soils with less than 1.5% organic matter.
- In the state of Wyoming (WY):
  -Do not apply to soils with less than 0.5% organic matter.
  -Apply to irrigated alfalfa only.

WEEDS CONTROLLED

Tide Hexazinone 2SL, when applied preemergence or early postemergence at the following rates, is labeled for the control or suppression of the following species in alfalfa:

1-2 Pints/Acre	
Tansymustard	*Descurainia pinnata*

2-4 Pints/Acre	
Bluegrass, annual	*Poa annua*
Brome, downy (cheatgrass)	*Bromus tectorum*
Buckwheat, wild	*Polygonum convolvulus*
Catchfly, English	*Silene gallica*
Chamomile, mayweed (dogfennel)	*Anthemis cotula*
Chickweed, common	*Stellaria media*
Fiddleneck, tarweed	*Amsinckia lycopsoides*
Filaree	*Erodium* spp.
Flixweed	*Descurainia Sophia*
Groundsel, common	*Senecio vulgaris*
Henbit*	*Lamium amplexicaule*
Lettuce, Miner's	*Montia perfoliata*
Mustard, blue	*Chorispora tenella*

Mustard, Jim Hill (tumble)	*Sisymbrium altissimum*
Mustard, wild	*Brassica kaber*
Orchardgrass (seedling)	*Dactylis glomerata*
Pennycress, field	*Thlaspi arvense*
Pigweed, redroot	*Amaranthus retroflexus*
Radish, wild	*Raphanus raphanistrum*
Rocket, London	*Sisymbrium irio*
Rocket, common yellow	*Barbarea vulgaris*
Salsify	*Tragopogon* spp.
Shepherdspurse	*Capsella bursa-pastoris*
Speedwell, purslane	*Veronica peregrina*
Spurry, corn	*Spergula arvensis*

4-6 Pints/Acre	
Alfalfa* (seedling)	*Medigaco sativa*
Barley, foxtail (seedling)	*Hordeum jubatum*
Bluegrass, perennial* (spring only)	*Poa* spp.
Cockle, white*	*Melandrium album*
Dandelion, common*	*Taraxacum officinale*
Dandelion, false* (spotted catsear)	*Hypochaeris radicata*
Foxtail*	*Setaria* spp.
Kochia	*Kochia scoparia*
Lambsquarters, common	*Chenopodium album*
Lettuce, prickly*	*Lactuca serriola*
Mallow, common	*Malva neglecta*
Ryegrass, Italian (annual)	*Lolium multiflorum*
Quackgrass*	*Elytrigia repens*
Speedwell, Ivyleaf	*Veronica hederaefolia*
Tea, Mexican*	*Chenopodium ambrosioides*
Thistle, Canada (seedling)	*Cirsium arvense*
Thistle, Russian	*Salsola iberica*

*Suppression – a visible reduction in plant population and/or plant vigor as compared to an untreated area and generally not accepted as control.

Tide Hexazinone 2SL, when applied late in spring or after cutting at the following rates, will control these species listed below:

2-6 Pints/Acre	
Crabgrass	*Digitaria* spp.
Fleabane	*Conyza* spp.
Foxtail	*Setaria* spp.
Jimsonweed	*Datura stramonium*
Lambsquarters, common	*Chenopodium album*
Pigweed, redroot	*Amaranthus retroflexus*

SEED ALFALFA (CA, ID, MT, NV, OR, UT, WA)

Tide Hexazinone 2SL may be used for general broadleaf weed and grass control in established alfalfa grown for seed.

DORMANT VARIETIES

Make a single application of Tide Hexazinone 2SL after alfalfa becomes dormant and before new growth exceeds 2 inches in height in the spring. Where weeds have emerged, use a surfactant.

NON-DORMANT AND SEMI-DORMANT VARIETIES

Make a single application of Tide Hexazinone 2SL during the winter months when alfalfa plants are in the least active stage of growth.

WEEDS CONTROLLED

Refer to the Alfalfa – Weeds Controlled section for specific use rates and weeds controlled.

USE RESTRICTIONS - SEED ALFALFA

- Do not apply within 30 days of harvest (cutting for hay), or feeding of forage or grazing.
- Do not use Tide Hexazinone 2SL on fields with sandy loam or loamy sand soils having less than 1% organic matter.
- Do not exceed 2 pints per acre on fields with sandy loam or loamy sand soils having 1-2% organic matter.
- Do not exceed 2 pints per acre on seed alfalfa that has been established for only one growing season.

SEED ALFALFA
WALLA WALLA COUNTY, WASHINGTON

Tide Hexazinone 2SL may be used for the suppression of prickly lettuce and quackgrass and control of Canada thistle (seedling), kochia, and certain other weeds in established alfalfa grown for seed.

Use Rates 4 to 6 pints per acre	
Kochia	*Kochia scoparia*
Lettuce, prickly*	*Lactuca serriola*
Quackgrass*	*Elytrigia repens*
Thistle, Canada (seedling)	*Cirsium arvense*

*Suppression

USE RESTRICTIONS - SEED ALFALFA

WALLA WALLA COUNTY WASHINGTON

- Do not exceed 6 pints Tide Hexazinone 2SL per acre per application.
- Do not exceed 6 pints (1.5 pounds active ingredient hexazinone) per acre per year.
- Do not apply within 30 days of harvest (cutting or hay), or feeding of forage or grazing.

SPRAY EQUIPMENT

Apply Tide Hexazinone 2SL using a fixed boom power sprayer or aerial equipment.

For ground applications apply in a minimum of 20 gallons of spray solution per acre and by air in a minimum of 5 gallons. Use at least 5 pints of water per each 1 pint of Tide Hexazinone 2SL.

CHEMIGATION - ALFALFA

Apply this product to alfalfa only through center pivot or linear-move sprinkler irrigation systems. Do not apply this product through any other type of irrigation system.

Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from nonuniform distribution of treated water.

Severe alfalfa injury may result following application after cutting if either the regrowth is more than 2" high or significant stubble is left after alfalfa cutting.

SPRINKLER CHEMIGATION

The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent flow of fluid back toward the injection pump.

The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.

The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

DORMANT APPLICATIONS - ALFALFA

Select the appropriate rate (see **Use Rates** section) for soil texture and organic matter content using 0.25" to 0.75" of sprinkler irrigation as a continuous injection during the application. Best results are obtained when soil is moist at time of application, and when weeds have not germinated or are less than 2" tall or across.

APPLICATION AFTER CUTTING

Apply Tide Hexazinone 2SL at 1 pint per acre to stubble after cutting, following hay removal, and before regrowth exceeds 2" in height. Apply Tide Hexazinone 2SL using 0.25" to 0.75" of sprinkler irrigation as a continuous injection during the application. Best results are obtained when soil is moist at time of application and when weeds have not germinated or are less than 2" tall or across.

PRECAUTION: Making an application when daily temperatures are forecast to be in the mid-to-high 90 degree range within 3 to 5 days after treatment may increase the potential for crop injury.

MIXING INSTRUCTIONS

1. Fill the supply tank 1/4 to 1/3 full of water
2. While agitating, add the required amount of Tide Hexazinone 2SL and continue agitation.
3. Once the Tide Hexazinone 2SL is fully dispersed, maintain agitation and continue filling tank with water.
4. As the tank is filling, add tank mix partners (if desired). Follow use precautions and directions on the tank mix partner label.
5. After thorough mixing, the agitation system can be stopped to prevent excessive foaming in the tank. Once thoroughly mixed the solution in the supply tank does not require additional agitation unless specified on the companion products label. If foaming occurs in the injection supply tank, a defoaming agent (defoamer) may be added.
6. Apply Tide Hexazinone 2SL spray mixture within 48 hours of mixing.

CROP ROTATION FOLLOWING ALFALFA

- Corn may be planted 12 months after the last treatment in areas of moderate to high rainfall (greater than 20 inches), provided the use rate did not exceed 3 pints per acre.
- Root crops such as potatoes, sugarbeets, radish and carrots may be planted 12 months after the last treatment, provided the use rate does not exceed 2 pints per acre. Sites with use rates higher than 2 pints per acre must not be replanted to any root crop within 2 years after application of Tide Hexazinone 2SL, or unacceptable crop injury may result.

  In areas where irrigation is needed to produce the crop, the crop rotation intervals listed may need to be extended if the normal irrigation amount is reduced for any reason.
- Sugarcane may be planted any time following treatment.
- Do not replant treated areas to any crop except corn, root crops, or sugarcane within two years after treatment, as crop injury may result.
- In California, do not replant seed alfalfa to any crop within two years after treatment, as crop injury may result.

Field Bioassay

In arid climates (10 inches of rainfall or less per year) or areas where drought conditions have prevailed for one or more years, a field bioassay must be completed prior to planting any desired crop.

The results of this bioassay may require the rotation intervals listed above to be extended.

A successful bioassay means growing to maturity a test strip of the crop(s) intended for production. The test crop(s) strip must cross the entire field including knolls, low areas, and areas where any berms were located.

In areas where irrigation is needed to produce the crop, the crop rotation intervals listed may need to be extended if the normal irrigation amount is reduced for any reason.

ALFALFA – IMPREGNATION ON DRY BULK FERTILIZER

(EXCEPT CALIFORNIA AND ARIZONA)

Dry bulk fertilizer may be impregnated or coated with Tide Hexazinone 2SL for application to established alfalfa. All instructions and precautions on this label must be followed along with state regulations relating to dry bulk fertilizer blending, impregnating and labeling.

If fertilizer materials are excessively dusty, use a suitable additive to reduce dust prior to impregnation, as dusty fertilizer will result in poor distribution during application. The dry fertilizer must be properly impregnated and uniformly applied to the alfalfa to prevent crop injury and/or poor weed control.

To impregnate the fertilizer, use a system consisting of a conveyor or closed drum used to blend dry bulk fertilizer. Any commonly used fertilizer can be impregnated with Tide Hexazinone 2SL, except potassium nitrate or sodium nitrate. Do not use Tide Hexazinone 2SL on limestone.

Use a minimum of 250 lb. dry bulk fertilizer per acre and up to a maximum of 450 lb. per acre. To impregnate or coat the dry bulk fertilizer with Tide Hexazinone 2SL, direct the nozzles to deliver a fine spray of this suspension toward the fertilizer for thorough coverage while avoiding spray contact with mixing equipment. Uniform impregnation of Tide Hexazinone 2SL to dry bulk fertilizer will vary, and if the absorptivity is not adequate, the use of an absorptive powder may be required to produce a dry, free-flowing mixture. "Microcel E" is the absorbent powder of choice. When another herbicide is used with Tide Hexazinone 2SL, mix and impregnate the fertilizer immediately.

Apply impregnated fertilizer as soon as possible after impregnation for optimum performance.

Select the rate of Tide Hexazinone 2SL to apply per acre from the appropriate section of this label. Then refer to the rate chart below to determine the amount of Tide Hexazinone 2SL that is to be impregnated on a ton of dry bulk fertilizer, based on the amount of fertilizer to be distributed in one acre.

Rate Chart for Impregnating Fertilizer with Tide Hexazinone 2SL

Fertilizer	Tide Hexazinone 2SL Rate Per Acre			
Rate/Acre	**2 Pints**	**3 Pints**	**4 Pints**	**6 Pints**
250 lbs.	16 pts./ton	24 pts./ton	32 pts./ton	48 pts./ton
300 lbs.	13.4 pts./ton	20 pts./ton	26.8 pts./ton	40.2 pts./ton
350 lbs.	11.4 pts./ton	17.2 pts./ton	22.8 pts./ton	34.2 pts./ton
400 lbs.	10 pts./ton	15 pts./ton	20 pts./ton	30 pts./ton
450 lbs.	8.8 pts./ton	13.2 pts./ton	17.6 pts./ton	26.4 pts./ton

For rates other than those listed, use the following formula to calculate the amounts of Tide Hexazinone 2SL to impregnated per ton of dry fertilizer.

Pints Tide Hexazinone 2SL Per Acre x 1 Ton Fertilizer = Pints Tide Hexazinone 2SL per Ton of Fertilizer

APPLICATION

Uniform application of Tide Hexazinone 2SL -impregnated dry fertilizer is essential for satisfactory weed control. Accurate calibration of the application equipment is essential for uniform distribution to the surface. The customary method of application is to apply ½ the labeled rate and overlap 50%. This results in the best distribution pattern.

USE PRECAUTIONS - ALFALFA

- Best results are obtained when ½ - 1 inch of rainfall or sprinkler irrigation occurs within two weeks after application, when soil is moist at time of application, and when weeds have not germinated or are less than 2 inches in height or diameter. Heavy rainfall or excessive irrigation after application may result in crop injury or poor performance of the herbicide.
- On soils high in organic matter (greater than 5%), the effectiveness of Tide Hexazinone 2SL can be significantly reduced and weed control may be unsatisfactory.
- Prevent overlapping of spray swaths and shut off spray booms while starting, turning, slowing or stopping or crop injury may result.
- Crop injury, including mortality, may result in fields with restricted root growth due to non-uniform soil profiles such as gravel bases and clay lenses.
- Crop injury may result if hot weather, mid-to-high 90 degree range or higher, occurs within a few days after application.
- Crop injury to alfalfa can be influenced by several factors including alfalfa variety, soil conditions, uniformity of application and environmental conditions, etc., if no prior use history for the site or variety, treat only a small area when first using Tide Hexazinone 2SL.
- If abnormally dry conditions exist following application, restrict the first irrigation to no more than ½ acre inch of water.
- Temporary yellowing of alfalfa may occur following Tide Hexazinone 2SL applications.
- In California, fall planted alfalfa may be treated in the following winter months with Tide Hexazinone 2SL at 1 to 2 pints per acre (use higher rate for fine textured soils) provided:

- alfalfa root growth exceeds 6 inches in length
- vegetative top growth of alfalfa has lateral development of secondary growth
- alfalfa is healthy and vigorous, not growing under stress from insect, disease, winter injury or other types of stress.

- To prevent injury to alfalfa plants, treat only stands of alfalfa established for one year or for one growing season (except in California), provided:
  - The alfalfa stand has a well-developed tap root structure that is at least 10 inches in length (0.25 inch diameter below the crown) throughout the field and the crop is healthy, vigorous, and not under stress from weather conditions, low fertility, insects or disease damage.
  - In areas with shorter growing seasons, such as, higher elevations, adequate alfalfa tap root growth may not occur and especially when alfalfa is grown together with a cover or nurse crop. If an adequate tap root is not present, delay application of Tide Hexazinone 2SL until the alfalfa has gone through a minimum of two growing seasons.

USE RESTRICTIONS- ALFALFA

- Do not apply to snow-covered or frozen ground.
- Do not use Tide Hexazinone 2SL on seedling alfalfa, alfalfa-grass mixtures, or other mixed stands as injury may result to the seedling alfalfa or companion crop.
- Do not use a surfactant with Tide Hexazinone 2SL when treating non-dormant alfalfa.
- Do not use Tide Hexazinone 2SL on gravelly or rocky soils, exposed subsoils, hardpan, sand poorly drained soil, or alkali soils.

BLUEBERRY

HIGH BUSH BLUEBERRIES

Tide Hexazinone 2SL is labeled for control of certain herbaceous and woody weeds in established high bush blueberry fields.

APPLICATION INFORMATION

Tide Hexazinone 2SL may be applied to high bush blueberries that have been established for 3 or more years. Apply Tide Hexazinone 2SL in the spring before the lower leaves of the blueberry plant have fully expanded. Avoid contact of the leaves with the spray solution.

Using calibrated ground spray equipment, make the application in sufficient water then provide thorough and uniform coverage to the treated area (usually 20 gallons per acre). Shut off spray booms when starting, turning, slowing or stopping, or injury to the crop may result.

USE PRECAUTIONS - HIGH BUSH BLUEBERRIES

- Since the effect of Tide Hexazinone 2SL on blueberries varies with soil type, plant vigor, uniformity of applications and amount of rainfall, it is suggested that growers limit their first use to small areas.

USE RESTRICTIONS - HIGH BUSH BLUEBERRIES

- Do not apply through any type of irrigation system.
- Do not apply within 90 days of harvest.
- Do not apply to flooded field with standing water.
- Do not apply to blueberry foliage or crop injury will occur.

USE RATES (Pints/Acre)
HIGH BUSH BLUEBERRIES

Soil Texture	less than or equal to 3% organic matter	greater than 3% organic matter
Coarse loamy sand, sandy loam (50-85% sand)	4	5
Medium loam, silt loam, silt, clay loam, sandy clay loam	--	8
Fine silty clay loam, clay loam, sandy clay, silty clay, clay	4-6*	8

*Use the higher rate as the soil organic matter approaches 3%.

LOW BUSH BLUEBERRIES

Tide Hexazinone 2SL may be used for the control of certain weeds in low bush blueberries.

APPLICATION INFORMATION

Tide Hexazinone 2SL may only be applied to pruned blueberry fields in the spring before leaf emergence. Using calibrated ground spray equipment make the application in sufficient water to provide thorough and uniform coverage to the treated area (20 gallons per acre). Shut off spray booms when starting, turning, slowing or stopping, or injury to the crop may result.

USE PRECAUTIONS - LOWBUSH BLUEBERRIES

- Since the effect of Tide Hexazinone 2SL on blueberries varies with soil type, plant vigor, uniformity of applications and amount of rainfall, it is suggested that growers limit their first use to small areas. If excessive leaf drop is observed after treatment, reduce rate in future applications.

USE RESTRICTIONS - LOWBUSH BLUEBERRIES

- Do not apply through any type of irrigation system.
- Do not apply to flooded field with standing water.
- Do not apply within 450 days of harvest.
- Do not exceed 8 pints per acre if field has been treated with hexazinone within the past 8 years.
- Do not apply to blueberry foliage or crop injury will occur.
- Maintain a 50-foot buffer from any well head or water reservoir.

LOW BUSH BLUEBERRIES (PINTS/ACRE)

Soil Texture	less than or equal to 3% organic matter	greater than 3% organic matter
Coarse loamy sand, sandy loam (50-85% sand)	4	5
Medium loam, silt loam, silt, clay loam, sandy clay loam	--	6
Fine silty clay loam, clay loam, sandy clay, silty clay, clay	4-8*	8-12**

*Use the higher rate as the soil organic matter approaches 3%.

**Use the higher rate for harder to control species.

IMPREGNATION ON DRY BULK FERTILIZER

Dry bulk fertilizer may be impregnated or coated with Tide Hexazinone 2SL for application to established high bush or low bush blueberries. All instructions on this label must be followed along with state regulations relating to dry bulk fertilizer blending, impregnating and labeling.

If fertilizer materials are excessively dusty, use a suitable additive to reduce dust prior to impregnation, as dusty fertilizer will result in poor distribution during application. The dry fertilizer must be properly impregnated and uniformly applied to prevent crop injury and/or poor weed control.

To impregnate the fertilizer, use a system consisting of a conveyor or closed drum used to blend dry bulk fertilizer. Any commonly used fertilizer can be impregnated with Tide Hexazinone 2SL, except potassium nitrate or sodium nitrate. Do not use Tide Hexazinone 2SL on limestone.

Use a minimum of 250 lbs. dry bulk fertilizer per acre and up to a maximum of 450 lbs. per acre. To impregnate or coat the dry bulk fertilize with Tide Hexazinone 2SL, direct the nozzles to deliver a fine spray of this suspension toward the fertilizer for thorough coverage while avoiding spray contact with mixing equipment. Uniform impregnation of Tide Hexazinone 2SL to dry bulk fertilizer will vary, and if the absorptivity is not adequate, the use of an absorptive powder may be required to produce a dry, free-flowing mixture. “Microcel E” is the absorbent powder of choice. When another herbicide is used with Tide Hexazinone 2SL, mix and impregnate the fertilizer immediately.

Apply impregnated fertilizer as soon as possible after impregnation for optimum performance.

Select the rate of Tide Hexazinone 2SL to apply per acre from the appropriate section of this label. Then refer to the rate chart below to determine the amount of Tide Hexazinone 2SL that is to be impregnated on a ton of dry bulk fertilizer, based on the amount of fertilizer to be distributed in one acre.

Rate Chart for Impregnating Fertilizer with Tide Hexazinone 2SL

Fertilizer	Tide Hexazinone 2SL Rate Per Acre			
Rate/Acre	**2 Pints**	**3 Pints**	**4 Pints**	**6 Pints**
250 lbs.	16 pts./ton	24 pts./ton	32 pts./ton	48 pts./ton
300 lbs.	13.4 pts./ton	20 pts./ton	26.8 pts./ton	40.2 pts./ton
350 lbs.	11.4 pts./ton	17.2 pts./ton	22.8 pts./ton	34.2 pts./ton
400 lbs.	10 pts./ton	15 pts./ton	20 pts./ton	30 pts./ton
450 lbs.	8.8 pts./ton	13.2 pts./ton	17.6 pts./ton	26.4 pts./ton

For rates other than those listed, use the following formula to calculate the amounts of Tide Hexazinone 2SL to be impregnated per ton of dry fertilizer.

Pints Tide Hexazinone 2SL Per Acre x 1 Ton Fertilizer = Pints Tide Hexazinone 2SL per Ton of Fertilizer

APPLICATION

Uniform application of Tide Hexazinone 2SL -impregnated dry fertilizer is essential for satisfactory weed control. Accurate calibration of the application equipment is essential for uniform distribution to the surface. The customary method of application is to apply ½ the labeled rate and overlap 50%. This results in the best distribution pattern.

WEEDS CONTROLLED

Tide Hexazinone 2SL will control or suppress the following weed species in High and Low Bush Blueberry crops:

Aster, heath*	*Aster ericoides*
Barnyardgrass	*Echinochloa crus-galli*
Blackberry* (briar)	*Rubus* spp.
Bluegrass, Kentucky (perennial)*	*Poa pratensis*
Brome, downy (cheatgrass)	*Bromus tectorum*
Broomsedge*	*Andropogon virginicus*
Carrot, wild*	*Daucus carota*
Catchfly, English	*Silene gallica*
Chamomile, mayweed	*Anthemis cotula*
Cherry, wild	*Prunus serotia*
Chickweed, common	*Stellaria media*
Cinquefoil	*Potentilla* spp.
Cockle, white*	*Melandrium album*
Dandelion, common*	*Taraxacum officinale*
Dandelion, false* (spotted catsear)	*Hypochaeris radicata*
Daisy, oxeye	*Chrysanthemum leucanthemum*
Dock, curly*	*Rumex crispus*
Dogfennel	*Eupatorium capillifolium*
Fescue*	*Festuca* spp.
Fiddleneck, tarweed	*Amsinckia lycopsoides*
Filaree	*Erodium* spp.
Fireweed* (willowweed)	*Epilobium angustifolium*
Fleabane, flax-leaved	*Conyza bonariensis*
Flixweed	*Descurainia Sophia*
Foxtail, yellow	*Setaria lutescens*
Goldenrod	*Solidago* spp.
Groundsel, common	*Senecio vulgaris*
Hawkweed	*Hieracium* spp.
Horseweed/marestail	*Conyza canadensis*
Jimsonweed	*Datura stramonium*
Lambsquarters, common	*Chenopodium album*
Lettuce, Miner's	*Montia perfoliata*

Lettuce, prickly*	*Lactuca serriola*
Mustard, blue	*Chorispora tenella*
Mustard, Jim Hill (tumble)	*Sisymbrium altissimum*
Orchardgrass*	*Dactylis glomerata*
Orchardgrass (seedling)	*Dactylis glomerata*
Panicgrass (witchgrass)	*Panicum capillare*
Panicum, fall	*Panicum dichotomiflorum*
Pearly everlasting	*Anaphalis margaritacea*
Pennycress, field	*Thlaspi arvense*
Pigweed, redroot	*Amaranthus retroflexus*
Quackgrass	*Agropyron repens*
Radish, wild	*Raphanus raphanistrum*
Ragweed, common	*Ambrosia elatior*
Raspberry* (briar)	*Rubus* spp.
Rocket, London	*Sisymbrium irio*
Rocket, common yellow	*Barbarea vulgaris*
Ryegrass, Italian (annual)	*Lolium multiflorum*
Ryegrass, perennial*	*Lolium perenne*
Salsify	*Tragopogon* spp.
Shepherdspurse	*Capsella bursa-pastoris*
Smartweed, Pennsylvania	*Polygonum pensylvanicum*
Sorrel, red	*Rumex acetosella*
Sorrel, sheep	*Rumex angiocarpus*
Spurry, corn	*Spergula arvensis*
Strawberry, wild	*Fragaria virginiana*
Tansymustard (pinnate)	*Descurainia pinnata*
Tea, Mexican*	*Chenopodium ambrosioides*
Velvetgrass	*Holcus lanatus*
Yarrow	*Achillea* spp.
8 to 12 Pints/Acre	
Dogbane**	*Apocynum* spp.
Meadow-sweet	*Filipendula ulmaria*
Blackberry, trailing	*Rubus ursinus*
Laurel, sheep	*Kalmia angustifolia*
Rose, wild**	*Rosa* spp.

*Suppression – a visible reduction in plant population and/or plant vigor as compared to an untreated area and generally not accepted as control.

**Harder to control species.

CHRISTMAS TREES

Tide Hexazinone 2SL is labeled for control of certain weeds where the following species are grown:

Fir, Douglas (western US only)	*Pseudotsuga menziesii*
Fir, Fraser	*Abies fraseri*
Fir, grand	*Abies grandis*
Fir, noble	*Abies procera*
Pine, Austrian	*Pinus nigra*
Pine, loblolly	*Pinus taeda*
Pine, ponderosa	*Pinus ponderosa*
Pine, Scotch	*Pinus sylvestris*
Spruce, Sitka	*Picea sitchensis*

Unless otherwise directed in separately published Tide International USA, Inc. instructions, do not use Tide Hexazinone 2SL on Christmas trees in the following states:

Alabama	Louisiana	New Jersey	Texas
Arkansas	Maine	New York	Vermont
Connecticut	Maryland	North Carolina	Virginia
Delaware	Massachusetts	Pennsylvania	West Virginia
Georgia	Mississippi	Rhode Island	
Florida	New Hampshire	South Carolina	

APPLICATION INFORMATION

EASTERN US

Apply Tide Hexazinone 2SL as a broadcast spray in the spring prior to bud break. If application is made after bud break, use directional spray equipment to prevent contact with foliage.

WESTERN US

Areas of greater than 20 inches annual rainfall – Tide Hexazinone 2SL may be applied as a broadcast spray in the spring prior to conifer bud break. If application is made after bud break, use directional spray equipment to prevent contact with foliage.

Areas of less than 20 inches annual rainfall – Tide Hexazinone 2SL may be applied in the fall before the soil freezes or in the spring after snow cover melts, but before conifer bud break occurs.

USE RATES

The rates listed below are for broadcast application. For band application, use proportionately less; for example, use ½ of the broadcast rates when treating a 3-foot band where row spacing is 6 feet. Use the higher end of the rate range on the heavier soil type.

Do not make more than one application of Tide Hexazinone 2SL per year.

	Tide Hexazinone 2SL (Pints/Acre)	
Soils	**First Year Plantings**	**Established Trees**
Coarse Texture		
Loamy sand, sandy loam (50-85% sand)	4	4-5
Medium Texture		
Loam, silt loam, silt, clay loam, sandy clay loam	4-5	5-7
Fine Texture		
Silty clay loam, clay loam, sandy clay, silty clay, clay	5-6	7-8

First year plantings – Transplant stock that is 2 years old or more (1 year old for loblolly pine). Apply Tide Hexazinone 2SL only if rainfall has settled the soil around the base and root systems of the transplants.

Established trees – Trees that have been planted in the plantation for 1 year or more.

WEEDS CONTROLLED

Tide Hexazinone 2SL is labeled for the control or suppression of the following weed species in Christmas tree crops:

Aster, heath*	*Aster ericoides*
Barnyardgrass	*Echinochloa crus-galli*
Bentgrass, common	*Agrostis alba*
Bluegrass, annual	*Poa annua*
Bromegrass	*Bromus* spp.
Burnweed, American*	*Erechtites hieracifolius*
Carrot, wild	*Daucus carota*
Crabgrass*	*Digitaris* spp.
Curly dock*	*Rumex crispus*
Daisy, oxeye	*Chrysanthemum leucanthemum*
Dandelion, common*	*Taraxacum officinale*
Dandelion, false* (spotted catsear)	*Hypochaeris radicata*

Fescue*	*Festuca* spp.
Fleabane	*Conyza* spp.
Foxtail	*Setaria* spp.
Goldenrod*	*Solidago* spp.
Groundsel, common	*Senecio vulgaris*
Horseweed/marestail	*Conyza canadensis*
Orchardgrass*	*Dactylis glomerata*
Ragweed, common	*Ambrosia elatior*
Ryegrass, Italian (annual)	*Lolium multiflorum*
Ryegrass, perennial*	*Lolium perenne*
Smartweed, Pennsylvania	*Polygonum pensylvanicum*
Velvetgrass, common	*Holcus lanatus*

*Suppression – a visible reduction in plant population and/or plant vigor as compared to an untreated area and generally not accepted as control.

SPRAY EQUIPMENT

Tide Hexazinone 2SL may be applied by ground equipment or by air.

Select a spray volume that will ensure a through and uniform application. Apply a minimum of 5 gallons per acre by air and a minimum of 10 gallons per acre by ground equipment.

USE PRECAUTIONS - CHRISTMAS TREES

- Weed control results from spring applications depend on sufficient moisture to activate Tide Hexazinone 2SL.
- Poor weed and brush control may result from the following:
  - Heavy duff or slash present at the time of application.
  - Use on poorly drained sites.
  - Applications made when soil is saturated with water and rain is imminent within 24 hours.
  - Applications to soils high in organic matter (greater than 5%).
- Injury may occur when Tide Hexazinone 2SL is used on the following:
  - Trees that show poor vigor, insect damage, disease, winter injury, or other stress conditions.
  - Any soil containing less than 1% organic matter
  - Loamy sand or sandy loam with less than 2% organic matter (except Jeffrey Pine and Ponderosa Pine).
  - Foliage after bud break.
  - Gravelly or rocky soils, exposed subsoils, clay knobs, sand, or sandy soil with 85% or more sand.

USE RESTRICTIONS - CHRISTMAS TREES

- Do not use Tide Hexazinone 2SL in nurseries, seed beds, or ornamental plantings.
- Do not add a surfactant in applications over the top of conifers.
- Do not cut treated vegetation for feed, or graze livestock on treated areas for 60 days following application of Tide Hexazinone 2SL at broadcast rates exceeding 4.5 pints per acre.
- Livestock may be grazed immediately following a broadcast application of Tide Hexazinone 2SL at rates of 4.5 pints per acre or less. Do not feed livestock treated vegetation for 38 days following application. Treated vegetation may be cut, dried, and fed after 38 days.

PINEAPPLE

Tide Hexazinone 2SL is labeled for control of certain weeds in pineapple.

APPLICATION INFORMATION

Mix the proper amount of Tide Hexazinone 2SL in water. Add a surfactant at the rate of 0.25% by volume of water.

Use the lower rates on coarse-textured soils or in areas where rainfall exceeds 65 inches per year. Use the higher rates on fine-textured soils or in areas where rainfall is less than 65 inches per year.

Intercrop period – Apply Tide Hexazinone 2SL as a broadcast spray in 100-400 gallons of water per acre at the rate of 0.9-7 pints per acre. For aerial application, use at least 10 gallons water per acre.

Post mulch, preplant – Apply Tide Hexazinone 2SL as a broadcast spray in 100-400 gallons of water per acre at the rate of 0.9-7 pints per acre.

Post plant, before planted material starts active growth – Apply Tide Hexazinone 2SL as a broadcast spray in 100-400 gallons of water per acre at the rate of 0.9-7 pints per acre. When weed growth has escaped control by other herbicide applications, a post-planting application may be made after the planted cuttings start to grow.

Post-plant crop harvest, prior to forcing first ratoon – Apply Tide Hexazinone 2SL as a broadcast spray in 100-400 gallons of water per acre at the rate of 0.9-7 pints per acre.

Directed postemergence (pineapple and weeds) interspace application – Apply Tide Hexazinone 2SL as a directed spray 3-10 months after planting in 50-200 gallons of water per acre (broadcast basis) at the rate of 0.9-7 pints per acre (broadcast basis) using a stroller boom or knapsack.

Directed spot treatments for perennial grasses before floral induction – Spray perennial grasses postemergence to wet (50-200 gallons per acre depending on size) with 3.5-7 pints per 100 gallons of water as a spot treatment.

Treatments to field edges and roadsides – Apply Tide Hexazinone 2SL at 7-14.5 pints per acre in 100-400 gallons of water.

WEEDS CONTROLLED

Tide Hexazinone 2SL is labeled for the control or suppression of the following species in pineapple crops:

Ageratum, tropic	*Ageratum conycoides*
Balsamapple	*Momordica charantia*
Castorbean	*Ricinus communis*
Crabgrass	*Digitaria* spp.
Crotalaria	*Crotolaria* spp.
Dallisgrass	*Paspalum dilatatum*
Guineagrass	*Panicum maximum*
Junglerice	*Echinochloa colonum*
Kao haole*	*Leucaena glauca*
Moana loa vine*	*Canavalia cathartica*
Morningglory	*Ipomoea* spp.
Oxalis	*Oxalis* spp.
Popolo	*Solanum sandwicense*
Richardsonium	*Richardsonia* spp.
Vaseygrass	*Paspalum urvillei*

*Suppression – a visible reduction in plant population and/or plant vigor as compared to an untreated area and generally not accepted as control.

USE RESTRICTIONS-PINEAPPLE

- Do not exceed 1.8 gallons Tide Hexazinone 2SL per acre per crop.
- Do not apply Tide Hexazinone 2SL within 181 days of harvest.

SUGARCANE

Tide Hexazinone 2SL is labeled for selective weed control in sugarcane except in the State of Florida.

APPLICATION INFORMATION

Apply a single treatment of Tide Hexazinone 2SL per year using a fixed-boom sprayer and a minimum of 25 gallons per acre unless otherwise directed.

HAWAII

Apply Tide Hexazinone 2SL pre- or postemergence at the following rates for the indicated soil texture:

Soil Texture Description	Tide Hexazinone 2SL (Pints/Acre) (Plus surfactant 0.25% by volume)
Coarse	
Sand, loamy sand, sandy loam	1.8-3.5
Medium	
Loam, silt loam, silty clay loam	1.8-7.0
Fine	
Clay, gray hydromorphic clay	7.0-14.5

Use the higher levels of the labeled rate ranges on soils high in organic matter.

Add an adjuvant for all uses.

For preemergence use only, Tide Hexazinone 2SL may be applied with aerial equipment using at least 10 gallons of spray per acre.

Apply Tide Hexazinone 2SL as a spot spray application for emerged weeds in sugarcane. Mix 3 to 12 pints of Tide Hexazinone 2SL per 100 gallons of water. Apply a sufficient volume of spray solution to thoroughly wet weed foliage but do not exceed a use rate of 14.4 pints per acre. Use the lower concentrations on coarse-textured soils that are low in organic matter, and use the higher concentrations on fine-textured soils that are high in organic matter.

LOUISIANA

Apply 1.8-3.5 pints of Tide Hexazinone 2SL per acre broadcast in the fall before sugarcane emerges or in the spring before active cane tillering begins. Fall treatments of 1.8-3 pints per acre may be followed by a spring treatment of 1.8-3 pints per acre. Do not apply more than 6 pints per year. Use the higher rates on fine textured soils.

PUERTO RICO

For preemergence treatments, apply 0.9-1.8 pints of Tide Hexazinone 2SL per acre.

For postemergence treatments, apply 0.9-1.8 pints of Tide Hexazinone 2SL per acre to weeds after they have emerged. Use the lower rates on coarse-textured soils and the higher rates on fine-textured soils (high in clay or organic matter). Each ratoon may receive up to 1.8 pints of Tide Hexazinone 2SL per acre.

For spot treatment of emerged weeds, Tide Hexazinone 2SL may be applied with a knapsack sprayer in concentrations of 0.9-1.8 pints per 100 gallons of water. Apply a sufficient spray volume to wet the weed foliage. Do not exceed 100 gallons of spray per treated acre. Use the lower concentration on coarse-textured soils and the higher concentration on fine-textured soils.

For "spot" knapsack applications, do not exceed the rate equivalent of 1.8 pints Tide Hexazinone 2SL per acre.

Do not apply more than 3.6 pints of Tide Hexazinone 2SL per acre per application.

TEXAS

Apply 1.8-7 pints of Tide Hexazinone 2SL per acre. On plant cane, apply the herbicide before the cane emerges or as a directed layby treatment. On stubble cane, apply Tide Hexazinone 2SL preemergence or early postemergence (up to the 3-leaf stage) or as a directed layby treatment. A pre- or early postemergence treatment may be followed by a layby treatment, provided at least 60 days have elapsed and 3 inches of rainfall or sprinkler irrigation have occurred since the first treatment.

Do not apply more than 7 pints of Tide Hexazinone 2SL per acre per season.

Use the following rates according to the different soil textures:

Soils Texture Description	Tide Hexazinone 2SL (Pints/Acre) Preemergence	+	Layby
Coarse*			
Sandy loam	1.8		1.8
Medium			
Loam, silt loam	2.7		2.7
Fine			
Clay loam	3.5		3.5

* With at least 2% organic matter.

On dormant cane, a surfactant may be added to the spray mixture to increase control of emerged weeds.

WEEDS CONTROLLED

Tide Hexazinone 2SL is labeled for the control or suppression of the following species in sugarcane crops:

Ageratum, tropic*	*Ageratum conycoides*
Alexandergrass	*Brachiaria plantaginea*
Balsamapple	*Momordica charantia*
Barnyardgrass	*Echinochloa crus-galli*
Bermudagrass*	*Cynodon dactylon*
Burnweed, American (fireweed)	*Erechtites hieracifolius*
Chickweed, common	*Stellaria media*
Crabgrass, large	*Digitaria sanguinalis*
Crabgrass, smooth	*Digitaria ischaemum*
Crotalaria, fuzzy	*Crotalaria incana*
Crotalaria, showy	*Crotalaria spectabilis*
Cuphea, tarweed	*Cuphea carthagenensis*
Dallisgrass	*Paspalum dilatatum*
Fingergrass, radiate	*Chloris radiate*
Fingergrass, swollen	*Chloris barbata*
Foxtail, bristly	*Setaria verticillata*
Foxtail, yellow	*Setaria lutescens*
Geranium, Carolina	*Geranium carolinianum*
Goosegrass	*Elusine indica*
Guineagrass	*Panicum maximum*
Henbit	*Lamium amplexicaule*
Itchgrass*	*Rottboellia cochinchinensis*
Job's-tears	*Coix lacryma*
Johnsongrass (seedling)	*Sorghum halepense*
Junglerice	*Echinochloa colonum*
Lambsquarters, common	*Chenopodium album*
Millet, Texas	*Panicum texanum*
Morningglory, hairy	*Ipomoea pentaphylla*
Morningglory, threelobe	*Ipomoea triloba*
Mustard, wild	*Sinapis arvensis*
Oxalis	*Oxalis* spp.
Paintbrush, Flora's	*Emilia sonchifolia*
Panicum, browntop	*Panicum fasciculatum*
Paspalum, ricegrass	*Paspalum orbiculare*
Paspalum, sour	*Paspalum conjugatum*
Pigweed, redroot	*Amaranthus retroflexus*
Pigweed, slender (green)	*Amaranthus viridus*
Pigweed, smooth	*Amaranthus chlorostachys*
Popolo	*Solanum sandwicense*
Purslane, common	*Portulaca oleracea*
Sandbur	*Cenchrus* spp.
Sensitive plant (hila hila)	*Mimosa* spp.
Signalgrass, broadleaf	*Brachiaria platyphylla*
Sowthistle, common	*Sonchus oleraceus*
Spanishneedles	*Bidens bipinnata*
Sprangletop	*Leptochloa* spp.
Spurge, prostrate	*Euphorbia humistrata*
Spurge, graceful	*Chamaesyce hypericifolia*
Sunflower	*Helianthus* spp.
Vaseygrass	*Paspalum urvillei*
Waltheria (hia loa)	*Waltheria* spp.

* Suppression – a visible reduction in plant population and/or plant vigor as compared to an untreated area and generally not accepted as control.

USE PRECAUTIONS – SUGARCANE

- Extremely heavy rainfall after application may result in poor weed control and/or crop injury, especially if the application is made to dry soil.

USE RESTRICTIONS – SUGARCANE

- Do not plant any crop other than sugarcane following an application of Tide Hexazinone 2SL.
- Do not feed sugarcane forage to livestock.
- Do not apply Tide Hexazinone 2SL:
  - Within 180 days of harvest in Hawaii.
  - Within 234 days of harvest in Louisiana.
  - Within 288 days of harvest in Puerto Rico.
  - Within 234 days of harvest in Texas.

Do not use Tide Hexazinone 2SL on cane that shows poor vigor because of insect damage, disease or winter injury, or shows symptoms of other stress conditions such as drought stress. Do not add a surfactant in applications unless otherwise specified or allowed. Do not use Tide Hexazinone 2SL on gravelly or rocky soils, thinly covered subsoils, or coarse-textured soils (sands to sandy loams) with less than 1% organic matter. Temporary chlorosis of the crop may result from application over emerged cane. Applications during active cane growth must be directed to cover the weeds and soil while minimizing crop contact. Do not use Tide Hexazinone 2SL on varieties known to be susceptible to herbicides.

FORESTRY

SITE PREPARATION

Tide Hexazinone 2SL is labeled for weed and brush control in areas where the following species are grown:

EASTERN US AND LAKE STATES

Fir, balsam	*Abies balsamea*
Pine, Austrian	*Pinus negra*
Pine, loblolly	*Pinus taeda*
Pine, longleaf	*Pinus palustris*
Pine, ponderosa	*Pinus ponderosa*
Pine, red	*Pinus resinosa*
Pine, Scotch	*Pinus sylvestris*
Pine, shortleaf	*Pinus echinata*
Pine, slash	*Pinus elliottii*
Pine, Virginia	*Pinus virginiana*
Spruce, black	*Picea mariana*
Spruce, red	*Picea rubens*
Spruce, white	*Picea glauca*

WESTERN US

Fir, Douglas	*Pseudotsuga menziesii*
Fir, grand	*Abies grandis*
Fir, Noble	*Abies procera*
Fir, white	*Abies concolor*
Pine, Jeffrey	*Pinus jeffreyi*
Pine, Lodgepole	*Pinus contorta*
Pine, ponderosa	*Pinus ponderosa*
Spruce, blue	*Picea pungens*
Spruce, Engleman	*Picea englemannii*
Spruce, Sitka	*Picea sitchensis*

APPLICATION INFORMATION

EASTERN US

Apply Tide Hexazinone 2SL from early spring to early summer after hardwoods have broken bud and before the foliage has hardened off.

Soil Texture Description	Tide Hexazinone 2SL (Quarts/Acre) Eastern US
Coarse	
Sand, loamy sand, sandy loam	4-6
Medium	
Loam, silt loam, sandy clay loam	6-8
Fine	
Silty clay loam, clay loam, sandy clay, silt, silty clay, clay	8-10

The rates listed are for broadcast application. Use the lower rates on coarse textured soils and soils low in organic matter. Use the higher rates where weeds identified with in this label as "partial control or suppression" predominate.

WESTERN US

For **SITE PREPARATION**, Tide Hexazinone 2SL may be applied at 2 to 6 quarts per acre. Use the lower rates on coarse textured soils and soils low in organic matter. Use the higher rates on fine textured soils and soils high in organic matter. Use the higher rates where weeds identified in this label as "partial control or suppression" predominate.

In areas where other conifer species may be mixed in with the conifers listed above, Tide Hexazinone 2SL may be applied if the user has prior experience with Tide Hexazinone 2SL on the other conifer species. With no prior experience, it is advised that either a small area of plantings be tested for conifer safety prior to treating larger areas, or make no application of Tide Hexazinone 2SL in these areas within the site preparation area. Conifer species that are sensitive to Tide Hexazinone 2SL (hexazinone) such as, sugar pine and western larch, require 18 months before interplanting on treated sites.

Applications made to shelter wood sites may also result in mortality to over-story conifers. Factors that may influence conifer sensitivity in these sites could include application rate, conifer species, soil characteristics, uniformity of spray distribution across the treatment swath and environmental stress.

Rain Belt (areas of high spring rainfall): For best results, apply in late winter or spring when weeds and brush are actively growing.

Snow Belt (areas of low spring rainfall): For best results, apply in the fall before soil freezes, or in the spring after snow cover melts in anticipation of rainfall. Weed and brush control results from spring applications will be dependent on sufficient rainfall following application to activate Tide Hexazinone 2SL.

PLANTS CONTROLLED

Tide Hexazinone 2SL is labeled for the control or suppression of the following species in site preparations for forestry crops:

HERBACEOUS PLANTS

Asters	
Aster, heath*	*Aster ericoides*
Barnyardgrass	*Echinochloa crus-galli*
Bentgrass	*Agrostis* spp.
Bluegrass, annual	*Poa annua*
Bromegrass	*Bromus* spp.
Carrot, wild	*Daucus carota*
Crabgrass*	*Digitaria* spp.
Daisy, oxeye	*Chrysanthemum leucanthemum*
Dandelion, common*	*Taraxacum officinale*
Dandelion, false* (spotted catsear)	*Hypochaeris radicata*
Dock, curly*	*Rumex crispus*
Elksedge	*Carex geyeri*
Fescue*	*Festuca* spp.
Fireweed* (willowweed)	*Epilobium angustifolium*
Fleabane	*Conyza* spp.

Foxtail	*Setaria* spp.
Goldenrod*	*Solidago* spp.
Groundsel, common	*Senecio vulgaris*
Horseweed/marestail	*Conyza canadensis*
Mullein, common**	*Verbascum thapsus*
Orchardgrass*	*Dactylis glomerata*
Pinegrass	*Calamagrostis rubescens*
Quackgrass*	*Agropyron repens*
Ragweed, common	*Ambrosia elatior*
Ryegrass, Italian (annual)	*Lolium multiflorum*
Ryegrass, perennial*	*Lolium perenne*
Smartweed, Pennsylvania	*Polygonum pensylvanicum*
Squawcarpet	*Ceanothus prostrates*
Thistle, Canada*	*Cirsium arvense*
Velvetgrass, common	*Holcus lanatus*

**For Western US site preparation, apply at 6 quarts per acre.

WOODY PLANTS

Ash	*Fraxinus* spp.
Aspen, big tooth	*Populus grandidentata*
Aspen, trembling	*Populus tremuloides*
Birch	*Betula* spp.
Blackgum	*Nyssa sylvatica*
Cherry, black	*Prunus serotina*
Deerbrush	*Ceanothus integerrimus*
Dogwood, flowering*	*Cornus florida*
Elm	*Ulmus* spp.
Hawthorn	*Crataegus* spp.
Hazel	*Corylus* spp.
Hickory	*Carya* spp.
Honeysuckle*	*Lonicera* spp.
Manzanita, Greenleaf	*Arctostaphylos patula*
Maple, red*	*Acer rubrum*
Oaks	*Quercus* spp.
Poplar, balsam	*Populus balsamifera*
Snowbrush (varnishleaf)	*Ceanothus velutinus)*
Sourwood*	*Oxydendrum arboretum*
Sweetgum	*Liquidambar* spp.
Willows	*Salix* spp.

*Suppression is a visible reduction in plant competition (reduced population and/or vigor) as compared to an untreated area. Degree of suppression will vary with rate applied, size of plants at application and environmental conditions following treatment. Species indicated above, especially resprouts of these species, may require a follow up treatment for acceptable control. Burning, as a follow up treatment, will enhance control of resprouts.

Within several weeks after Tide Hexazinone 2SL activation by rainfall, affected vegetation may be burned, if desired. This burn may further enhance control of vegetation. Burn the vegetation only after any residual stand is completely defoliated, at least twice, allowing for sufficient root uptake of Tide Hexazinone 2SL. In the West, results may take one to two years in areas of low rainfall.

SPRAY EQUIPMENT

When applied as a liquid spray using water as the carrier, Tide Hexazinone 2SL may be applied by ground equipment or by air (helicopter only).

For ground application, use enough water for thorough coverage (a minimum of 25 gallons per acre). For aerial applications, use at least 5 gallons of water per acre and at least 5 gallons of water for every 1 gallon of Tide Hexazinone 2SL.

GRID APPLICATION

Apply undiluted Tide Hexazinone 2SL directly to the soil surface in a grid pattern using an exact delivery handgun applicator. This equipment delivers a thin stream of predetermined volume. Tide Hexazinone 2SL must be applied during the period from hardwood bud break to early summer.

Application rate and grid pattern will depend on soil texture and woody plant composition. Use the lower rates on coarse textured soils and when the major components of the hardwoods are susceptible species. Use the high rates on fine-textured soils and where weeds identified in this label as "partial control or suppression" predominate.

Application Patterns and Rates for Tide Hexazinone 2SL Suspension			
	ML/Spot	**Grid (Ft)**	**Quarts/Acre**
Coarse	0.6	3x3	3
	2.0	4x4	6
	3.1	4x6	6
Medium/Fine	1.6	3x3	8
	2.8	4x4	8
	3.5	4x4	10
	5.2	4x6	10

BASAL (SOIL) SINGLE STEM TREATMENT

Apply undiluted Tide Hexazinone 2SL with an exact-delivery handgun applicator. Apply at the rate of 2-4 ml for each inch of stem diameter at breast height. Direct the treatment to the soil within 3 feet of the root collar of woody plants to be controlled. When treating large stems and when more than one delivery of Tide Hexazinone 2SL is needed per stem, make application on opposite sides of the stem.

For multi-stemmed and low-growing brush that have stem diameters that are difficult to determine, apply Tide Hexazinone 2SL at the rate of 2-4 ml per 3 feet of canopy width. For tall, slender (columnar) brush types, apply 4-8 ml per 3 feet of height. Base the rate on whichever canopy dimension is greater (width or height).

When treating brush that requires more than a single 4 ml application of Tide Hexazinone 2SL, apply subsequent applications equally spaced around the plant. If treating brush on sloped sites, apply most of the Tide Hexazinone 2SL on the uphill side of the stem. If treating resprouts from brush disturbed by cutting or other mechanical methods, the rate of application must be proportional to the original tree size, not just the small regrowth of sprouts.

INJECTION

No Worker Protection Standard worker entry restrictions or worker notification requirements apply when this product is directly injected into agricultural plants.

Inject 1 ml of undiluted Tide Hexazinone 2SL through the bark of undesirable trees. Make injections at 4 inch intervals around the circumference of the tree. When using tubular injection equipment, inject near the ground level. When using the "Hypo-Hatchet" Tree Injector or a similar device, inject at waist height. Best results if treatments are made in the summer. Woody species controlled include black cherry, oaks, and sweetgum.

USE PRECAUTIONS - SITE PREPARATION

- Following harvest, allow sufficient time for stumps and injured trees to adequately resprout before applying Tide Hexazinone 2SL.

USE RESTRICTIONS - SITE PREPARATION

- Where burning is desired, burn the vegetation only after any residual brush has completely defoliated, at least twice, allowing for sufficient root uptake of Tide Hexazinone 2SL.

FORESTRY – RELEASE

Tide Hexazinone 2SL is labeled for conifer release where the following species are grown:

EASTERN US AND LAKE STATES

Fir, balsam	*Abies balsamea*
Pine, loblolly	*Pinus taeda*
Pine, longleaf	*Pinus palustris*
Pine, red	*Pinus resinosa*
Pine, shortleaf	*Pinus echinata*
Pine, slash	*Pinus elliottii*
Pine, Virginia	*Pinus virginiana*
Spruce, black	*Picea mariana*
Spruce, Norway	*Picea abies*
Spruce, red	*Picea rubens*
Spruce, white	*Picea glauca*

WESTERN US

Fir, Douglas	*Pseudotsuga menziesii*
Fir, grand	*Abies grandis*
Fir, Noble	*Abies procera*
Fir, white	*Abies concolor*
Hemlock, Western	*Tsuga heterophylla*
Pine, Jeffrey	*Pinus jeffreyi*
Pine, lodgepole	*Pinus contorta*
Pine, ponderosa	*Pinus ponderosa*
Spruce, blue	*Picea pungens*
Spruce, Engleman	*Picea englemannii*
Spruce, Sitka	*Picea sitchensis*

APPLICATION INFORMATION

EASTERN US

Apply Tide Hexazinone 2SL from early spring to early summer after hardwoods have broken bud and before full leaf expansion.

Applications made over the top of pines may result in excessive pine injury under conditions of high humidity and temperature (80 degrees F).

WESTERN US

Rainbelt (areas of high spring rainfall): For best results, apply in late winter or spring when brush is actively growing, but prior to conifer budbreak. Dormant trees are less susceptible to injury. Applications where the spray comes into direct contact with conifers after dormancy break in the spring or before the final resting bud has hardened in the fall may severely injure or kill the trees.

Snowbelt (areas of low spring rainfall): For best results, apply in the fall before soil freezes and after final resting bud has hardened on the conifers. Or, spring applications may be made after snow cover melts in anticipation of rainfall prior to conifer bud break. Brush control results from spring treatments will be dependent on sufficient rainfall following application to activate Tide Hexazinone 2SL.

USE RATES

The rates listed below are for broadcast application. Do not use more than one application of Tide Hexazinone 2SL per year. Use the higher rate range for harder to control* (suppression) species in the **PLANTS CONTROLLED** listings of the Site Prep and Release sections.

EASTERN US

Crop Species	Soil Texture Description	Tide Hexazinone 2SL (Quarts/Acre) Established Trees
Loblolly pine Longleaf pine Shortleaf pine Virginia pine Slash pine	Loamy sand, sandy loam	2-3
	Loam, silt loam, silt, sandy clay loam	2-4
	Silty clay loam, clay loam, sandy clay, silty clay, clay	4.5-6
Red pine	Loamy sand, sandy loam	2-4
	Loam, silt loam, silt, sandy clay loam	4-6
	Silty clay loam, clay loam, sandy clay, silty clay, clay	6-8

Established Trees

- 4 years of age from transplanting on coarse-textured soils
- 3 years of age from transplanting on medium-textured soils
- 2 years of age from transplanting for Red Pine

WESTERN US

Application rates by soil type for Tide Hexazinone 2SL in the following western conifers: Blue spruce, Douglas fir, Engleman spruce, Grand fir, Jeffrey pine, Lodgepole pine, Noble fir, Ponderosa pine, Sitka spruce, Western hemlock and White fir.

Soil Texture Description	Tide Hexazinone 2SL (Quarts/Acre)
Loamy sand, sandy loam	2-4.5
Loam, silt loam, sandy clay loam	3.5-6
Silt, silty clay loam, clay loam, sandy clay, silty clay, clay	5-6

For first year plantings utilizing bare root stock, treat only transplant stock that is 2 years old (2-0, 1-1) or more, except (1-0) for Ponderosa and Jeffrey pines. Apply Tide Hexazinone 2SL only if rainfall has settled the soil around the base and root systems of the transplants.

BRUSH CONTROLLED

Tide Hexazinone 2SL is labeled for the control or suppression of the following species in forestry release sites:

Ash	*Fraxinus* spp.
Aspen, big tooth	*Populus grandidentata*
Aspen, trembling	*Populus tremuloides*
Birch	*Betula* spp.
Elder, box	*Acer negundo*
Brambles	*Rubus* spp.
Cherry, black	*Prunus serotina*
Cherry, pin	*Prunus pensylvanica*
Deerbrush	*Ceanothus integerrimus*
Dogwood, flowering*	*Cornus florida*
Elm	*Ulmus* spp.
Hawthorn	*Crataegus* spp.
Hazel	*Corylus* spp.
Honeysuckle*	*Lonicera* spp.
Manzanita, Greenleaf	*Arctostaphylos patula*
Maple, red*	*Acer rubrum*
Oaks	*Quercus* spp.
Poplar, balsam	*Populus balsamifera*
Snowbrush (varnishleaf)	*Ceanothus velutinus*
Sourwood*	*Oxydendrum arboretum*
Sweetgum	*Liquidambar* spp.
Willows	*Salix* spp.

* Suppression – a visible reduction in plant population and/or plant vigor as compared to an untreated area and generally not accepted as control.

In addition to brush controlled, herbaceous species listed in **Weeds Controlled** section of **Release-Herbaceous Weed Control** may be controlled with these applications.

SPRAY EQUIPMENT

When applied as a liquid spray using water as the carrier, Tide Hexazinone 2SL may be applied by ground equipment or by air (helicopter only).

For ground application, use enough water for thorough coverage (a minimum of 25 gallons per acre). For aerial applications, use a minimum of 5 gallons per acre and at least 5 gallons of water for every 1 gallon of Tide Hexazinone 2SL.

GRID APPLICATION

Apply undiluted Tide Hexazinone 2SL directly to the soil surface in a grid pattern using an exact delivery handgun applicator. This equipment delivers a thin stream of predetermined volume when triggered. Apply Tide Hexazinone 2SL during the period from hardwood bud break to early summer.

Application rate and grid pattern will depend on soil texture and woody plant composition. Use the lower rates on coarse textured soils and when the major component of the hardwoods are susceptible species. Use the high rates on fine-textured soils and where weeds identified in this label as "partial control or suppression" predominate.

Application Patterns and Rates for Undiluted Tide Hexazinone 2SL			
	ML/Spot	**Grid (Ft)**	**Quarts/Acre**
Coarse	0.5	3x4	2*
	1.2	3x6	3
	2.1	4x6	4
Medium/Fine	1.2	3x3	6
	2.3	3x6	6
	1.6	3x3	8
	3.1	3x6	8

* Use on deep sands with pines four years or more of age.

BASAL (SOIL)
SINGLE STEM TREATMENT

Apply undiluted Tide Hexazinone 2SL to the soil with an exact-delivery handgun applicator. Apply at the rate of 2-4 ml for each inch of stem diameter at breast height. Direct the treatment to the soil within 3 feet of the root collar of woody plants to be controlled. When treating large stems and when more than one delivery of Tide Hexazinone 2SL is needed per stem, make application on opposite sides of the stem.

For multi-stemmed and low-growing brush that have stem diameters that are difficult to determine, apply Tide Hexazinone 2SL at the rate of 2-4 ml per 3 feet of canopy width. For tall, slender (columnar) brush types, apply 4-8 ml per 3 feet of height. Base the rate on whichever canopy dimension is greater (width or height).

When treating brush that requires more than a single 4 ml application of Tide Hexazinone 2SL, apply subsequent applications equally spaced around the plant. If treating brush on sloped sites, apply most of the Tide Hexazinone 2SL on the uphill side of the stem. If treating resprouts from brush disturbed by cutting or shredding, the rate of application must be proportional to the original tree size, not just the small regrowth of sprouts.

INJECTION

No Worker Protection Standard worker entry restrictions or worker notification requirements apply when this product is directly injected into agricultural plants.

Inject 1 ml of undiluted Tide Hexazinone 2SL through the bark of undesirable trees. Make injections at 4 inch intervals around the circumference of the tree. When using tubular injection equipment, inject Tide Hexazinone 2SL near the ground level. When using the "Hypo-Hatchet" Tree Injector or a similar device, inject at waist height. Best results if treatments are made in the summer. Woody species controlled include black cherry, oaks, and sweetgum.

USE PRECAUTIONS - RELEASE

UNDILUTED APPLICATIONS

- Application of Tide Hexazinone 2SL basal soil spot treatments closer than 36 inches to conifer seedlings in their first season or directly up slope from these seedlings may result in injury or mortality.
- Use Tide Hexazinone 2SL on seedlings in their first or fourth year and older. Injury may result from use on two and three year old seedlings where root growth is extensive but hardiness is lacking.

RELEASE
HERBACEOUS WEED CONTROL

Tide Hexazinone 2SL is labeled for controlling herbaceous weeds where these pine species are grown:

EASTERN US

Loblolly pine	Slash pine
Longleaf pine	Red pine

WESTERN US

Blue spruce	Noble fir
Douglas fir	Ponderosa pine
Engleman spruce	Sitka spruce
Grand fir	Western hemlock
Jeffrey pine	White fir
Lodgepole pine	

APPLICATION INFORMATION

EASTERN US

Apply Tide Hexazinone 2SL as a broadcast or banded spray in the spring prior to conifer bud break to lesson conifer injury potential.

WESTERN US

Rainbelt (areas of high spring rainfall): For best results, apply as a broadcast or banded spray in the late winter or spring when weeds are actively growing, but prior to conifer budbreak. If application is made after conifer bud break, use directional spray equipment to prevent contact with conifer foliage, as injury may result.

Snowbelt (areas of low spring rainfall): For best results, apply as a broadcast or banded spray in the fall before soil freezes and after the final resting bud has hardened on the conifers. Or, spring applications may be made after snow cover melts in anticipation of rainfall prior to conifer bud break. Weed control results from spring treatments will be dependent on sufficient rainfall following application to activate Tide Hexazinone 2SL.

USE RATES

The rates listed below are for broadcast application. For band application, use proportionately less. For example, use ½ of the broadcast rates when treating a 3-foot band where row spacing is 6 feet. Use the higher rate range for harder to control (*suppression) weeds listed in the table below.

EASTERN US

	Tide Hexazinone 2SL (Pints/Acre)	
Soil Texture Description	**First Year Plantings**	**Established Trees**
Loamy sand, sandy loam (50 – 85% sand)	4	4-5
Loam, silt loam, silt, sandy clay loam	4-5	5-7
Silty clay loam, clay loam, sandy clay, silty clay, clay	5-6	7-8

Red pine only- Refer to labeled rates in the **FORESTRY RELEASE – Use Rates Eastern US** section of the label.

WESTERN US

Refer to labeled rates in the **FORESTRY RELEASE – Use Rates Western US** section of the label.

WEEDS CONTROLLED

Tide Hexazinone 2SL is labeled for the control or suppression of the following species in forestry release sites:

Asters	*Aster* spp.
Aster, heath*	*Aster ericoides*
Barnyardgrass	*Echinochloa crus-galli*
Bentgrass	*Agrostis* spp.
Bluegrass, annual	*Poa annua*
Brackenfern	*Pteridium aquilinum*
Bromegrass	*Bromus* spp.
Carrot, wild	*Daucus carota*
Crabgrass*	*Digitaria* spp.
Daisy, oxeye	*Chrysanthemum leucanthemum*
Dandelion, common*	*Taraxacum officinale*
Dandelion, false* (spotted catsear)	*Hypochaeris radicata*
Dock, curly*	*Rumex crispus*

Fescue*	*Festuca* spp.
Fireweed* (willowweed)	*Epilobium angustifolium*
Fleabane	*Conyza* spp.
Foxtail	*Setaria* spp.
Goldenrod*	*Solidago* spp.
Groundsel, common	*Senecio vulgaris*
Horseweed/marestail	*Conyza canadensis*
Orchardgrass*	*Dactylis glomerata*
Panicums	*Panicum* spp.
Pinegrass	*Calamagrostis rubescens*
Ragweed, common	*Ambrosia elatior*
Ryegrass, Italian (annual)	*Lolium multiflorum*
Ryegrass, perennial*	*Lolium perenne*
Smartweed, Pennsylvania	*Polygonum pensylvanicum*
Squawcarpet	*Ceanothus prostrates*
Velvetgrass, common	*Holcus lanatus*

* Suppression – a visible reduction in plant population and/or plant vigor as compared to an untreated area and generally not accepted as control.

FORESTRY
IMPREGNATION ON DRY BULK FERTILIZER

Tide Hexazinone 2SL is labeled for impregnating or coating dry bulk fertilizer to be applied on forested sites for the establishment or release of conifer plantations (except longleaf pine) as specified on this label.

PLANTS CONTROLLED

Fertilizer impregnated with Tide Hexazinone 2SL is labeled for the control and suppression of the weeds and brush identified for the specific applications on this label. Consult the appropriate segment of this label to determine the appropriate rate of Tide Hexazinone 2SL to be applied per acre. Apply this amount of Tide Hexazinone 2SL to the volume of fertilizer to be applied per acre.

IMPREGNATION EQUIPMENT

To impregnate or coat the fertilizer use a system consisting of conveyor or closed drum used to blend dry bulk fertilizer.

IMPREGNATION INSTRUCTIONS

Tide Hexazinone 2SL may be used undiluted or mixed with a sufficient quantity of water to ensure thorough coverage of the fertilizer.

Direct the spray nozzles of the impregnation equipment to deliver a fine spray of the mixture toward the fertilizer for thorough coverage while avoiding contact with mixing equipment. The use of a colorant or dye may be beneficial to visually determine the uniformity of impregnation.

Uniform impregnation of dry bulk fertilizer may vary. If absorption of the spray is not adequate, the use of an absorptive powder or additive, such as "Microcel E" or "HiSil 233", may be required to produce a dry, free flowing mixture.

Apply the fertilizer as soon as possible after impregnation for optimum performance. Impregnated fertilizer may become lumpy and difficult to apply following storage.

Diammonium phosphate, potassium chloride, 16-16-16 and 24-4-4-have been successfully impregnated.

APPLICATION EQUIPMENT

Applications of impregnated fertilizer may be made by ground equipment or by air (helicopter or fixed wing). Accurate calibration and patterning of the equipment is essential for uniform distribution of the impregnated fertilizer on the soil surface.

USE PRECAUTIONS – FORESTRY

IMPREGNATED FERTILIZER

- Uniform and precise application of the impregnated fertilizer is essential for satisfactory weed and brush control and to minimize pine injury. Overlaps or skips between adjoining swaths or non-uniform distribution of impregnated fertilizer within the swath will deliver poor results and may result in pine injury or mortality.

USE RESTRICTIONS - FORESTRY

IMPREGNATED FERTILIZER

- If fertilizer materials are excessively dusty, use a suitable additive to reduce dust prior to impregnation. Application of dusty fertilizer which has been impregnated may result in off-target drift and injury to desirable vegetation. Such drift and associated injury may be aggravated by high wind conditions.
- The dry fertilizer must be properly impregnated and uniformly applied to prevent pine injury/mortality and poor weed and brush control.
- Do not impregnate potassium nitrate, sodium nitrate or triple super phosphate fertilizers with Tide Hexazinone 2SL as herbicidal action will be lost.

USE PRECAUTIONS - FORESTRY

- On tracts of land where various soil types are present and Tide Hexazinone 2SL rate selection is difficult, conifer damage or less-than-expected vegetation suppression may occur due to the different rates required for various soil types.
- Poor weed and brush control may result from the following:
  - Heavy duff or slash present at time of application
  - Use on poorly drained sites
  - Applications made when the soil is saturated with water and rain is imminent within 24 hours
  - Applications to soils high in organic matter (greater than 5%)
- Following harvest, allow stumps and injured trees sufficient time to adequately resprout before applying Tide Hexazinone 2SL.
- Where burning is desired, burn vegetation after any brush has completely defoliated, at least twice, allowing for sufficient root uptake of Tide Hexazinone 2SL.
- Weed control results from spring applications depend on sufficient moisture to activate Tide Hexazinone 2SL.
- Crop injury may occur when Tide Hexazinone 2SL is used:
  - On trees that show poor vigor, insect damage, disease, winter injury, or other stress conditions
  - On any soil containing less than 1% organic matter
  - On loamy sand or sandy loam with less than 2% organic matter, except Jeffrey pine and Ponderosa pine
  - On conifer foliage after conifer bud break
  - On gravelly or rocky soils, exposed subsoils, clay knobs, sand, or sandy soil with 85% or more sand
  - On crop species not listed on this label

USE RESTRICTIONS - FORESTRY

- Do not use Tide Hexazinone 2SL in nurseries, seedbeds, or ornamental plantings.
- Do not use Tide Hexazinone 2SL on frozen soils; use in spring after snow melt.
- Leave treated soil undisturbed to reduce the potential for Tide Hexazinone 2SL movement by soil erosion due to wind or water.
- Do not add a surfactant in applications over the top of conifers.
- When applying Tide Hexazinone 2SL after transplanting, wait until rainfall has settled the soil around the base and root systems of the transplants before making the treatment.
- Livestock may be grazed immediately following a broadcast application of Tide Hexazinone 2SL at rates of 4.5 pints per acre or less, and treated vegetation may be cut, dried, and fed after 38 days.
- Do not cut treated vegetation for feed, or graze livestock on treated areas for 60 days following application of Tide Hexazinone 2SL at broadcast rates exceeding 4.5 pints per acre.

YELLOW POPLAR PLANTINGS

Tide Hexazinone 2SL is labeled for the control of herbaceous weeds in the establishment of yellow poplar plantations. Applications may be made over the top of planted seedlings after the soil has settled around the root systems but before the seedlings have broken dormancy (bud break). A subsequent application may be made before dormancy break in the Spring of the second year.

Apply 4-6 pints per acre of Tide Hexazinone 2SL as specified on the package label for "**RELEASE – HERBACEOUS WEED CONTROL"** in pine plantations in the eastern U.S. Follow the label instructions regarding varying the application rate by soil texture.

For ground application, use enough water for thorough coverage, usually a minimum of 25 gallons per acre. For aerial applications, use at least 5 gallons of water per acre and at least 5 gallons of water for every 1 gallon of Tide Hexazinone 2SL.

For broader spectrum control, Tide Hexazinone 2SL may be tank mixed with Escort® herbicide. Add Escort at a rate of 1/2 ounce per acre to a tank mix with the prescribed rate of Tide Hexazinone 2SL.

USE PRECAUTIONS - YELLOW POPLAR PLANTINGS

- Applications of Tide Hexazinone 2SL and tank mixes of Tide Hexazinone 2SL and Escort® made to yellow poplar seedlings that are suffering from loss of vigor caused by insects, disease, drought, winter damage, animal damage, excessive soil moisture, planting shock or other stresses may injure or kill the seedlings.
- The use of surfactant with Tide Hexazinone 2SL is not recommended for applications made over the tops of seedlings.
- Careful consideration must be given by an experienced and knowledgeable forester to ensure the specific growth requirements of yellow poplar will be provided by the selected planting site. Treatment of yellow poplar planted on a site inadequate to meet its requirements may injure or kill the seedlings.

USE RESTRICTIONS - YELLOW POPLAR PLANTINGS

- Applications of Tide Hexazinone 2SL and tank mixes of Tide Hexazinone 2SL and Escort must only be made after adequate rainfall has closed the planting slit and settled the soil around the roots following transplanting.

PASTURE/RANGELAND

Tide Hexazinone 2SL is labeled for control of brush and weeds in pasture.

BERMUDAGRASS/BAHIAGRASS

Tide Hexazinone 2SL is labeled for control of smutgrass and other weeds in established stands of bermudagrass and bahiagrass.

APPLICATION INFORMATION

Make a single application of Tide Hexazinone 2SL per year when weeds are actively growing.

WEEDS CONTROLLED – USE RATES

Tide Hexazinone 2SL effectively controls the following weeds at the rates shown. Use a lower rate on coarse-textured soils (sand to sandy loam). Use the higher rate on fine-textured soils (clay loam to clay) and on soils high in organic matter.

2 ¾ to 4 ½ Pints/Acre	
Barley, little	*Hordeum pusillum*
Barnyardgrass	*Echinochloa crus-galli*
Dogfennel	*Eupatorium capillifolium*
Fescue	*Festuca* spp.
Lespedeza	*Lespedeza cuneata*
Oxalis	*Oxalis* spp.
Passionflower, maypop	*Passiflora incarnate*
Pepperweed, Virginia	*Lepidium virginicum*
Pigweed	*Amaranthus* spp.
Smutgrass*	*Sporobolus indicus*

*Suppression may result with some of the giant (larger) smutgrass species.

Suppression – a visible reduction in plant population and/or plant vigor as compared to an untreated area and generally not accepted as control.

SPRAY EQUIPMENT

Apply Tide Hexazinone 2SL uniformly over the desired area using ground equipment only.

For ground application, use enough water for thorough coverage (a minimum of 25 gallons per acre). The use of a surfactant may increase the potential for bermudagrass or bahiagrass injury.

USE PRECAUTIONS - BERMUDAGRASS/BAHIAGRASS

- For bermudagrass that may be grown in the states of ID, OR, UT, or WA, determine the suitability of using Tide Hexazinone 2SL by treating a small area at a labeled application rate prior to treating larger areas. The smaller treated area must be observed for any signs of herbicidal injury during 60 days of normal growing conditions to determine if the treatment is safe to bermudagrass. If this evaluation is not completed prior to use, the user assumes the responsibility for any plant damage or other liability resulting from the use of Tide Hexazinone 2SL on bermudagrass.
- Some temporary discoloration of the bermudagrass or bahiagrass may occur after application.
- Treatment of mixed pastures containing forage species other than bermudagrass or bahiagrass may result in injury or mortality to the other forage species.
- Injury may result when desirable grasses are under stress from drought, insects, disease, cold temperature, or poor fertility.

- Injury to or loss of desirable trees or other plants may result if Tide Hexazinone 2SL is applied or if equipment is drained or flushed on or near desirable trees or other plants, on areas where their roots may extend, or in locations where the chemical may be washed or moved into contact with their roots.
- Severe crop injury may occur if applications are made on gravelly or rocky soils, thinly covered subsoils, or soils with less than 1% organic matter.

USE RESTRICTIONS - BERMUDAGRASS/BAHIAGRASS

- Use Tide Hexazinone 2SL only in stands of bermudagrass and bahiagrass established for at least one year. Do not treat newly sprigged or sodded areas.
- Livestock may be grazed immediately following a broadcast application of Tide Hexazinone 2SL at rates of 4.5 pints per acre or less, and treated vegetation may be cut, dried and fed after 38 days.

PASTURE/RANGELAND
BRUSH CONTROL

Tide Hexazinone 2SL may be used either broadcast or as a basal-soil treatment for the control of undesirable brush in pasture or rangeland.

APPLICATION INFORMATION

Apply Tide Hexazinone 2SL from late winter through summer, pre-budbreak until new growth hardens off.

In areas where the soil remains frozen during the winter and spring rains are usually inadequate for soil activation, a fall or winter treatment may be applied before the soil freezes.

For broadcast rates needed to control the species below, see the **Forestry – Release, Use Rates** section.

BRUSH CONTROLLED

Tide Hexazinone 2SL is labeled for the control or suppression of the following brush species in pasture and rangeland:

Alder	*Alnus* spp.
Ash	*Fraxinus* spp.
Aspen	*Populus* spp.
Birch	*Betula* spp.
Blackgum	*Nyssa sylvatica*
Bay, sweet	*Magnolia virginiana*
Cactus, cholla**	*Optunia imbricata*
Catclaw acacia	*Acacia greggii*
Cedar, Eastern red	*Juniperus virginiana*
Cherry, black	*Prunus serotina*
Chinaberry*	*Melia azedarach*
Deerbrush	*Ceanothus integerrimun*
Dogwood, flowering*	*Cornus florida*
Elm, American	*Ulmus Americana*
Elm, Chinese	*Ulmus parvifolia*
Hackberry, common	*Celtis occidentalis*
Hawthorn	*Crataegus* spp.
Hazel	*Corylus* spp.
Hickory	*Carya* spp.
Huisache	*Acacia farnesiana*
Juniper	*Juniperus* spp.
Locust	*Robinia* spp.
Lotebush	*Ziziphus obtusifolia*
Manzanita, Greenleaf	*Arctostaphylos patula*
Maple, red	*Acer rubrum*
Mesquite	*Prosopis glandulosa*
Mulberry	*Morus* spp.
Oaks	*Quercus* spp.
Osage-orange	*Maclura pomifera*
Persimmon	*Diospyros* spp.

Plum, wild	*Prunus munsoniana*
Poplar, balsam	*Populus balsamifera*
Poplar, yellow	*Liriodendron tulipifera*
Privet	*Ligustrum* spp.
Rose, multiflora	*Rosa multiflora*
Sassafras*	*Sassafras albidum*
Soapweed, small (yucca)	*Yucca glauca*
Snowbrush (varnishleaf)	*Ceanothus velutinus*
Sourwood	*Oxydendrum arboretum*
Sumac	*Rhus* spp.
Sweetgum	*Liquidambar* spp.
Tallow, Chinese	*Sapium sebiferum*
Waxmyrtle	*Myrica cerifera*
Whitebrush	*Aloysia gratissima*
Willow	*Salix* spp.

*Suppression – a visible reduction in plant population and/or plant vigor as compared to an untreated area and generally not accepted as control.

**For Cholla cactus (tree-type cactus) apply Tide Hexazinone 2SL at the rate of 4 ml of product for plants up to 2 feet tall. Apply 8 ml of product for Cholla cactus plants between 2 and 6 feet tall. For plants taller than 6 feet, apply 4 ml for each additional 2 feet of height. When treating plants it is desirable to make applications equally spaced around the plant.

SPRAY EQUIPMENT AND APPLICATION TECHNIQUES

Basal (Soil) Undiluted – Apply Tide Hexazinone 2SL undiluted with an exact-delivery handgun applicator. This equipment delivers a thin stream of predetermined volume when triggered. Apply Tide Hexazinone 2SL at the rate of 2 to 4 ml for each inch of stem diameter at breast height. Do not exceed 1/3 gallon of Tide Hexazinone 2SL per acre per year. Direct the treatment to the soil within 3 inches of the root collar of woody plants to be controlled. When treating large stems and when more than one delivery of the Tide Hexazinone 2SL is needed per stem, make applications on opposite sides of the stem.

USE PRECAUTIONS - PASTURE/RANGELAND

- Injury to or loss of desirable trees or other plants may result if Tide Hexazinone 2SL is applied or if equipment is drained or flushed on or near desirable trees or other plants, on areas where their roots may extend, or in locations where the chemical may be washed or moved into contact with their roots.
- Poor weed and brush control may result from the following:
  - Use on poorly drained sites
  - Applications made when the soil is saturated with water and rain is imminent within 24 hours
  - Applications to soils high in organic matter (greater than 5%)
- Following mechanical cutting or clearing, allow stumps and injured trees sufficient time to adequately resprout before applying Tide Hexazinone 2SL.

USE RESTRICTIONS - PASTURE/RANGELAND

- Do not use Tide Hexazinone 2SL on frozen soils.
- Weed and brush control results depend on sufficient moisture to activate Tide Hexazinone 2SL.
- When Tide Hexazinone 2SL is applied as a basal soil treatment, there is no restriction on grazing by domestic animals nor on cutting surrounding vegetation for forage or hay.
- Livestock may be grazed immediately following a broadcast application of Tide Hexazinone 2SL at rates of 4.5 pints per acre or less, and treated vegetation may be cut, dried, and fed after 38 days.
- Do not cut treated vegetation for feed, or graze livestock on treated areas for 60 days following application of Tide Hexazinone 2SL at broadcast rates exceeding 4.5 pints per acre.

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

Use on non-crop sites including industrial turfgrasses are not within the scope of the Worker Protection Standard.

When applied as a spray do not enter or allow worker entry into treated areas until sprays have dried.

APPLICATION INFORMATION

Tide Hexazinone 2SL is labeled for general weed and brush control as follows: uncultivated nonagricultural areas (such as, airports, highway, railroad and utility right-of ways, sewage disposal areas); uncultivated agricultural areas (non-crop producing, which includes: farmyards, fuel storage areas, fence rows, barrier strips); industrial sites (outdoor, such as, lumberyards, pipeline and tank farms).

NON-CROP SITES

Tide Hexazinone 2SL is labeled for control of many annual, biennial, and perennial weeds in non-crop, industrial sites.

APPLICATION INFORMATION

Apply Tide Hexazinone 2SL as a preemergence or postemergence spray when weeds are actively germinating or growing.

WEEDS CONTROLLED – USE RATE

Tide Hexazinone 2SL effectively controls the following weeds when applied at the use rates shown in industrial sites. When applied at lower rates, Tide Hexazinone 2SL provides short-term control of the weeds listed; when applied at higher rates, weed control is increased and extended.

Use lower rate on coarse-textured soils (sand to sandy loam). Use the higher rate on fine-textured soils (clay loam to clay) and on soils high in organic matter.

1 – 2 ½ Gallons/Acre	
Barnyardgrass	*Echinochloa crus-galli*
Bindweed, field*	*Convolvulus arvensis*
Bouncingbet*	*Saponaria officinalis*
Bromegrass	*Bromus* spp.
Buffalograss*	*Buchloe dactyloides*
Burdock	*Arctium* spp.
Cocklebur	*Xanthium* spp.
Crabgrass	*Digitaria* spp.
Crown vetch	*Coronilla varia*
Curly dock*	*Rumex crispus*
Dandelion, common*	*Taraxacum officinale*
Dandelion, false* (spotted catsear)	*Hypochaeris radicata*
Dogbane*	*Apocynum cannabinum*
Fiddleneck, tarweed	*Amsinckia lycopsoides*
Filaree	*Erodium* spp.
Fleabane, flax-leaved	*Conyza bonariensis*
Goatsbeard vine (sweet briar)	*Aruncus sylvester*
Goldenrod	*Solidago* spp.
Horseweed/marestail	*Conyza canadensis*
Lespedeza	*Lespedeza cuneata*
Milkweed, common*	*Asclepias syriacea*
Mustard, wild	*Sinapis arvensis*
Nutsedge*	*Cyperus* spp.
Oats, wild*	*Avena fatua*
Orchardgrass*	*Dactylis glomerata*

Orchardgrass (seedling)	*Dactylis glomerata*
Oxalis	*Oxalis* spp.
Paragrass	*Panicum purpurascens*
Parsnip, wild	*Pastinaca sativa*
Pigweed	*Amaranthus* spp.
Purslane, common	*Portulaca oleracea*
Quackgrass	*Agropyron repens*
Ryegrass, Italian (annual)	*Lolium multiflorum*
Smartweed	*Polygonum* spp.
Spurge	*Euphorbia* spp.
Star thistle	*Centaurea* spp.
Trumpetcreeper*	*Campsis radicans*
3-4 Gallons/Acre	
Aster, heath	*Aster ericoides*
Bahiagrass*	*Paspalum notatum*
Bermudagrass*	*Cynodon dactylon*
Blackberry	*Rubus* spp.
Bluegrass	*Poa* spp.
Broomsedge	*Andropogon virginicus*
Camphorweed	*Heterotheca subaxillaris*
Canada thistle*	*Cirsium arvense*
Carrot, wild	*Daucus carota*
Chickweed	*Stellaria media*
Clovers	*Trifolium* spp.
Dewberry	*Rubus trivialis*
Dogfennel	*Eupatorium capillifolium*
Fescue*	*Festuca* spp.
Fingergrass	*Digitaria ciliaris*
Foxtail	*Setaria* spp.
Guineagrass	*Panicum maximum*
Honeysuckle	*Lonicera* spp.
Horseweed/marestail	*Conyza canadensis*
Lantana	*Lantana camara*
Lettuce, prickly	*Lactuca serriola*
Natalgrass (red top)	*Rhynchelytrum repens*
Plantain	*Plantago* spp.
Ragweed, common	*Ambrosia elatior*
Smutgrass**	*Sporobolus indicus*
Spanishneedles	*Bidens bipinnata*
Vaseygrass	*Paspalum urvillei*

* Suppression – a visible reduction in plant population and/or plant vigor as compared to an untreated area and generally not accepted as control.

** Suppression may result with some of the giant (larger) smutgrass species.

SPECIFIC WEED PROBLEMS

Control of Canada Thistle in Crown Vetch – Tide Hexazinone 2SL is labeled for control of Canada thistle in established stands of crown vetch on noncrop sites. Make a single application of 3-5 pints of Tide Hexazinone 2SL from late spring through mid-summer, when thistle is actively growing prior to flowering. Do not use a surfactant. Some discoloration of the crown vetch foliage may occur after application.

SPRAY EQUIPMENT

Apply Tide Hexazinone 2SL uniformly over the desired area using ground equipment or helicopter. Do not apply more than 3 gallons per acre of Tide Hexazinone 2SL by air.

Use enough water for thorough coverage (for ground application, a minimum of 25 gallons per acre). Higher application volumes may be needed to obtain uniform application with handgun equipment. For aerial applications (helicopter only) this is usually a minimum of 5 gallons per acre. Higher volumes of water may be needed when water temperatures are cold or the higher rates of Tide Hexazinone 2SL are used.

NON-CROP
BRUSH CONTROL

Tide Hexazinone 2SL is labeled for the control of undesirable brush in non-crop sites.

APPLICATION INFORMATION

Apply Tide Hexazinone 2SL from late winter through summer, pre- bud break until new growth hardens off.

In areas where soils remains frozen during the winter and spring rains are usually inadequate for soil activation, a fall or winter treatment may be applied before the soil freezes.

BROADCAST

Apply 2-4 gallons of Tide Hexazinone 2SL per acre as a coarse spray by ground equipment or 2-3 gallons per acre by air (helicopter only). Use enough water for thorough coverage. For ground, equipment usually a minimum of 25 gallons per acre. For aerial equipment, usually a minimum of 10 gallons per acre. Higher volumes of water may be needed when water temperatures are cold or the higher rates of Tide Hexazinone 2SL are used.

BASAL (SOIL)
SINGLE STEM TREATMENT

Undiluted – Apply Tide Hexazinone 2SL undiluted with an exact-delivery handgun applicator. This equipment delivers a thin stream of predetermined volume when triggered. Apply Tide Hexazinone 2SL at the rate of 2 to 4 ml for each inch of stem diameter at breast height. Do not exceed 4 gallons of Tide Hexazinone 2SL per acre per year. Direct the treatment to the soil within 3 feet of the root collar of woody plants to be controlled. When treating large stems and when more than one delivery of Tide Hexazinone 2SL is needed per stem, make applications on opposite sides of the stem.

For multi-stemmed and low-growing brush that have stem diameters that are difficult to determine, apply Tide Hexazinone 2SL at the rate of 2 to 4 ml per 3 feet of canopy width. For tall, slender (columnar) brush types, apply 4 to 8 ml per 3 feet of height. Base the rate on whichever canopy dimension is greater (width or height).

When treating brush that requires more than a single 4 ml application of Tide Hexazinone 2SL, apply subsequent applications equally spaced around the plant. If treating brush on sloped sites, apply most of the Tide Hexazinone 2SL on the uphill side of the stem. If treating resprouts from brush disturbed by cutting or shredding, the rate of application must be proportional to the original tree size, not just the small regrowth of sprouts.

Diluted – Mix one gallon of Tide Hexazinone 2SL with 5 or more gallons of water. Apply 2 to 4 gallons of Tide Hexazinone 2SL per acre. Direct the spray to the soil in a serpentine pattern so that the swath on the soil is 6 to 12 inches wide at the base of the brush. Swaths must be 2 to 4 feet apart.

USE RATES

Tide Hexazinone 2SL is labeled for the control or suppression of the following species in non-crop sites. Use lower rate on coarse-textured soils (sand to sandy loam). Use the higher rate on fine-textured soils (clay loam to clay) and on soils high in organic matter.

2-4 Gallons/Acre	
Alder	*Alnus* spp.
Ash	*Fraxinus* spp.
Aspen	*Populus* spp.
Birch	*Betula* spp.
Blackgum	*Nyssa sylvatica*
Bay, sweet	*Magnolia virginiana*
Cactus, cholla**	*Optunia imbricata*
Catclaw acacia	*Acacia greggii*
Cedar, Eastern red	*Juniperus virginiana*

Cherry, black	*Prunus serotina*
Chinaberry*	*Melia azedarach*
Deerbrush	*Ceanothus integerrimus*
Dogwood, flowering*	*Cornus florida*
Elm, American	*Ulmus Americana*
Elm, Chinese	*Ulmus parvifolia*
Hackberry, common	*Celtis occidentalis*
Hawthorn	*Crataegus* spp.
Hazel	*Corylus* spp.
Hickory	*Carya* spp.
Huisache	*Acacia farnesiana*
Juniper	*Juniperus* spp.
Locust	*Robinia* spp.
Lotebush	*Ziziphus obtusifolia*
Manzanita, Greenleaf	*Arctostaphylos patula*
Maple, red	*Acer rubrum*
Mesquite	*Prosopis glandulosa*
Mulberry	*Morus* spp.
Oaks	*Quercus* spp.
Osage-orange	*Maclura pomifera*
Persimmon	*Diospyros* spp.
Plum, wild	*Prunus munsoniana*
Poplar, balsam	*Populus balsamifera*
Poplar, yellow	*Liriodendron tulipifera*
Privet	*Ligustrum* spp.
Rose, multiflora	*Rosa multiflora*
Sassafras*	*Sassafras albidum*
Soapweed, small (yucca)	*Yucca glauca*
Snowbrush (varnishleaf)	*Ceanothus velutinus*
Sourwood	*Oxydendrum arboretum*
Sumac	*Rhus* spp.
Sweetgum	*Liquidambar* spp.
Tallow, Chinese	*Sapium sebiferum*
Waxmyrtle	*Myrica cerifera*
Whitebrush	*Aloysia gratissima*
Willow	*Salix* spp.

* Suppression – a visible reduction in plant population and/or plant vigor as compared to an untreated area and generally not accepted as control.

** For Cholla cactus (tree-type cactus) apply Tide Hexazinone 2SL at the rate of 4 ml of product for plants up to 2 feet tall. Apply 8 ml of product for Cholla cactus plants between 2 and 6 feet tall. For plants taller than 6 feet, apply 4 ml for each additional 2 feet of height.

When treating plants it is desirable to make applications equally spaced around the plant.

INDUSTRIAL TURFGRASS

Tide Hexazinone 2SL is labeled for selective weed control in established stands of bermudagrass and/or bahiagrass in noncrop areas.

APPLICATION TIMING

Make a single application of Tide Hexazinone 2SL per year when weeds are actively growing.

WEEDS CONTROLLED – USE RATE

Tide Hexazinone 2SL effectively controls the following weeds at the rates shown in industrial turf (unimproved only). Use a lower rate on coarse textured soils (sand to sandy loam). Use the higher rate on fine-textured soils (clay loam to clay) and on soils high in organic matter.

2 ¾ - 4 ½ Pints/Acre	
Barley, little	*Hordeum pusillum*
Barnyardgrass	*Echinochloa crus-galli*
Dogfennel	*Eupatorium capillifolium*
Fescue	*Festuca* spp.
Lespedeza	*Lespedeza cuneata*
Oxalis	*Oxalis* spp.
Passionflower, maypop	*Passiflora incarnate*
Pepperweed, Virginia	*Lepidium virginicum*
Pigweed	*Amaranthus* spp.
Smutgrass*	*Sporobolus indicus*

*Suppression may result with some of the giant (larger) smutgrass species.

Suppression – a visible reduction in plant population and/or plant vigor as compared to an untreated area and generally not accepted as control.

SPRAY EQUIPMENT

Apply Tide Hexazinone 2SL uniformly over the desired area using ground equipment only.

For ground application, use enough water for thorough coverage (a minimum of 25 gallons per acre). The use of a surfactant is not advised.

USE PRECAUTIONS - ALL NON-CROP SITES

- For bermudagrass that may be grown in the states of ID, OR, UT, or WA, determine the suitability of using Tide Hexazinone 2SL by treating a small area at a labeled application rate prior to treating larger areas. The smaller treated area must be observed for any signs of herbicidal injury during 60 days of normal growing conditions to determine if the treatment is safe to bermudagrass. If this evaluation is not completed prior to use, the user assumes the responsibility for any plant damage or other liability resulting from the use of Tide Hexazinone 2SL on bermudagrass.
- Injury to or loss of desirable trees or other plants may result if Tide Hexazinone 2SL is applied or if equipment is drained or flushed on or near desirable trees or other plants, on areas where their roots may extend, or in locations where the chemical may be washed or moved into contact with their roots.
- Application spray drift may injure desirable plants.
- Poor weed and brush control may result from the following:
  - Use on poorly drained sites
  - Applications made when the soil is saturated with water and rain is imminent within 24 hours.
  - Applications to soils high in organic matter (greater than 5%)
- Following mechanical cutting or clearing, allow stumps and injured trees sufficient time to adequately resprout before applying Tide Hexazinone 2SL.
- Weed and brush control results from spring applications depend on sufficient moisture to activate Tide Hexazinone 2SL.
- Some discoloration of the bermudagrass or bahiagrass may occur after application.
- Injury may result when desirable grasses are under stress from drought, insects, disease, cold temperature, or poor fertility.
- Severe turfgrass injury may occur if applications are made on gravelly or rocky soils, thinly covered subsoils, or soils with less than 1% organic matter.

USE RESTRICTIONS - ALL NON-CROP SITES

- Do not use Tide Hexazinone 2SL on frozen soils.
- Leave treated soil undisturbed to reduce the potential for Tide Hexazinone 2SL movement by soil erosion due to wind or water.
- Do not use Tide Hexazinone 2SL on lawns, driveways, tennis courts, or other residential or recreational areas.
- Livestock may be grazed immediately following a broadcast application of Tide Hexazinone 2SL at rates of 4.5 pints per acre or less, and treated vegetation may be cut, dried and fed after 38 days.

- Do not cut treated vegetation for feed, or graze livestock on treated areas for 60 days following application of Tide Hexazinone 2SL at broadcast rates greater than 4.5 pints and up to 3 gallons per acre.
- For Tide Hexazinone 2SL rates above 3 gallons per acre, do not cut treated vegetation for forage or hay nor graze domestic animals for 1 year following application.
- There are no grazing or haying restrictions for the directed basal-soil applications of Tide Hexazinone 2SL.
- Use Tide Hexazinone 2SL only in stands of bermudagrass and bahiagrass turfgrasses established for at least one year. Do not treat newly sprigged or sodded areas.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage and disposal.

PESTICIDE STORAGE: Store product in original container only. Store in a cool, dry place.

PESTICIDE DISPOSAL: Waste resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER HANDLING:

Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying.

(Nonrefillable container ≤ 5 gallons): Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

(Nonrefillable > 5 gallons): Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

NOTICE: Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

Tide International, USA, Inc. warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. This warranty does not extend to the use of this product contrary to label instructions, or under abnormal conditions or under conditions not reasonably foreseeable to or beyond the control of Seller or Tide International, USA, Inc., and Buyer and User assumes the risk of any such used. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, TIDE INTERNATIONAL, USA, INC. MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product in the event of ineffectiveness or other unintended consequences that may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of Tide International USA, Inc. or Seller. To the extent consistent with applicable law, all such risks shall be assumed by Buyer and User, and Buyer and User agree to hold Tide International, USA, Inc. and Seller harmless for any claims relating to such factors.

To the extent consistent with applicable law, in no event shall Tide International, USA, Inc. or Seller be liable for any incidental, consequential, or special damages resulting from the use or handling of this product. **TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER AND BUYER, AND THE EXCLUSIVE LIABILITY OF TIDE INTERNATIONAL, USA, INC. AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT SHALL BE, AT THE ELECTION OF TIDE INTERNATIONAL, USA, INC. OR SELLER, THE REPLACEMENT OF THE PRODUCT, OR COMPENSATION LIMITED TO DAMAGES NOT**

EXCEEDING THE FAIR MARKET PURCHASE PRICE, AND SHALL NOT INCLUDE INCIDENTAL OR CONSEQUENTIAL DAMAGES.

Tide International USA, Inc. and Seller offer this product, and Buyer and User accept it, subject to the foregoing conditions of sale and limitations of warranty and of liability, which may not be modified except by written agreement signed by the duly authorized representative of Tide International USA, Inc.

Label Code No.: TIC-HER8422935
EPA 20190201
Created date: 02/01/2019

Novita Solutions LLC

NOVITA 90

NONIONIC LOW-FOAM WETTER/SPREADER SURFACTANT

PRINCIPAL FUNCTIONING AGENTS:

Alkylpolyoxethylene, humectants, and constituents ineffective as an adjuvant.....100%

KEEP OUT OF REACH OF CHILDREN

WARNING

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.
(If you do not understand the label, find someone to explain it to you in detail.)

Causes skin irritation and serious eye irritation. Read label before use. Keep container tightly closed. Keep only in original container. Avoid breathing dust, fume, gas, mist, vapors or spray. Wash skin thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves, protective clothing, eye protection and face protection.

FIRST AID

Have the product container with you when calling a poison control center or doctor, or going for treatment.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present, after the first 5 minutes, then continue cautiously rinsing eye. If eye irritation persists: Get medical advice or attention.

IF ON SKIN OR CLOTHING: Take off contaminated clothing and wash it before reuse. Wash skin with plenty of soap and water for several minutes. Call a poison center, doctor, chemical manufacturer, importer, or distributor to specify the appropriate source of emergency medical advice. If skin irritation persists: Get medical advice or attention.

IF SWALLOWED: Call a POISON CENTER, doctor or physician if you feel unwell. Unless advised otherwise by a poison control center or doctor, have person rinse mouth with water, if able. Do not give anything by mouth to an unconscious person.

IF INHALED: If breathing is difficult, remove person to fresh air and keep at rest in a position comfortable for breathing. If person is not breathing, call 911 or an ambulance, and then give artificial respiration, preferably mouth to mouth if possible.

NOVITA 90 is a general purpose nonionic surfactant, used to enhance spreading and coverage of sprays.

NOVITA 90 may be used with various insecticides, fungicides, herbicides, PGR's and nutrients at rates determined by pesticide label and field experience.

DIRECTIONS FOR USE

Follow the directions and rate on the pesticide label being used.

Type of Herbicide Application	Amount/100 gal.
Utility ROW and roadside foliar	1/2 pt. - 2 qt.
Forest site preparation	1 pt. - 2 qt./acre
Aquatic - surface	1/2 pt. - 2 qt.
Aquatic - submerged	1 - 2 gal.
Agriculture / Citrus / Turf	1/2 - 4 pt.

STORAGE AND DISPOSAL

STORAGE: Store in a cool well-ventilated place. Keep in original container tightly closed. Do not reuse empty container. Do not store with food, feed, or other material to be used or consumed by humans or animals. Do not contaminate water supplies. For optimal storage, store between 40° and 90° F.

DISPOSAL: Do not contaminate water, food or feed by storage or disposal. Dispose of contents container to an approved waste disposal facility in accordance with all federal, state and local regulations. Triple rinse (or equivalent) adding rinse water to application tank. Offer container for recycling or dispose of in a sanitary landfill or by other procedures approved by local regulations. The Agricultural Container Recycling Council (ACRC) operates the national recycling program. To contact your state and local ACRC recycler visit the ACRC web page at www.acrecycle.org.

WARRANTY

Novita Solutions, LLC warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in strict accordance with the directions, subject to the inherent risks set forth below. Novita Solutions, LLC MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF MERCHANT-ABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY. Inherent Risks of Use: It is impossible to eliminate all risks associated with use of this product. Plant injury, lack of performance, or other unintended consequences may result because of such factors as use of the product contrary to label instructions (including conditions noted on the label, such as unfavorable temperature, soil conditions, etc.), abnormal conditions (such as excessive rainfall, drought, tornadoes, hurricanes), presence of other materials, the manner of application, or other factors, all of which are beyond the control of Novita Solutions, LLC or the seller. All such risks shall be assumed by buyer. Limitation of Remedies: The exclusive remedy for losses or damages resulting from this product (including claims based on contract, negligence, strict liability, or other legal theories), shall be limited to, at Novita Solutions, LLC's election, one of the following: 1. Refund of purchase price paid by buyer or user for product bought, or 2. Replacement of amount of product used Novita Solutions, LLC shall not be liable for losses or damages resulting from handling or use of this product unless Novita Solutions, LLC is promptly notified of such loss or damage in writing. In no case shall Novita Solutions, LLC be liable for consequential or incidental damages or losses. The terms of the "Warranty Disclaimer" above and this "Limitation of Remedies" cannot be varied by any written or verbal statements or agreements. No employee or sales agent of Novita Solutions, LLC or the seller is authorized to vary or exceed the terms of the "Warranty Disclaimer" or this "Limitation of Remedies" in any manner.

NET CONTENTS:

- ☐ 2.5 U.S. Gallons (9.46 liters)
- ☐ 30 Gallon (113.55 liters)
- ☐ 270 Gallons (1022.06 liters)

Distributed By: Novita Solutions, LLC
4621 E University Drive
Prosper, TX 75078

Novita Solutions LLC

BASAL OIL BLUE

with BLUE DYE

HIGHLY EMULSIFIED BASAL DILUENT

PRINCIPAL FUNCTIONING AGENTS:

A proprietary blend of paraffinic oil, emulsifiers and colorant 100%

FOLLOW RECOMMENDATIONS AND LABEL RATES OF HERBICIDE MANUFACTURERS.

KEEP OUT OF REACH OF CHILDREN

DANGER/PELIGRO

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.(If you do not understand the label, find someone to explain it to you in detail.)

May be fatal if swallowed and enters airways. Causes serious eye irritation. Keep out of reach of children. Read label before use. Keep container tightly closed. Keep only in original container. Avoid breathing vapors or spray. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves, protective clothing, eye protection and face protection.

FIRST AID

Have the product container with you when calling a poison control center or doctor, or going for treatment.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do then continue rinsing. If eye irritation persists: Get medical advice or attention.

IF ON SKIN OR CLOTHING: Take off contaminated clothing and wash it before reuse. Wash with plenty of soap and water for several minutes.

IF SWALLOWED: Unless advised otherwise by a poison control center or doctor, have person rinse mouth with water, if able. Do not give anything by mouth to an unconscious person.

IF INHALED: Do not induce vomiting. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If person is not breathing, call 911 or an ambulance, and then give artificial respiration, preferably mouth to mouth if possible.

GENERAL INFORMATION

NOVITA BASAL OIL BLUE is a non-aromatic paraffinic oil diluent and emulsifier blend that improves the coverage and spreading of basal bark and brush control active ingredients.

DIRECTIONS FOR USE

Follow the recommendations of the most restrictive active ingredient label.

Tank mixture should only be applied within the label recommendations of every product in the tank mixture.

Use only if a paraffinic oil and emulsifier are allowed or not excluded on the label.

NOVITA BASAL OIL BLUE does not contain ammonium sulfate.

Ifthe user does not have experience with the mixture being applied, perform a jar test using the order and amounts in the mixture and perform a phytotoxicity test to ensure crop safety.

Order of addition

Prior to mixing, fill the spray tank with half of the carrier. Start the spraryer and check to make sure that all valves and guages work and that there is adequate tank agitation.

In general, follow the W-A-L-E-S plan when adding herbicides to a tank mix.

1. Wettable Powders (WP) then Flowables (F, DF)
2. Agitate then add anti-foaming compounds, buffers
3. Liquid and Soluble products
4. Emulsifiable concentrates (EC)
5. NOVITA BASAL OIL BLUE and other adjuvants

APPLICATION RATES

NOVITA BASAL OIL BLUE can be used at dilution ratios of 1:4 (20%) or 1:3(25%) when following the herbicide manufacturers' label recommendations for a basal oil diluent.

NOVITA BASAL OIL BLUE is developed specifically for basal-bark and cut-surface brush control applications where *Garlon 4® and *Stalker® are used in premix.

NOVITA BASAL OIL BLUE is formulated for use with 15-20% Garlon 4® and up to 5% Stalker® v/v.

NOTE: Use rates may vary dependent on environmental conditions and applications. Increase rates as necessary for additional wetting and penetration.

* Garlon 4® t is a registered trademark of Dow Agro Sciences.
* Stalker® is a registered trademark of BASF.

STORAGE AND DISPOSAL

STORAGE: Store in a cool well-ventilated place. Keep in original container tightly closed. Do not reuse empty container. Do not store with food, feed, or other material to be used or consumed by humans or animals. Do not contaminate water supplies. For optimal storage, store between 40° and 90° F.

DISPOSAL: Do not contaminate water, food or feed by storage or disposal. Dispose of contents container to an approved waste disposal facility in accordance with all federal, state and local regulations. Triple rinse (or equivalent) adding rinse water to application tank. Offer container for recycling or dispose of in a sanitary landfill or by other procedures approved by local regulations. The Agricultural Container Recycling Council (ACRC) operates the national recycling program. To contact your state and local ACRC recycler visit the ACRC web page at www.acrecycle.org.

WARRANTY

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NET CONTENTS:

- ☐ 2.5 U.S. Gallons (9.46 liters)
- ☐ 11.25 Gallons (42.58 liters)
- ☐ 30 Gallon (113.55 liters)
- ☐ 270 Gallons (1022.06 liters)

Distributed By: Novita Solutions, LLC
4621 E University Drive
Prosper, TX 75078

Novita Solutions LLC

SUPER MARKING DYE

HIGH STRENGTH BLUE MARKING DYE

ACTIVE INGREDIENTS:
Highly-concentrated blue dye in an aqueous solution.....100%

KEEP OUT OF REACH OF CHILDREN
WARNING/ADVERTENCIA!

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.
(If you do not understand the label, find someone to explain it to you in detail.)

GHS HAZARDS: May be harmful if swallowed. May causes an allergic skin reaction. Causes eye irritation. May be harmful if inhaled. GHS PRECAUTIONS: Keep out of reach of children. Read label before use. Keep container tightly closed. Keep only in original container. Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/ protective clothing/ eye protection/ face protection. IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. IF ON SKIN: Wash with plenty of soap and water. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do then continue rinsing cautiously. If eye irritation persists: Get medical advice/attention.

FIRST AID

Call a poison control center or doctor immediately for treatment advice.

EYE CONTACT - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do then continue rinsing. Have the product container with you when calling a poison control center or doctor, or going for treatment. If eye irritation persists: Get medical advice or attention.

SKIN CONTACT - IF ON SKIN OR CLOTHING: Take off contaminated clothing and wash it before reuse. Wash with plenty of soap and water for several minutes. Call a poison center, doctor, chemical manufacturer, importer, or distributor to specify the appropriate source of emergency medical advice.

INGESTION - IF SWALLOWED: Unless advised otherwise by a poison control center or doctor, have person rinse mouth with water, if able. Do not give anything by mouth to an unconscious person. Call a poison center, doctor, chemical manufacturer, importer, or distributor to specify the appropriate source of emergency medical advice if you feel unwell.

INHALATION - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If person is not breathing, call 911 or an ambulance, and then give artificial respiration, preferably mouth to mouth if possible.

NOVITA SUPER MARKING DYE is a flexible, user-friendly, non-hazardous colorant for aquatic, industrial, municipal, utility, right-of-way and any other application of pesticides and/or fertilizers.

NOVITA SUPER MARKING DYE indicates to applicators where they have applied pesticides or other products, and helps avoid oversprays and skips.

NOVITA SUPER MARKING DYE disappears rapidly in any weather conditions, and blends completely with pesticides and fertilizers, without influencing their effectiveness.

Aquatic applications of **NOVITA SUPER MARKING DYE** will not interrupt irrigation use of ponds, reservoirs, lakes or lagoons. Performs best in impounded water systems.

Color vibrancy will gradually fade due to sunlight, adjustments to the water volume, or chlorinated treatment products-usually within 2-4 weeks

Application rates of **NOVITA SUPER MARKING DYE** will differ depending on conditions, tank mix partners, spray application rates and other conditions. To find the best rate of application, vary the rate of **NOVITA SUPER MARKING DYE** to find a rate that is cost-effective, yet is visible for the desired length of time. Typically, the user/applicator should start at the low end, and if the indicator is not dark enough or does not last long enough, increase the amount until the desired effect is achieved.

Recommended use rate: 4 to 12 ounces per 100 gallons of spray solution.
For smaller spray applications using backpacks and small sprayers, use 1/3 to 2/3 of an ounce, (approximately 2 to 4 tsp) per three gallon tank.

Aquatic applications: 32 ounces per 4-6 acre-feet
Gradually increasing or decreasing the application rate to correct color intensity for aesthetic purposes or due to changes caused by weathering may be necessary.

Applying **NOVITA SUPER MARKING DYE** in the deepest area of the water feature or close to mechanical circulation systems will disperse the colorant quickly, but natural changes in temperature, and currents caused by wind, will also spread the color.

STORAGE AND DISPOSAL

STORAGE:. Store in a cool well-ventilated place. Do not store near heat or open flame. Do not store with oxidizing agents or ammonium nitrate. Keep in original container tightly closed. Do not reuse empty container. Do not store with food, feed, or other material to be used or consumed by humans or animals. Do not contaminate water supplies. For optimal storage, store between 40° and 90° F.

DISPOSAL: Do not contaminate water, food or feed by storage or disposal. Dispose of contents in container to an approved waste disposal facility in accordance with all federal, state and local regulations. Triple rinse (or equivalent) adding rinse water to application tank. Offer container for recycling or dispose of in a sanitary landfill or by other procedures approved by local regulations. If burning is allowed, stay out of smoke. The Agricultural Container Recycling Council (ACRC) operates the national recycling program. To contact your state and local ACRC recycler visit the ACRC web page at www.acrecycle.org.

WARRANTY

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Inherent Risks of Use: It is impossible to eliminate all risks associated with use of this product. Plant injury, lack of performance, or other unintended consequences may result because of such factors as use of the product contrary to label instructions (including conditions noted on the label, such as unfavorable temperature, soil conditions, etc.), abnormal conditions (such as excessive rainfall, drought, tornadoes, hurricanes), presence of other materials, the manner of application, or other factors, all of which are beyond the control of Novita Solutions, LLC or the seller. All such risks are and shall be assumed by buyer.

Limitation of Remedies: The exclusive remedy for losses or damages resulting from this product (including claims based on contract, negligence, strict liability, or other legal theories), shall be limited to, at Novita Solutions, LLC's election, one of the following: 1. Refund of purchase price paid by buyer or user for product bought, or 2. Replacement of amount of product used Novita Solutions, LLC shall not be liable for losses or damages resulting from handling or use of this product unless Novita Solutions, LLC is promptly notified of such loss or damage in writing. In no case shall Novita Solutions, LLC be liable for consequential or incidental damages or losses.

The terms of the "Warranty Disclaimer" above and this "Limitation of Remedies" cannot be varied by any writ-ten or verbal statements or agreements. No employee or sales agent of Novita Solutions, LLC or the seller is authorized to vary or exceed the terms of the "Warranty Disclaimer" or this "Limitation of Remedies" in any manner.

NET CONTENTS:
2.5 U.S. Gallons (9.46 liters)

Distributed By: Novita Solutions, LLC
4621 E University Drive
Prosper, TX 75078

Novita Solutions LLC

DRIFT CONTROL

DEPOSITION AID AND DRIFT RETARDANT

ACTIVE INGREDIENTS:

Polyvinyl Polymer (Polyacrylamide)	35.25%
Inert Ingredients	64.75%
TOTAL	**100%**

All ingredients are exempt from tolerance requirements as specified in federal regulation 40 CFR 180.

KEEP OUT OF REACH OF CHILDREN

WARNING /ADVERTENCIA!

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.
(If you do not understand the label, find someone to explain it to you in detail.)

GHS HAZARDS: May be harmful if swallowed. May cause an allergic skin reaction. Causes eye irritation. May be harmful if inhaled. GHS PRECAUTIONS: Keep out of reach of children. Read label before use. Keep container tightly closed. Keep only in original container. Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/ protective clothing/ eye protection/ face protection. IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. IF ON SKIN: Wash with plenty of soap and water. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do then continue rinsing cautiously. If eye irritation persists: Get medical advice/attention.

DO NOT FREEZE. PRODUCT WILL CAUSE A SLIP HAZARD.

FIRST AID

Call a poison center or doctor to specify the appropriate emergency medical advice.
Have the product with you when calling a poison control center or doctor, or going for treatment.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present, after the first five minutes, then continue cautiously rinsing eye. If eye irritation persists: Get medical advice/attention.

IF ON SKIN OR CLOTHING: Take off contaminated clothing and wash it before reuse. Wash with plenty of soap and water for several minutes. If skin irritation occurs: Get medical advice or attention.

IF SWALLOWED: Unless advised otherwise by a poison control center or doctor, have person rinse mouth with water, if able. Do not give anything by mouth to an unconscious person. DO NOT INDUCE VOMITING.

IF INHALED: If breathing is difficult, remove person to fresh air and keep at rest in a position comfortable for breathing. If person is not breathing, call 911 or an ambulance, and then give artificial respiration, preferably mouth to mouth if possible.

GENERAL INFORMATION

NOVITA DRIFT CONTROL is an effective, easy-to-use adjuvant for deposition improvement and drift retardation in spraying operations. **NOVITA DRIFT CONTROL** is designed for general use in standard ground and aerial applications and is fully compatible with a wide variety of spray configurations including those with new A.I. and other specialized drift reduction nozzles. Further, **NOVITA DRIFT CONTROL** is compatible in tank mix application with a broad spectrum of crop protection pesticides, including the complete range of all branded and generic glyphosate formulations.

DIRECTIONS FOR USE

Dosages may be adjusted to compensate for environmental conditions or mechanical factors. Lower dosages may be used when spraying under calm winds, slow application speeds, low pressures, and lower boom heights with nozzles closer to the target. The greater the shear on the spray boom nozzle head, the greater the spray droplet fragmentation, which produces fines (mists) that may drift to non-targeted areas or evaporate. For best results in aerial application, use state-of-the-art techniques, such as pressure less than 45 psi and nozzles oriented 45 degrees back to straight back.

MIXING

NOVITA DRIFT CONTROL is very concentrated and performs effectively at ultra-low use rates even as low as 1-4 oz. per 100 gal. of water. Start with low dosage rates and increase as needed. A thickened or "stringy" solution indicates that too much **NOVITA DRIFT CONTROL** has been used.

Step 1. Select proper dosage for the spraying operation. Step 2. Fill mix tank with water, pesticide, fertilizer, surfactant / additives and agitate. Step 3. Shake bottle well before using. Step 4. For best mixing results, either (1) inject **NOVITA DRIFT CONTROL** liquid into the suction side of the feeder or recirculating pump to obtain adequate dispersion of the polymer throughout the pesticide solution, or (2) slowly add **NOVITA DRIFT CONTROL** liquid to the agitating tank mix at the area of highest turbulence. Step 5. Continue to agitate mix tank for at least three minutes before spraying. Step 6. Follow all cleanup precautions on label of pesticide used. Follow governmental procedures for disposal of pesticide spray solution.

DOSAGE CHART

Spray Pressure	Nozzle Orientation	NOVITA DRIFT CONTROL DOSAGE
Aerial applied below 45 psi	Straight Back 45° Angle Back	2 - 6 oz. / 100 gals. 4 - 8 oz. / 100 gals.
Ground Application Low (below 30 psi)	Flat Fan, Flooding Off-Center	1 - 4 oz. / 100 gals. 3 - 5 oz. / 100 gals.
Medium (30 - 50 psi)	Flat Fan, Flooding Off-Center Spray Guns	3 - 4 oz. / 100 gals. 4 - 6 oz. / 100 gals. 5 - 8 oz. / 100 gals.
High (over 50 psi)	Spray Guns	8 - 32 oz. / 100 gals.

Higher spray pressure or greater agitation requires higher rates to maintain good drift control. If unacceptable drift is still occurring, add additional **NOVITA DRIFT CONTROL** in increments of 1 oz. per 100 gal. of spray solution.

STORAGE AND DISPOSAL

STORAGE: Store in a cool well-ventilated place. Keep in original container tightly closed. Do not reuse empty container. Do not store with food, feed, or other material to be used or consumed by humans or animals. Do not contaminate water supplies. For optimal storage, store between 40° and 90° F.

DISPOSAL: Do not contaminate water, food or feed by storage or disposal. Dispose of contents container to an approved waste disposal facility in accordance with all federal, state and local regulations. Triple rinse (or equivalent) adding rinse water to application tank. Offer container for recycling or dispose of in a sanitary landfill or by other procedures approved by local regulations. The Agricultural Container Recycling Council (ACRC) operates the national recycling program. To contact your state and local ACRC recycler visit the ACRC web page at www.acrecycle.org.

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NET CONTENTS:

- ☐ 2.5 U.S. Gallons (9.46 liters)
- ☐ 30 Gallons (113.55 liters)
- ☐ 270 Gallons (1022.06 liters)

Distributed By: Novita Solutions, LLC
4621 E University Drive
Prosper, TX 75078

Novita Solutions LLC

NOVITA MSO

METHYLATED SEED OIL BLEND

PRINCIPAL FUNCTIONING AGENTS:

Methylated seed oil and other oils and emulsifiers.....100%

All ingredients are accepted for use under 40 CFR 180.

KEEP OUT OF REACH OF CHILDREN

CAUTION! / PRECAUCIÓN!

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.
(If you do not understand the label, find someone to explain it to you in detail.)

Precautionary Statements: May cause eye or skin irritation. Avoid contact with eyes, skin, or clothing. Do not take internally. Wear protective eyewear when handling. Avoid breathing vapors. When handling wear coveralls over short-sleeved shirt, short pants, socks, chemical resistant shoes and chemical resistant gloves.

READ AND FOLLOW ALL LABEL DIRECTIONS AND CAUTIONS ON ALL PRODUCTS USED.

FIRST AID

Call a poison control center or doctor immediately for treatment advice.
Have the product container or label with you when call or going for treatment.

IF SWALLOWED: Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes.

IF INHALED: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth to mouth if possible.

IF IN EYES: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses if present, after the first 5 minutes, then continue rinsing eye. Have the product container with you when calling a poison control center or doctor, or going for treatment.

GENERAL INFORMATION

NOVITA MSO is an oil-based spray adjuvant, designed for use with pesticides that suggest or require the use of an oil adjuvant. **NOVITA MSO** has been shown to boost the performance of products such as 2,4-D esters, SU's and many other products where the use of an oil adjuvant is advised. **NOVITA MSO** can be especially helpful wherever weeds have become large, have thick, waxy coatings or are otherwise under stress. **NOVITA MSO** is used on agricultural crops, in forestry applications, in industrial and R.O.W. settings, in pasture and rangeland areas and in T&O or in any non-aquatic application.

APPLICATION RATES

NOVITA MSO may be used at rates of 3/4 pint to 6 quarts per acre depending on conditions and weeds. The lowest rates should be used on weeds with thin wax layers under ideal conditions. Higher doses will be required when stress occurs causing thicker wax layers, if there are large numbers of weeds or with weeds that have naturally thicker waxy cuticles.

AQUATIC USE RATES

Application	amount of NOVITA MSO per 100 gallons of spray solution
Aquatic-surface	16 to 32 ounces
Aquatic-submerged	20 to 40 ounces

NOTE: Always follow the recommendations on the label of the active formulation.

DIRECTIONS

Follow the mixing order on the label of the pesticide.

If no order is specified, add this product after other tank mix additives and pesticides, with good agitation. Do not put water into this product container unless all of the product has been poured out. Then triple rinse the container and pour the rinsate into the mix tank. Then continue adding water.

STORAGE AND DISPOSAL: Store in a cool, dry place. Do not introduce water to the container before use or during storage. Follow all local, state and local regulations for disposal of this and all other products and containers.

WARRANTY

Novita Solutions, LLC warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in strict accordance with the directions, subject to the inherent risks set forth below. Novita Solutions, LLC MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF MERCHANT-ABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

Inherent Risks of Use: It is impossible to eliminate all risks associated with use of this product. Plant injury, lack of performance, or other unintended consequences may result because of such factors as use of the product contrary to label instructions (including conditions noted on the label, such as unfavorable temperature, soil conditions, etc.), abnormal conditions (such as excessive rainfall, drought, tornadoes, hurricanes), presence of other materials, the manner of application, or other factors, all of which are beyond the control of Novita Solutions, LLC or the seller. All such risks shall be assumed by buyer.

Limitation of Remedies: The exclusive remedy for losses or damages resulting from this product (including claims based on contract, negligence, strict liability, or other legal theories), shall be limited to, at Novita Solutions, LLC's election, one of the following: 1. Refund of purchase price paid by buyer or user for product bought, or 2. Replacement of amount of product used. Novita Solutions, LLC shall not be liable for losses or damages resulting from handling or use of this product unless Novita Solutions, LLC is promptly notified of such loss or damage in writing. In no case shall Novita Solutions, LLC be liable for consequential or incidental damages or losses.

The terms of the "Warranty Disclaimer" above and this "Limitation of Remedies" cannot be varied by any written or verbal statements or agreements. No employee or sales agent of Novita Solutions, LLC or the seller is authorized to vary or exceed the terms of the "Warranty Disclaimer" or this "Limitation of Remedies" in any manner.

NET CONTENTS:

- ☐ 2.5 U.S. Gallons (9.46 liters)
- ☐ 30 Gallon (113.55 liters)
- ☐ 270 Gallons (1022.06 liters)

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4621 E University Drive
Prosper, TX 75078

Novita Solutions LLC

FoamNoMore

DEFOAMER - ANTIFOAM

PRINCIPAL FUNCTIONING AGENTS:

Polydimethylsiloxane	10%
Constituents ineffective as a spray adjuvant	90%
TOTAL	100%

All ingredients are exempt from tolerance requirements under 40 CFR 180

KEEP OUT OF REACH OF CHILDREN

CAUTION! / PRECAUCIÓN!

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle
(If you do not understand the label, find someone to explain it to you in detail.)

Harmful if swallowed, inhaled, or absorbed through skin. Avoid contact with eyes and skin, may cause irritation. Avoid breathing spray mist.

FIRST AID

Call a poison control center or doctor immediately for treatment advice.
Have the product container with you when calling a poison control center or doctor, or going for treatment.

If Swallowed: Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

If on Skin or Clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes.

If Inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth to mouth if possible.

If in Eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses if present, after the first five minutes, then continue rinsing eye.

NET CONTENTS:
4 x 1 U.S. Gallon (4 x 3.79 L)

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