

Purchasing Divison 2019 Washington Street East Post Office Box 50130 Charleston, WV 25305-0130

State of West Virginia **Request for Quotation** 07 - Chemicals

Proc	Folder:	217244
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Doc Description: Cacapon State Park Purchase of Golf Course Chemicals

Proc Type: Central Purchase Order

Date Issued Solicitation Closes Solicitation No Version 2016-07-28 2016-08-30 **CRFQ** 0310 DNR1700000001 1 13:30:00

BID RECEIVING LOCATION

BID CLERK

DEPARTMENT OF ADMINISTRATION

PURCHASING DIVISION

2019 WASHINGTON ST E

CHARLESTON

WV 25305

US

VENDOR

Vendor Name, Address and Telephone Number:

TOM BREHOB

RESIDEX LLC 3365 URBAINCREST INDUST. DR. 513-378-4371 URBANCREST, OH 43123 OFFICE 614-931-0792

08/16/16 10:29:37 WV Purchasing Division

INFORMAT		

Guy Nisbet

(304) 558-2596

guy.l.nisbet@wv.gow

Signature X

57-1202840

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

Page: 1

FORM ID: WV-PRC-CRFQ-001

ADDITIONAL INFORMATION

Request for Quotation

The West Virginia Purchasing Division is soliciting bids on behalf of the West Virginia Division of Natural Resources (WVDNR), Parks and Recreation Section to establish a contract for the one-time purchase of Golf Course Chemicals per the bid requirements and specifications as apart of this solicitation.

INVOICE TO		SHIP TO			
SUPERINTENDENT		SUPERINTENDENT			
DIVISION OF NATURAL RESOURCES CACAPON RESORT STATE PARK			DIVISION OF NATURAL RESOURCES CACAPON RESORT STATE PARK		
818 CACAPON LODGE DR		818 CACAPON LODGE DR			
BERKELEY SPRINGS	WV25411-3300	BERKELEY SPRINGS	WV 25411		
US		US			

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
1	Golf Course Chemicals-per Appendix "A" Pricing Page	1.00000	LS		\$40,843,20

Comm Code	Manufacturer	Specification	Model #	
10171600				·

Extended Description:

Please enter the TOTAL BID AMOUNT for items 3.1.1, 3.1.2, 3.1.3, 3.1.4, 3.1.5, 3.1.6, 3.1.7, 3.1.8 and 3.1.9 in the wvOASIS Contract Amount.

	Document Phase	Document Description	Page 3
DNR170000001	Final	Cacapon State Park Purchase of Golf	of 3
		Course Chemicals	

ADDITIONAL TERMS AND CONDITIONS

See attached document(s) for additional Terms and Conditions

DESIGNATED CONTACT: Vendor appoints the individual identified in this Section as the Contract Administrator and the initial point of contact for matters relating to this Contract.
1000 Enchol Territorial Salas
(Name Title)
TOM BREHOD - TERRITORIAL SALES
(Printed Name and Title) 3365 NEBAIO CREST INDUST. DR OH 43
(Address) 14-931-0792 FAX 614-277-8603
(Phone Number) / (Fax Number)
(email address)
(Simil deal 635)
CERTIFICATION AND SIGNATURE: By signing below, or submitting documentation through wvOASIS, I certify that I have reviewed this Solicitation in its entirety; that I understand the requirements, terms and conditions, and other information contained herein; that this bid, offer or proposal constitutes an offer to the State that cannot be unilaterally withdrawn; that the product or service proposed meets the mandatory requirements contained in the Solicitation for that product or service, unless otherwise stated herein; that the Vendor accepts the terms and conditions contained in the Solicitation, unless otherwise stated herein; that I am submitting this bid, offer or proposal for review and consideration; that I am authorized by the vendor to execute and submit this bid, offer, or proposal, or any documents related thereto on vendor's behalf; that I am authorized to bind the vendor in a contractual relationship; and that to the best of my knowledge, the vendor has properly registered with any State agency that may require registration.
RESIDEX LLC
(Company)
Jan Brehob - Territorial Sales
(Authorized Signature) (Representative Name, Title)
TOM BREHOB- TERRITORIAL SalES
(Printed Name and Title of Authorized Representative)
8/14/2016
(Date)
513.378-4371 - call
(Phone Number) (Fax Number)

STATE OF WEST VIRGINIA Purchasing Division

PURCHASING AFFIDAVIT

MANDATE: Under W. Va. Code §5A-3-10a, no contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and: (1) the debt owed is an amount greater than one thousand dollars in the aggregate; or (2) the debtor is in employer default.

EXCEPTION: The prohibition listed above does not apply where a vendor has contested any tax administered pursuant to chapter eleven of the W. Va. Code, workers' compensation premium, permit fee or environmental fee or assessment and the matter has not become final or where the vendor has entered into a payment plan or agreement and the vendor is not in default of any of the provisions of such plan or agreement.

DEFINITIONS:

"Debt" means any assessment, premium, penalty, fine, tax or other amount of money owed to the state or any of its political subdivisions because of a judgment, fine, permit violation, license assessment, defaulted workers' compensation premium, penalty or other assessment presently delinquent or due and required to be paid to the state or any of its political subdivisions, including any interest or additional penalties accrued thereon.

"Employer default" means having an outstanding balance or liability to the old fund or to the uninsured employers' fund or being in policy default, as defined in W. Va. Code § 23-2c-2, failure to maintain mandatory workers' compensation coverage, or failure to fully meet its obligations as a workers' compensation self-insured employer. An employer is not in employer default if it has entered into a repayment agreement with the Insurance Commissioner and remains in compliance with the obligations under the repayment agreement.

"Related party" means a party, whether an individual, corporation, partnership, association, limited liability company or any other form or business association or other entity whatsoever, related to any vendor by blood, marriage, ownership or contract through which the party has a relationship of ownership or other interest with the vendor so that the party will actually or by effect receive or control a portion of the benefit, profit or other consideration from performance of a vendor contract with the party receiving an amount that meets or exceed five percent of the total contract amount.

AFFIRMATION: By signing this form, the vendor's authorized signer affirms and acknowledges under penalty of law for false swearing (*W. Va. Code* §61-5-3) that neither vendor nor any related party owe a debt as defined above and that neither vendor nor any related party are in employer default as defined above, unless the debt or employer default is permitted under the exception above.

WITNESS THE FOLLOWING SIGNATURE:			
Vendor's Name: KESIDEX LI	_C		
Authorized Signature: John Bleek	rob	Date:	8/8/2016
State of Ohio			
County of Hamilton, to-wit:			
Taken, subscribed, and sworn to before me this	tay of August		, 20_16
My Commission expires March 24	, 2020		
AFFIX SEAL HERE	NOTARY PUBLIC	to-	toryoluckott
		Purc	hasing Affidavit (Revised 08/01/2015)

Exhibit "A" Pricing Page

West Virginia Division of Natural Resources Cacapon Resort State Park - Golf Course Chemicals

Item Number	Description	Vendors submitted Manufacturer Brand for Equal-Products	Unit of Measure	Unit Cost	Quantity	Extended Price
3.1.1	Systemic Insecticide; DuPont Acelepryn or Equal. Insecticide must contain a minimum active ingredient of 18.4% Chlorantraniliprole.	Acelepryn - Syngenta	Gallon	1899.000	6	11,394.00
3.1.2	Systemic Fungicide; Bayer Aliette WDG or Equal. Fungicide must contain a minimum active ingredient of 80% Aluminum Tris (O-Ethyl Phosphonate).	Fosal Select - Prime Source LLC	Pound	14.060	660	9,279.60
3.1.3	Broad Spectrum Fungicide; Cleary 3336F or Equal. Fungicide must contain a minimum active ingredient of 41.25% Thiophanate-Methyl(Dimethyl4,4'-O-Phenylenebis[3-Thioallophanate]).	TM 4.5 F - Prime Source LLC	Gallon	47.600	90	4,284.00
3.1.4	Systemic Fungicide; Syngenta Daconil Weather Stik or Equal. Fungicide must contain a minimum active ingredient of 54% Chlorothalonil (Tetrachloroisophthalonitirile).	Docket WS - Syngenta	Gallon	34.200	65	2,223.00
3.1.5	Systemic Fungicide; Syngenta Banner Maxx II or Equal. Fungicide must contain a minimum active ingredient of 14.3% Propiconazole.	Dorado - Syngenta	Gallon	52.200	14	730.80
3.1.6	Systemic Fungicide; Bayer Banol or Equal. Fungicide must contain a minimum active ingredient of 66.5% Propamocarb Hydrochloride.	Proplant - Sipcam Advan	Gallon	320.000	30	9,600.00

Resider LLC

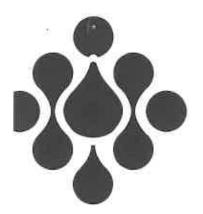
Exhibit "A" Pricing Page

West Virginia Division of Natural Resources Cacapon Resort State Park - Golf Course Chemicals

		,	TOTAL 1	BID AM	OUNT	40,843.20
3.1.8	Systemic Fungicide; Bayer Chipco 26GT or Equal. Fungicide must contain a minimum active ingredient of 23.3% Iprodione 3-(3,5-dichloropheny)-N-(1-methylethyl)-2,4-dioxo-1-Imidazolidinecarboxamide).	Iprodione 2 SE - Prime Source LLC	Gallon	41.450	60	2,487.00
3.1.7	Systemic Fungicide; Bayer Bayleton 50 or Equal. Must contain a minimum active ingredient of 50% Triadimefon 1-(4-Chlorophenoxy)-3, 3-dimethyl1-1-(1H-1,2,4-triazol-1-yl)-2- butanone.	Bayer Bayleton 50 WSP	Ounce	4.800	176	844.80

Vendors should submit product specifications and Data sheets with their submitted bid. This information may be required before award of Purchase Order.

Resider LLC



IPRODIONE 2SE SELECT

FUNGICIDE

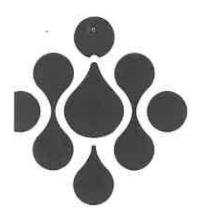
A FUNGICIDE FOR THE PREVENTION AND CONTROL OF CERTAIN DISEASES OF TURFGRASS AND ORNAMENTALS

ACTIVE INGREDIENT

KEEP OUT OF REACH OF CHILDREN CAUTION

See inside booklet for additional PRECAUTIONARY STATEMENTS, DIRECTIONS FOR USE, and STORAGE AND DISPOSAL



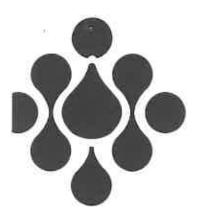


IPRODIONE 2SE SELECT

FUNGICIDE

-	FIRST AID						
If Swallowed:	 Immediately call a poison control center or doctor. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give any liquid to the person. Do not give anything by mouth to an unconscious person. 						
 Hold eye open and rinse slowly and gently with water for 15-20 minute Remove contact lenses, if present, after the first 5 minutes, then continuing eye. Call a poison control center or doctor for treatment advice. 							
lf 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 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 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 a.m. to 4:30 p.m. Pacific Time (NPIC Website: www.npic.orst.edu). Outside of these times call your poison control center at 1-800-222-1222.							
This product may pose	NOTE TO PHYSICIAN an aspiration pneumonia hazard. Contains petroleum distillates.						





IPRODIONE 2SE SELECT

FUNGICIDE

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS GAUTION

Harmful if swallowed, absorbed through skin, or inhaled. Avoid contact with skin, eyes, or clothing. Avoid breathing spray mist.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Mixers, loaders, others exposed to the concentrate, cleaners/repairers of equipment, and applicators applying as a dip treatment must wear long-sleeve shirt and long pants, chemical resistant gloves such as barrier laminate, nitrite rubber (≥ 14 mils), neoprene rubber (≥ 14 mils), or viton (≥ 14 mils), chemical-resistant apron, and chemical-resistant footwear plus socks.

Applicators using hand held equipment must wear coveralls over long-sleeve shirt and long pants, chemical-resistant gloves such as barrier laminate, nitrite rubber (≥ 14 mils), neoprene rubber (≥ 14 mils), or viton (≥ 14 mils), chemical-resistant footwear plus socks, chemical-resistant headgear for overhead exposures, and a dust/mist filtering respirator (MSHA/NIOSH approval number prefix TC-21C), or a NIOSH approved respirator with any R, P or HE filter.

Applicators using aircraft or mechanical ground equipment (groundboom, airblast, etc.), and flaggers for aerial applications must wear long-sleeve shirt and long pants, and shoes plus socks.

Applicators using truck-mounted equipment with a handgun at the end of a hose (i.e., for commercial turfgrass or ornamental applications) and all other handlers not specified above must wear long-sleeve shirt and long pants, chemical-resistant gloves such as barrier laminate, nitrile rubber (≥ 14 mils), neoprene rubber (≥ 14 mils), or viton (≥ 14 mils), and shoes plus socks.

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

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.

USER SAFETY REQUIREMENTS

Users should:

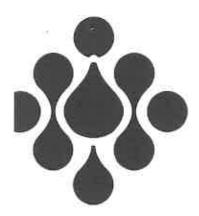
- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as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

ENVIRONMENTAL HAZARDS

This chemical can contaminate surface water through aerial and ground spray applications. Under some conditions, it may also have a high potential for runoff into surface water after application. These include poorly draining or wet soils with readily visible slopes toward adjacent surface waters, frequently flooded areas, areas overlaying extremely shallow ground water, areas with in-field canals or ditches that drain to surface water, areas not separated from adjacent surface waters with vegetated filter strips, and areas overlaying tile drainage systems that drain to surface water.

This pesticide is toxic to invertebrates. 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 may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment washwater or rinsate.





IPRODIONE 2SE SELECT[™]

FUNGICIDE

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.

Do not apply this product in a way that will contact workers or other persons, either directly or indirectly 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 of 12 hours for ornamental uses. The restricted entry interval for all other WPS uses is 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
- Chemical-resistant gloves such as barrier laminate, nitrile rubber (≥ 14 mils), neoprene rubber (≥ 14 mils), or viton (≥ 14 mils)
- Shoes plus socks

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to ornamental and turf uses (golf courses, landscape and institutional areas) 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.

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

USE DIRECTIONS

Iprodione 2SE Select is a fungicide that may be used for control of spring, summer, fall and winter diseases on non-residential turf located on golf courses, sod farms and institutional areas where fine turf is grown, and on non-residential ornamental flowers and foliage plants grown in field and landscape nurseries or greenhouses, and in conifer nurseries.

Follow all directions and restrictions on this label to obtain optimum disease control and to prevent crop injury.

Do not apply this product to residential turf and/or ornamentals.

Do not apply this product when the wind direction is toward aquatic areas. Refer to the Spray Brift management section of this label.

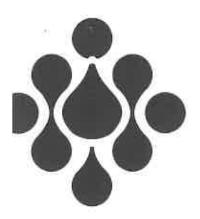
TURF

Applied according to good turf management practices, Iprodione 2SE Select is an effective tool in controlling spring, summer and fall diseases and in controlling certain winter diseases.

Mixing and Application Instructions: Use the following tables to determine the specified rates depending on the disease. Prepare only the amount of spray mixture required for a single day's (12 hours) application to avoid decomposition of the product. Add the required amount of Iprodione 2SE Select to 0.5 to 10 gal. water per 1,000 sq. ft. Agitate the spray mixture during mixing and application in a properly calibrated sprayer. Apply when disease first appears or when disease development can be expected. Apply to ensure uniform coverage of the turf but do not drench.

Use the higher rate and/or shorter spray interval between applications for severe disease conditions. The lower rates and longer intervals





IPRODIONE 2SE SELECT

FUNGICIDE

between applications are recommended for light to moderate disease pressure.

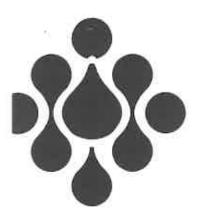
Restrictions:

- Do not apply to turf cut higher than 1" on golf holes where water bodies are present.
- Except for use on golf courses, if applying this product adjacent to a water body such as a lake, reservoir, river, permanent stream, marsh
 or natural pond, estuary, or commercial fish pond, there must be at least a 25-foot vegetative buffer strip between the water body and
 the point of application.
- Do not mow or irrigate treated areas until the grass is completely dry, which typically takes 24 hours post-treatment.
- . Do not mix with any sticker, extender, or wetting agents.
- Do not apply more than 35 fl. oz. product/1,000 sq. ft. per year.
- Do not apply more than 6 applications per year.
- Do not allow animals to graze on treated turf and do not feed clippings from treated turf to livestock or poultry.

TURF DIRECTIONS FOR USE - SPRING, SUMMER AND FALL DISEASES

DISEASE	APPLICATION RATE (FL. OZ. PER 1,000 SQ.FT.)	APPLICATION INSTRUCTIONS	RESTRICTIONS AND COMMENTS
Anthracnose (Colletotrichum)	4 to 8	Apply Iprodione 2SE Select as a tank mix with registered trifloxystrobin or fosetyl-al products, or other fungicides which control anthracnose.	For suppression only.
Corticium Red Thread (Laetisaria fuciformis)	4.	Apply as a preventative every 14 days as long as required.	
Curvularia (Curvularia spp.),	4 to 8	Apply as a preventative every 14 days as long as required.	For use on Bermuda Grass only
Dollar Spot (Lanzia spp. and Moellerodiscus spp.) Brown Patch (Rhizoctonia solani) Leaf Spot such as Helminthosporium Leaf Spot caused by (Drechslera spp.)	3 to 4 [Dollar Spot control on Fairways: 2 to 4]	Greens and Tees: Make repeat applications at 14- to 21-day intervals as long as required. Fairways and Other Turf Areas: Make repeat applications at 14- to 28-day intervals as long as required.	
Fusarium Blight (Fusarium spp.) Necrotic Ring Spot # (Leptosphaeria korrae)	8	Apply as a preventative foliar spray when conditions first favor disease development. Apply repeat applications as needed at 28-day intervals.	# Not registered for use in California.
Fusarium Patch (Microdochium nivalis)	4 to 8	Make additional applications at 14 to 21 day intervals as long as required.	For application in the Pacific Northwest Only – West of the Cascade Mountains
Large Patch (Rhizoctonia solani)	4	Make first application in fall when conditions are favorable for disease development but no symptoms are visible. Apply in the spring as needed on 14-21 day spray intervals.	Not registered for use in California.





IPRODIONE 2SE SELECT

FUNGICIDE

TURF DIRECTIONS FOR USE - WINTER DISEASES

DISEASE	APPLICATION RATE (FL. OZ. PER 1,000 SQ.FT.)	APPLICATION INSTRUCTIONS	RESTRICTIONS AND COMMENTS
Gray Snow Mold (<i>Typhula</i> spp.) Pink Snow Mold (<i>Fusarium</i> nivale)	4 to 8	Make an application prior to the first permanent snow cover. A second application may be made during a mid-winter thaw.	See additional directions below for use of tank mixes of Iprodione 2SE Select plus other fungicides for control of this disease.

TANK MIXES

Additional Disease Control: Iprodione 2SE Select is compatible with most commonly used registered fungicides containing flutolanil, azoxystrobin and trifloxystrobin. These tank-mixes are useful for control of additional diseases in turf. Follow the label directions and use precautions for all tank-mix partners and ensure that the use of that fungicide is registered for use on turf. Verify the compatibility of the tank mix partner with Iprodione 2SE Select before making an application.

When applied as a tank-mix, follow all restrictions noted above for use of Iprodione 2SE Select alone.

Broad Spectrum Disease Control and Resistance Management: Apply Iprodione 2SE Select with the registered thiophanate-methyl fungicide product, TM 4.5F Select™, for broad spectrum turf disease control. This tank mixture aids in resistance management practices required for other fungicides susceptible to resistance. Apply 3 fl. oz. per 1,000 sq. ft. of Iprodione 2SE Select with TM 4.5F Select according to the following table:

Disease Pressure	Low	Medium (for more dollar spot and brown patch)	High
Amount of thiophanate-methyl in tank mix	1.0 fl. oz./1,000 sq. ft.	1.0 fl. oz./1,000 sq. ft.	2.0 fl. oz./1,000 sq. ft.

Summer Stress Complex/Summer Decline: Tank-mix applications of 4 to 8 fl. oz. per 1,000 sq. ft. of Chipco[®] Signature™ Fungicide with 3 to 4 fl. oz. per 1,000 sq. ft. lprodione 2SE Select to help manage these diseases.

Pythium Blight: Pythium blight will be controlled by a tank-mix of Iprodione 2SE Select with one of the following: fosetyl-al or propamocarb hydrochloride fungicides. Follow the label directions and use precautions for all tank-mix partners and ensure that the use of that fungicide is registered for use on turf.

Gray Snow Mold (*Typhula* spp.): To use Iprodione 2SE Select as a tank-mix in sites where continuous snow cover occurs, use 4 to 8 fl. oz. per 1,000 sq. ft. with one of the following registered products: chlorothalonil, such as Chlorothalonil 720 Select™, or pentachloronitrobenzene (PCNB) fungicides. Use the rates according to the directions on the labels of the registered tank mix partner products.

For optimum control, application must be made in autumn prior to snow cover. Ensure thorough coverage is attained by dilution in sufficient water (1 to 5 gallons of spray solution per 1,000 sq. ft.). If the turf has been frozen prior to application, use the higher rate of lprodione 2SE Select, and make a repeat application only if a thaw occurs and all snow cover has melted.

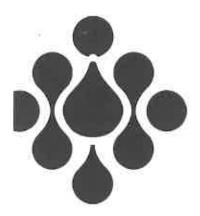
ORNAMENTALS - FIELD, LANDSCAPE AND GREENHOUSE ORNAMENTALS AND CONIFER NURSERIES

Applied according to the label directions below, Iprodione 2SE Select may be applied either as a foliar spray, as a soil drench, or as a dip application to ornamental flowers and foliage to control certain diseases.

Restrictions

- For use by commercial nursery and landscape personnel only.
- · Do not apply to residential ornamentals.
- When applying this product adjacent to a water body (lakes, reservoirs, rivers, permanent streams, marshes or natural ponds, estuaries, or commercial fishpond), there must be at least a 25-foot vegetative buffer strip between the water body and the point of application.





IPRODIONE 2SE SELECT

FUNGICIDE

Mixing and Application Instructions: Use the tables below to determine the specified rates of Iprodione 2SE Select. Prepare only the amount of spray mixture required for a single day's (12 hours) application to avoid decomposition of the product. Add the required amount of Iprodione 2SE Select to water. Agitate the spray mixture during mixing and application in a properly calibrated sprayer. Apply when disease first appears or when disease development can be expected. Follow additional directions, below, for foliar, drench or dip applications.

List of Diseases:

1.	Aerial Web Blight	Rhizoctonia spp.
2.	Alternaria Leaf Blight	Alternaria euphorbiae
3.	Alternaria Leaf Spot	Alternaria panax, Alternaria tenuissima
4.	Botrytis Blight	Botrytis spp.
5.	Fusarium Leaf Spot	Fusarium moniliforme
6.	Helminthosporium Leaf Spot	Helminthosporium spp.
7.	Rhizoctonia stem and root rot	Rhizoctonia spp.
8.	Ink Spot	Drechslera iridis
9.	Tulip Fire	Botrytis tulipae
10.	Alternaria Leaf Blight	Alternaria zinniae
11.	Ray Blight	Ascochyta chrysanthami
12.	Fusarium Corm rot	Fusarium oxysporum
13.	Daffodil Leaf Scorch	Stagnospora curtissi
14.	Blossom Blight	Monilinia fructicola
15.	Botrytis Storage Rot	Botrytis spp.
16.	Cylindrocladium Blight and Wilt	Cylindrocladium scoparium





IPRODIONE 2SE SELECT

FUNGICIDE

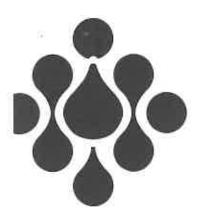
TABLE 1

List of Ornamentals:

Iprodione 2SE Select may be used on the following ornamentals. Although Iprodione 2SE Select has been tested for plant tolerance and found to be acceptable for the specific genera and species listed on this label, it is impossible to test every species or variety of ornamental plant grown under different conditions for its tolerance to Iprodione 2SE Select Fungicide. The user should test a few plants using the specified rates if they are not listed on this label and evaluate for possible phytotoxicity before using Iprodione 2SE Select on a large scale.

Ageratum (1 to 7)	Dieffenbachia (1 to 7)	Peach (ornamental) (1 to 7)
Ajuga (1 to 7)	Dizygotheca (1 to 7)	Peperomia (1 to 7)
Almond (ornamental) (1 to 7)	Dogwood (1 to 7)	Periwinkle (1 to 7)
Alyssum (1 to 7)	Dracena (1 to 7)	Philodendron (1 to 7)
Andromeda (1 to 7)	English Ivy (1 to 7)	Phlox (1 to 7)
Aphelandra (1 to 7)	Episcia (1 to 7)	Pilea (1 to 7)
Artemisia (1 to 7)	Euonymous (1 to 7)	Pine (1 to 7)
Aster (1 to 7)	Ficus (1 to 7)	Pitosporum (1 to 7)
Azalea (1 to 7, 16)	Forsythia (1 to 7)	Plum (ornamental) (1 to 7, 14)
Boxwood (1 to 7)	Gazania (1 to 7)	Poinsettia (1 to 7)
Cactus (1 to 7)	Geranium (1 to 7)	Poppy (1 to 7)
Calendula (1 to 7)	Gladiolus (1 to 7, 12)	Pothos, (excluding soil drench application for Rhizoctonia stem and root rot) (1 to 6)
Carnation (1 to 7)	Gloxinia (1 to 7)	Primrose (1 to 7)
Cherry (ornamental) (1 to 7)	Gypsophila (1 to 7)	Privet (1 to 7)
Chrysanthemum (1 to 7, 11)	Hawthorn (1 to 7)	Protea (1 to 7)
Cineraria (1 to 7)	Holly (1 to 7)	Pyracantha (1 to 7)
Cistena Plum (1 to 7, 14)	Hoya (1 to 7)	Rhododendron (1 to 7, 16)
Coleus (1 to 7)	Hydrangea (1 to 7)	Rose Tree of China (1 to 7)
Columbine (1 to 7)	Impatiens, (excluding soil drench application for <i>Rhizoctonia</i> stem and root rot) (1 to 7)	Rose (1 to 7, 15)
Coral Bells (Heuchera) (1 to 7)	Iris (1 to 8)	Salvia (1 to 7)
Crape Myrtle (1 to 7)	Juniper (1 to 7)	Schefflera (1 to 7)
Crassula (1 to 7)	Kalanchoe (1 to 7)	Snapdragon (1 to 7)
Croton (1 to 7)	Lilies (1 to 7)	Statice (1 to 7)
Cyclamen (1 to 7)	Lipstick Vine (Aeschynanthus) (1 to 7)	Tree lvy (1 to 7)
Daffodils (1 to 7, 13)	Marigold (1 to 7)	Tulip (1 to 7, 9)
Dahlia (1 to 7)	Monarda (Bee Balm) (1 to 7)	Viburnum (1 to 7)
Delphinium (1 to 7)	Pachysandra (1 to 7)	Violet (1 to 7)
Deutzia (1 to 7)	eutzia (1 to 7) Palm (1 to 7) Zinnia (1 to 7, 10)	
Dianthus (1 to 7)	Pansy (1 to 7)	





IPRODIONE 2SE SELECT

FUNGICIDE

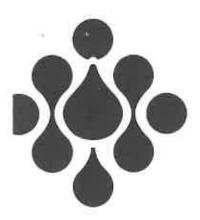
Foliar Applications: Make applications of Iprodione 2SE Select when disease develops or if conditions are favorable for disease development. Foliar applications may be made to all ornamentals listed in Table 1.

DISEASE	APPLICATION RATE OF Iprodione 2SE Solect (QT. PER ACRE)	APPLICATION INSTRUCTIONS	RESTRICTIONS
Aerial Web Blight (Rhizoctonia sp.)	1.0 to 2.5	Apply Iprodione 2SE Select as a foliar spray in sufficient water to	Do not apply Iprodione 2SE Select on Spathiphylium (Peace lily or White
Alternaria Leaf Blight (Alternaria euphorbiae)		ensure thorough coverage of the plant foliage.	Anthurium). Do not apply more than 2.5 qts.
Alternaria Leaf Spot (Alternaria panax) (Alternaria tenissima)		Make repeat applications as needed every 7 to 14 days. Under severe disease pressure,	product/acre per application. Do not make more than 4 applications per crop per year.
Botrytis Blight (Botrytis spp.)		use the highest rate listed and/ or the shortest interval between	
Fusarium Leaf Spot (Fusarium moniliforme)		applications. When disease pressure is light to moderate, use the lower rates	
Helminthosporium Leaf Spot (Helminthosporium spp.)		and longer spray intervals.	

Drench Applications: Use Iprodione 2SE Select as a soil drench at seeding and/or after transplanting to control Rhizoctonia. Drench applications may be made to all ornamentals listed in Table 1 except Impatiens and Pothos.

DISEASE	APPLICATION RATE OF Iprodione 2SE Select (Amount Per 100 GAL.)	APPLICATION INSTRUCTIONS	RESTRICTIONS
Stem and Root Rot (Rhizoctonia spp.)	13 fl. oz.	Apply Iprodione 2SE Select using 1 to 2 pints of the drench solution per sq. ft. of soil. Make repeat applications as needed every 14 days. Use the highest rate listed for severe disease pressure and the lower rate for light to moderate disease pressure.	Do not exceed a total of 35 fluid oz. product/1,000 sq. ft. (24 lb. Al per acre) per year. Do not make more than 6 applications per year. MOTE: Do not use Iprodione 2SE Select as a drench on Impatiens and Pothos. Do not use Iprodione 2SE Select on Spathiphylium (Peace lily or White Anthurium).





IPRODIONE 2SE SELECT[™]

FUNGICIDE

FOR DISEASES SPECIFIC TO CERTAIN DRNAMENTALS

Fuliar Applications: Make applications of Iprodione 2SE Select when disease develops or if conditions are favorable for disease development.

DISEASE	ORNAMENTALS	APPLICATION RATE OF Iprodione 2SE Select (QT. PER ACRE)	APPLICATION INSTRUCTIONS	
Alternaria Leaf Blight (Alternaria zinniae)	For use on Zinnia	1.0 to 2.5	Apply Iprodione 2SE Select as a foliar spray in sufficient water to ensure	
Ink Spot (Drechslera iridis)	For use on Iris	Make repeat applicate every 7 to 14 days. Under severe disease the highest rate lister shortest interval between the disease press		thorough coverage of the plant foliage. Make repeat applications as needed
Ray Blight (Ascochyta chrysanthami)	For use on Chrysanthemum		every 7 to 14 days. Under severe disease pressure, use the highest rate listed and/or the	
Tulip Fire (Botrytis tulipae)	For use on Tulips		shortest interval between applications. When disease pressure is light to	
Daffodil Leaf Scorch (Stagnospora curtissi)	For use on Daffodils		moderate, use the lower rates and longer spray intervals.	
Blossom Blight (Monilinia fructicola)	For use on Cistena Plum			

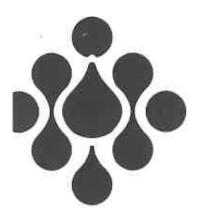
Restrictions:

- Do not apply more than 2.5 qts. product/acre per application.
- Do not make more than 4 applications per crop per year.

Dip Applications: Apply Iprodione 2SE Select as a dip to control diseases of the ornamentals listed in the table below.

DISEASE	ORNAMENTALS	APPLICATION RATE OF Iprodione 2SE Select (QT. PER 100 GAL.)	APPLICATION INSTRUCTIONS
Botrytis Storage Rot (Botrytis spp.)	For use on Roses	1.0	Dip the rose plant roots for 5 minutes prior to cold storage.
Cylindrocladium Blight and Wilt (Cylindrocladium scoparium)	For use on Azalea and Rhododendron	1.0	Dip cuttings of azaleas and rhododendron for 5 minutes before planting.
Fusarium Corm Rot (Fusarium oxysporum)	For use on Gladiolus	2.0	Dip the gladiolus corms for 5 minutes prior to storage.





IPRODIONE 2SE SELECT

FUNGICIDE

TANK MIXES

Additional Disease Control: Other diseases that may infect ornamentals can be treated with tank mixes of Iprodione 2SE Select with other commonly used fungicides. Pythium and Phytophthora are controlled by tank-mixes of Iprodione 2SE Select with any fosetyl-al-containing pesticide registered for use on ornamentals. Refer to the label of the tank-mix partner for a full list of diseases controlled, application rates and directions for use. Verify the compatibility of the tank mix partner with Iprodione 2SE Select before making an application.

When applied as a tank mix, follow all restrictions noted above for ornamental uses when Iprodione 2SE Select is used alone.

DIRECTIONS THROUGH SPRINKLER IRRIGATION SYSTEMS

Do not use through sprinkler irrigation systems in California.

Apply this product only through sprinkler irrigation systems including center pivot.

Do not apply this product through any other type of irrigation system.

SPRAY PREPARATION: Remove scale, pesticide residues, and other foreign matter from the chemical tank and entire injector system. Flush with clean water.

APPLICATION INSTRUCTIONS: First prepare a suspension of Iprodione 2SE Select in a mix tank. Fill tank with ½ to ¾ the desired amount of water. Start mechanical or hydraulic agitation. Add the required amount of Iprodione 2SE Select and then the remaining volume of water. (Suspension concentrations using the appropriate dosage per acre recommended on this label of Iprodione 2SE Select per 1 to 4 gallons of water are recommended). Then set sprinkler to deliver 0.1 to 0.3 inch of water per acre. Start sprinkler and uniformly inject the suspension of Iprodione 2SE Select into the irrigation water line so as to deliver the desired rate per acre. The suspension of Iprodione 2SE Select should be injected with a positive displacement pump into the main line ahead of a right angle turn to insure adequate mixing. If you should have any other questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.

Nute: When treatment with !prodione 2SE Select has been completed, further field irrigation over the treated area should be avoided for 24 to 48 hours to prevent washing the chemical off the crop.

Maintain continuous agitation in mix tank during mixing and application to assure a uniform suspension.

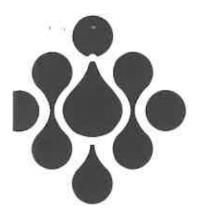
Greater accuracy in calibration and distribution will be achieved by injecting a larger volume of a more dilute solution per unit time. The system must contain a functional check valve, vacuum relief valve, and low-pressure drain appropriately located on the irrigation pipeline to prevent water source 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 shutdown. 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 system interlock.

Do not apply when wind speed favors drift, when system connection or fittings leak, when nozzles do not provide uniform distribution or when lines containing the product must be dismantled and drained.

Crop injury or lack of effectiveness may result from nonuniform distribution of treated water. Allow sufficient time for pesticide to be flushed through all lines and all nozzles before turning off irrigation water. A person knowledgeable of the chemigation system and responsible for its operation must shut the system down and make necessary adjustments should the need arise.

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





IPRODIONE 2SE SELECT

FUNGICIDE

SPRAY DRIFT

Avoiding spray drift at the application site is the responsibility of the applicator. 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 decision. The following drift management requirements must be followed to avoid off-target drift movement from aerial applications to agricultural field crops. These requirements do not apply to forestry applications, public health uses or to applications using dry formulation.

- 1. The distance of the outer most nozzles on the boom must not exceed the length of the wingspan or rotor.
- 2. Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees.

When states have more stringent regulations, they must be observed. The applicator should be familiar with and take into account the information covered in the Aerial Drift Reduction Advisory Information, below.

Aerial 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 below).

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 Mozzles Use the minimum number of nozzles that provide uniform coverage.
- Nuzzle Drientation 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.

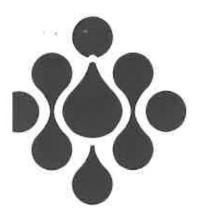
Application Height: Applications must not be made at a height greater than 10 feet above the top of the largest plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

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 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 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.





IPRODIONE 2SE SELECT

FUNGICIDE

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

STORAGE AND DISPOSAL

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

STORAGE: Store only in original container.

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

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, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

LIMITATION OF WARRANTY AND LIABILITY

Read the entire directions for use, conditions 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 Prime Source LLC. All such risks shall be assumed by the user or buyer.

DISCLAIMER OF WARRANTIES: To the extent consistent with applicable law, Prime Source LLC 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 Prime Source LLC is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. To the extent consistent with applicable law, Prime Source LLC 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 Prime Source LLC's election, the replacement of product.

Select is a registered trademark of Prime Source LLC.

Chipco® is a registered trademark and Signature™ is a trademark of Bayer.





Safety Data Sheet

Issue Date: 13-Jan-2009

Revision Date: 06-Jan-2016

Version 2

1. IDENTIFICATION

Product Identifier

Product Name

Prime Source Fosal Select™

Other means of identification

SDS#

Registration Number(s)

EPA Reg. No. 89442-8

Recommended use of the chemical and restrictions on use

Recommended Use

EPA registered pesticide.

Details of the supplier of the safety data sheet

Manufacturer Address

Prime Source, LLC 10025 US 264 Alternate Middlesex, NC 27557 877-235-0043

Emergency Telephone Number

Emergency Telephone (24 hr)

For fire, spill and/or leak contact INFOTRAC:

1-800-535-5053 (North America) 1-352-323-3500 (International)

For medical emergencies and health/safety inquiries, contact PROSAR:

1-877-250-9291

2. HAZARDS IDENTIFICATION

This chemical is a product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-EPA registered chemicals. Please see Section 15 for additional EPA information.

Appearance White granules

Physical State Solid

Odor Faint

Classification

Serious eye damage/eye irritation

Category 2

Hazards Not Otherwise Classified (HNOC)

May be harmful in contact with skin

Signal Word Warning

Hazard Statements

Causes serious eye irritation





<u>Precautionary Statements - Prevention</u>

Wear eve protection/face protection

Wash hands, face, and any exposed skin thoroughly after handling

Precautionary Statements - Response

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing If eye irritation persists: Get medical advice/attention

Other Hazards

Harmful to aquatic life with long lasting effects

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Fosal Select Technical	39148-24-8	77.6-82.4
Proprietary Additive	Proprietary	3.8-4.2

^{**}If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.**

4. FIRST-AID MEASURES

First Aid Measures

General Advice IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician. When

possible, have the product container or label with you when calling a poison control center

or doctor or going for treatment.

Eye Contact IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing. If eye irritation persists: Get medical

advice/attention.

Skin Contact Remove contaminated clothing and shoes. Wash affected areas thoroughly with soap and

water for at least 15 minutes.

Inhalation Give oxygen if breathing is difficult. If breathing has stopped, call 911, give artificial

respiration. Seek medical attention.

Ingestion Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth

to an unconscious person. Do not induce vomiting without medical advice. Immediately call

a poison center or doctor/physician.

Most important symptoms and effects

Symptoms

Causes serious eye irritation.

Indication of any immediate medical attention and special treatment needed

Notes to Physician

Treat symptomatically.



5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Dry chemical. Carbon dioxide (CO₂). Foam.

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical

May form explosive dust mixtures with air.

Hazardous Combustion Products Smoke, furnes or vapors, and oxides of carbon. Aluminum oxides. Phosphorus oxides.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Evacuate area of unprotected personnel. Remain upwind of fire to avoid hazardous vapors and decomposition products. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Wear protective clothing as described in Section 8 of this safety data sheet. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Avoid contact with skin,

eves or clothing. Avoid creating dust.

Environmental Precautions

Personal Precautions

Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section

12, Ecological Information. See Section 13: DISPOSAL CONSIDERATIONS.

Methods and material for containment and cleaning up

Methods for Containment

Prevent further leakage or spillage if safe to do so.

Methods for Clean-Up

Shovel waste material into properly labeled container. Avoid creating dust. Scrub area with detergent and water. Rinse area thoroughly. Place rinsate into chemical waste container.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling

Handle in accordance with good industrial hygiene and safety practice. Use personal protection recommended in Section 8. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact with skin, eyes or clothing. Use only outdoors or in a well-ventilated area. Avoid generation of dust. Avoid spillage which can cause very slippery conditions on floors. Do not contaminate water, food, or feed by storage or disposal.

Conditions for safe storage, including any incompatibilities

Storage Conditions

Do not contaminate water, food, or feed by storage or disposal. Keep/store only in original container. Store at ambient conditions. Keep container tightly closed and store in a cool, dry and well-ventilated place. Avoid excessive temperatures & high humidity.

Packaging Materials

Do not reuse container.

Incompatible Materials

Strong acids. Strong bases.



8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

This product, as supplied, does not contain any hazardous materials with occupational

exposure limits established by the region specific regulatory bodies

Appropriate engineering controls

Engineering Controls

Please refer to the product label. Use only with adequate ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to keep worker exposure to airborne

contaminants below any recommended or statutory limits.

Individual protection measures, such as personal protective equipment

Eve/Face Protection

Wear safety glasses with side shields (or goggles).

Skin and Body Protection

Wear appropriate clothing to prevent repeated or prolonged skin contact. Wear long-sleeved

shirt, long pants, and shoes plus socks. Use chemical resistant gloves, such as P.V.C., butyl-

rubber, nitrile-rubber, or neoprene.

Respiratory Protection

NIOSH-approved respirator or mask in the absence of adequate ventilation.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice. Wash face, hands and any exposed skin thoroughly after handling. Take off all contaminated clothing and wash it before reuse. 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, use detergent and hot water. Keep and wash PPE separately from other laundry.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State Appearance

Solid

White granules

Odor

Faint

Color

White

Odor Threshold

Remarks · Method

Not determined

Property

Ha

Values_

3.4

Not determined

Melting Point/Freezing Point **Boiling Point/Boiling Range**

Not determined Not determined

Flash Point **Evaporation Rate**

Not applicable Not determined Not determined

Flammability (Solid, Gas) **Upper Flammability Limits** Lower Flammability Limit

Not determined Not determined

Vapor Pressure **Vapor Density Specific Gravity** Water Solubility

Not determined Not determined Insoluble in water

Solubility in other solvents **Partition Coefficient Auto-ignition Temperature**

Not determined Not determined >400 °C / >752 °F Not determined

Decomposition Temperature Kinematic Viscosity

Not determined Not determined

Dynamic Viscosity **Explosive Properties**

Dust can form an explosive mixture with air

Oxidizing Properties Density

Not determined 0.65 g/ml



10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions.

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous Polymerization

Hazardous polymerization does not occur.

Keep out of reach of children. High humidity is to be avoided. **Conditions to Avoid**

Incompatible Materials

Strong acids. Strong bases.

Smoke, fumes or vapors, and oxides of carbon. Aluminum oxide. Phosphorous oxides.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Eye Contact

Causes serious eye damage.

Skin Contact

May be harmful in contact with skin.

Inhalation

Harmful if inhaled.

Ingestion

Do not ingest.

Component Information Oral LD50	Dermal LD50 Inhalation LC50
Chemical Name = 5 g/kg (Rat)	> 2 g/kg(Rabbit)
39148-24-8 > 10000 mg/kg (Rat) Proprietary Additive > 10000 mg/kg (Rat)	

Information on physical, chemical and toxicological effects

Please see section 4 of this SDS for symptoms.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Carcinogenicity

Based on the information provided, this product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP



Product Information (Numerical measures of toxicity)

Acute Oral LD50 (Rat): 2,860 mg/kg

Acute Dermal LD50 (Rabbit): >2,000 mg/kg Acute Inhalation LC50 (Rat): >5.0 mg/L (4-hr)

Eye Irritation: Mildly irritating. Dermal Irritation: Slightly irritating. Dermal Sensitization: Not a sensitizer.

12. ECOLOGICAL INFORMATION

Harmful to aquatic life with long lasting effects. This product is toxic to aquatic and estuarine invertebrates. Drift and runoff may be hazardous to aquatic and estuarine organisms in neighboring areas. 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.

Component Information

Component Information			Toxicity to	Crustacea
Chemical Name	Algae/aquatic plants	Fish	mlcroorganisms	178 - 365: 48 h Daphnia magna
Fosal Select Technical 39148-24-8	21.9: 90 h Scenedesmus pannonicus mg/L EC50	430: 96 h Oncorhynchus mykiss mg/L LC50		mg/L EC50 Static 172 - 207.5: 96 h Daphnia pulex mg/L EC50 Static
Proprietary Additive		13500 - 14500: 96 h Pimephales promelas mg/L LC50 6800: 96 h Pimephales promelas mg/L LC50 static 3040 - 4380: 96 h Lepomis macrochirus mg/L LC50 static 13500: 96 h Lepomis macrochirus mg/L LC50		630: 96 h Daphnia magna mg/ EC50 2564: 48 h Daphnia magna mg/L EC50

Persistence/Degradability: Not determined.

Bioaccumulation: Not determined.

-	
ı	Mobility Partition Coefficient
Í	Chemical Name -2.28 - 2.77
ŀ	Fosetyl-Al Technical
١	39148-24-8

Other Adverse Effects

Not determined

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods Disposal of Wastes

END USERS MUST DISPOSE OF ANY UNUSED PRODUCT AS PER THE LABEL

Pesticide wastes are acutely hazardous. 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. Under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste.

Contaminated Packaging

Disposal should be in accordance with applicable regional, national and local laws and regulations.



14. TRANSPORT INFORMATION

DOT

Not regulated

IATA

Not regulated

IMDG

Marine Pollutant

This material may meet the definition of a marine pollutant

15. REGULATORY INFORMATION

International Inventories

riter hationar investigation			NECS ELINC	S ENCS	IECSC	KECL	PICCS	AICS
Chemical Name TSCA	DSL	1100-	NECS ELINC resent	5 2.100	X	Present		X
Fosal Select Technical	 		resent	Present	X	Present	X	×
Proprietary Additive Present	<u>^</u> _	<u> </u>	<u> </u>					

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 311/312 Hazard Categories

	Yes
Acute Health Hazard	No
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	
Reactive Hazard	No

SARA 313

Not determined

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Ţ	J.S. State Right-to-Milow Mose			Pennsylvania
г	Chemical Name	New Jersey	Massachusetts	T GIRLOYIVE
ŀ	Fosal Select Technical	x		
-	39148-24-8		x	x
1	Proprietary Additive		<u> </u>	

EPA Pesticide Registration Number EPA Reg. No. 89442-8



This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

EPA Pesticide Label

Signal Word: Caution

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

Difference between SDS and EPA pes	ticide label			
Difference between 300 and services	EPA	OSHA		
	Caution	Warning		
Signal Word	Harmful if swallowed	N/A		
Acute toxicity - Oral	Harmful if absorbed	1		
Acute toxicity - Dermal	through the skin	N/A		
Acute toxicity - Inhalation (Vapors)	Harmful if inhaled	N/A		
	-+	Causes serious eye irritation		
Serious eye damage/eye irritation	N/A			

16. OTHER INFORMATION

Special Hazards Instability **Flammability** Health Hazards None 0 Personal Protection NFPA_ **Physical Hazards Flammability** See section 8 **Health Hazards** HMIS_

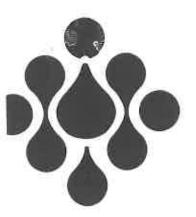
1 13-Jan-2009

Issue Date: 06-Jan-2016 **Revision Date:**

Updated format from 13-Jan-2015 **Revision Note:**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet



TM 4.5F SELECT™

FUNGICIDE

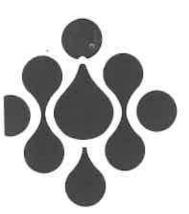
CONTAINS THIOPHANATE-METHYL, THE ACTIVE INGREDIENT USED IN TOPSIN 4.5FL THIOPHANATE METHYL 4.5F SELECT IS NOT MANUFACTURED OR DISTRIBUTED BY CEREXAGRI.

ACTIVE INGREDIENT:	% BY WT.
Thiophanate-methyl: (dimethyl[(1,2-phenylene)-	40.000/
his/iminocarbonothiovI)]bis[carbamate])	46.20% 53.80%
OTHER NGREDIENTS:	(4116 AT
Total	100.00%

Contains 4.5 pounds of thiophanate-methyl per gallon.

KEEP OUT OF REACH OF CHILDREN CAUTION



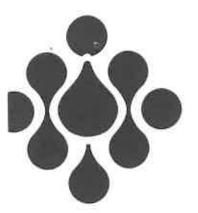


TM 4.5F SELECT

FUNGICIDE

FIRST AID				
F 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 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 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. 			
emergency information c	th you when calling a poison control center or doctor, or going for treatment. For oncerning this product, call the National Pesticides Information Center (NPIC) at ays a week, 6:30 a.m. to 4:30 p.m. Pacific Time (NPIC Website: www.npic.orst.edu).			





TM 4.5F **SELECT**

FUNGICIDE

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Harmful if swallowed, absorbed through skin, or inhaled. Avoid contact with skin, eyes, or clothing. Avoid breathing vapor or spray mist. 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)

Some materials that are chemical resistant to this product are barrier laminate, butyl rubber (= 14 mils), neoprene rubber (= 14 mils) and polyethylene. If you want more options, follow the instructions for category C on an EPA chemical resistance category selection chart.

Handlers mixing, loading, and applying the product as a dip (including application of product in kaolinite clay to conifer seedling roots) must wear:

- Coveralls over long-sleeved shirt and long pants
- Chemical-resistant gloves
- Chemical-resistant footwear plus socks
- · A chemical-resistant apron

All other mixers, loaders, and applicators must wear:

- Long-sleeved shirt and long pants
- · Shoes plus socks
- · Chemical-resistant gloves
- · Chemical-resistant apron for mixers, loaders, and other handlers exposed to the concentrate

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

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.

ENGINEERING CONTROLS

When handlers use 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.

ENVIRONMENTAL HAZARDS

Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment wash water.

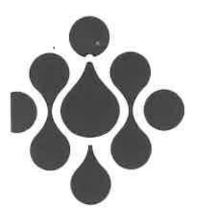
DIRECTIONS FOR USE

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

Do not apply when wind speed favors drift beyond the area intended for treatment.





TM 4.5F SELECT

FUNGICIDE

AGRICULTURAL USE REQUIREMENTS

Use this product 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). The REI for each crop is listed in the directions for use associated with each crop.

Exemption: If the product is applied by drenching, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated areas 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 Worker Protection Standard and that involves contact with anything that has been treated such as plants, soil, or water is:

- · Coveralls over long-sleeved shirt and long pants
- Chemical-resistant gloves made of any waterproof material
- Chemical-resistant footwear plus socks
- Chemical-resistant headgear for overhead exposure

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

PRODUCT INFORMATION

Shake well before using.

Apply Thiophanate Methyl 4.5F Select with ground or aerial equipment using sufficient volume of spray to provide thorough coverage. Add required amount of Thiophanate Methyl 4.5F Select to partially filled tank agitated by mechanical or hydraulic means and then add remaining required amount of water. Continuous agitation is required to keep the material in suspension. Do not tank mix with highly alkaline pesticides such as Bordeaux mixture or lime sulfur. No claim of compatibility with other pesticides is implied. Use the higher rate under conditions of severe disease pressure. Also, see local State Extension Service instructions for application schedules.

Use the fl. oz./acre rate for concentrate sprayers (less than 400 gallons on apples, less than 300 gallons on stone fruit). Use the fl. oz./100 gal rate for dilute ground application. For aerial applications use a minimum of 5 gal./acre for row crops; use a minimum of 10 gal./acre for tree crops. For ground applications use a minimum of 20 gal./acre for row crops and 30 gal./acre for tree crops. Higher spray volume will result in better coverage and better disease control.

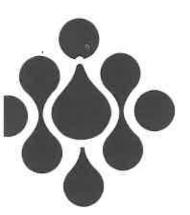
Chemigation instructions follow the RESISTANCE MANAGEMENT section of this labeling. Do not apply through any irrigation system unless these instructions are followed.

In California, chemigation is only allowed for the following crops: beans, cucurbits (cantaloupe, casaba, cucumbers, melons, pumpkins, squash, and watermelons), peanuts, soybeans, strawberries, and sugar beets.

4

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





TM 4.5F **SELECT**

FUNGICIDE

RESISTANCE MANAGEMENT

To avoid the development of tolerant or resistant strains of fungi, tank mix Thiophanate Methyl 4.5F Select with a fungicide of different chemistry and/or alternate a fungicide of different chemistry with Thiophanate Methyl 4.5F Select at each application. DO NOT USE PRODUCTS CONTAINING THIABENDAZOLE OR OTHER PRODUCTS CONTAINING THIOPHANATE METHYL IN COMBINATION OR IN ROTATION WITH THIOPHANATE METHYL 4.5F SELECT. If after using Thiophanate Methyl 4.5F Select as directed and the treatment is not effective, a tolerant or resistant strain of fungi may be present. Discontinue the use of Thiophanate Methyl 4.5F Select for at least one season. Do not use products containing thiabendazole as substitutes for Thiophanate Methyl 4.5F Select, as they are of similar chemistry and will contribute to the development of resistance. As long as these precautions are followed, Thiophanate Methyl 4.5F Select can be useful for disease control even if resistant strains are present.

CHEMIGATION INSTRUCTIONS

Apply this product only through sprinkler irrigation systems including center pivot, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set, or hand move, or drip (mini-micro sprinklers, strip tubing, trickle) 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 non-uniform distribution of treated water.

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

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.

Do not connect the chemigation system to any public water system. Public water system means a system for the provision 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.

SYSTEM REQUIREMENTS

Systems utilizing a pressurized water and pesticide injection system must meet the following requirement:

- 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
- 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.

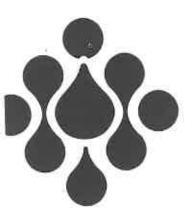
INSTRUCTIONS FOR SPRINKLER (OVERHEAD) IRRIGATION, DRIP (TRICKLE) IRRIGATION

Observe the requirements in the SYSTEM REQUIREMENTS section above. Do not apply when wind speed favors drift beyond the area

Apply Thiophanate Methyl 4.5F Select only through systems containing anti-siphon and check valves designed to prevent water source contamination or overflow of the mix tank and containing interlocking controls between the metering device and the water pump to ensure simultaneous shut off.

Maintain a gentle continuous agitation in mix tank during mixing and application to ensure a uniform suspension.





TM 4.5F **SELECT™**

FUNGICIDE

Greater accuracy in calibration and distribution will be achieved by injecting a large volume of a more dilute suspension per unit time.

Application of more than the specified quantities of irrigation water per acre can result in decreased product performance.

Do not apply when wind speed favors drift, when system connections or fittings leak, when nozzles do not provide uniform distribution, or when lines containing the product cannot be flushed and must be dismantled and drained. In a center pivot system, block the nozzle set nearest the well/pivot/injection unit to prevent spray being applied to this area.

Where sprinkler distribution patterns do not overlap sufficiently, unacceptable disease control may result.

Allow sufficient time for pesticide to be flushed through all lines and all nozzles before turning off irrigation water.

Apply Thiophanate Methyl 4.5F Select in conjunction with chemically neutral liquid fertilizers. Avoid application in conjunction with highly alkaline fertilizers such as aqueous ammonia, as degradation of the pesticide could result in reduced performance.

Check local restrictions and requirements regarding sprinkler irrigation applications, as they vary from state to state.

SPRAY PREPARATION

Remove scale, pesticide residues, and other foreign matter from the chemical tank and entire injector system. Flush with clean water. Prepare a suspension of Thiophanate Methyl 4.5F Select in a mix tank. Fill the tank with 1/2 or 3/4 the desired amount of water. Start mechanical or hydraulic agitation. Slowly add the required amount of Thiophanate Methyl 4.5F Select and then the remaining volume of water.

APPLICATION INSTRUCTIONS

Observe all SYSTEMS REQUIREMENTS and APPLICATION INSTRUCTIONS. Set sprinkler system to deliver 0.4 inches of water per acre. Volumes of water higher than this could reduce efficacy. Start sprinkler and then uniformly inject the suspension of Thiophanate Methyl 4.5F Select into the irrigation water line so as to deliver the desired rate per acre. Inject the suspension of Thiophanate Methyl 4.5F Select with a positive displacement pump into the main line ahead of a right angle to ensure adequate mixing.

NOTE: When treatment with Thiophanate Methyl 4.5F Select has been completed, do not irrigate the treated area for 24 to 48 hours to prevent washing the chemical off the crop.

Drip (Mini-Micro Sprinklers, Strip Tubing, Trickle) Irrigation-Notes

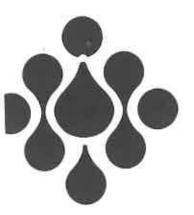
Observe all SYSTEM REQUIREMENTS and APPLICATION INSTRUCTIONS.

Preharvest Interval (PHI)

The required days between last application and harvest are given in the REMARKS section for each crop.

REI = Restricted-Entry Interval





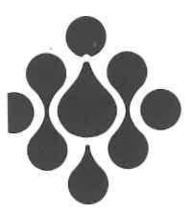
TM 4.5F

FUNGICIDE

Annli	cation	Dates

plication Rates CROP	DISEASES	FL. OZ./ACRE/ APPLICATION	FL. OZ./ 100 GAL	REMARKS			
ALMONDS	Brown Rot Blossom Blight (Monilinia) Scab (Cladosporium sp.) Jacket Rot (Monilinia, Sclerotinia, Botrytis) Leaf Blight (Seimatosporium)	20 - 30.	-	Apply at early pink bud and early petal fall Apply at pink bud for Brown Rot control. For all other applications Thiophanate Methyl 4.5F Select can be applied with a contact fungicide like Ziram 76F for broad-spectrum control and resistance management.			
	 Do not apply more than 30 fl. oz Do not apply more than 60 fl. oz The PHI is 1 day. The REI is 3 days. 	of product per acr	e per applicati e per season.				
APPLES	Apple Scab (Venturia) Black pox* (Helminthosporium papulosum) Flyspeck (Zygophiala sp.) Powdery Mildew (Podosphaera sp.) Sooty Blotch (Gloeodes) Black Rot (Botryosphaeria obtusa) Brooks fruit spot (Mycosphaerila sp.) White rot* (Botryosphaeria sp.)		3.75-5 cre per year to st-harvest dise	Apply at 5- to 10-day intervals from green tip through petal fall; continue at 7- to 14-day intervals as cover sprays. Ital including both applications beginning at eases.			
	Probaryest use to control Post-Harvest	- A Land to control Poet Maryert Ricesses on Annies					
	Storage Rot Blue Mold (Pencillium expansum) Gray Mold (Botrytis cinerea) Bulls-Eye Rot (Neofabraea spp.)	1	3.75-5	weeks to 3 days of harvest. Application closer to harvest provides better efficacy. Application of a non-benzimidazole post-harvest fungicide such as Penbotec® or Schlor® will provide additional protection from post-harvest diseases.			
	Do not apply more than 80 fl. petal fall and preharvest appli Do not use a benzimidazole fu Thiophanate Methyl 4.5F Sele The PHI is 1 day. The REI is 2 days. The REI is 2 days. The REI is 2 days.	ingicide such as Me	ocre per year to ost-harvest dis ertect® post-h	otal including both applications beginning at leases. arvest following a pre-harvest application of			



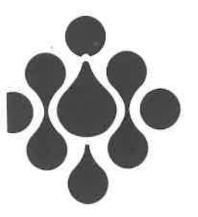


TM 4.5F SELECT

FUNGICIDE

CROP	DISEASES	FL. OZ./ACRE/ Application	FL. OZ <i>i</i> 100 GAL	REMARKS	
BEANS (Dry and Succulent) including: Lima bean, Snap bean, Kidney bean, Mung bean, Navy bean, Pinto bean, Wax bean, Broad bean, Fava bean, Asparagus bean, Blackeyed pea, Cowpea, Sweet lupine, White lupine White Sweet lupine, Grain lupine, Chick pea, Garbanzo bean	Gray Mold (Botrytis) White Mold (Sclerotinia) Anthracnose (Colletotrichum)	OR 20-30 Use a maximum of 80 fl. oz. of product per acre (2.8 lbs. a.i.) per crop cycle, with a minimum 7-day spray interval.	ct per year.	For one application: Apply when 100% of plants have at least one open bloom or when conditions are favorable for disease development. OR For multiple applications: Make first application when 10%-30% of plants have at least one open bloom, and follow with sequential applications on a 4- to 7-day interval.	
	Do not apply more than 80 fl. oz./acre of product per year. The REI is 1 day for all succulent beans and 3 days for dry beans. The PHI is 14 days for succulent beans and lima beans. PHI is 28 days for dry beans. For California Unit: PHI is 14 days for succulent beans. PHI is 28 days for dry beans and lima beans.				

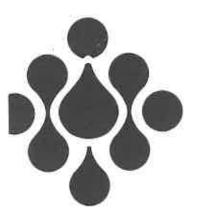




TM 4.5F SELECT

CROP	DISEASES	FL. OZJACRE/ Application	FL. 0Z/ 100 GAL	REMARKS	
Cucureits: Cantaloupe, Casaba Cucumbers, Melons, Pumpkins, Summer and winter squash, Watermelons	Acremonium/ Cephalosporium Hypocotyl rot	10	-	Apply in-furrow, on top of the seeds at planting. Do not use less than 10 gallons of water per acre.	
	Anthracnose* (Colletotrichum) Gummy Stem Blight* (Didymella) Powdery Mildew (Erysiphe) Target Spot* (Corynespora)	10	_	Begin applications when plants begin to run or when disease first appears and repeat at 7- to 14-day intervals as needed. For Target Spot, use 7-day intervals as needed.	
	Belly Rots (Rhizoctonia,Fusarium)	10	-	For Belly Rots, apply in sufficient volume to allow runoff to the soil. Will not control Pythium or Phytophthora.	
	Suppression of vine decline (Monosporascus) Charcoal rot (Macrophomina)	10	_	For disease suppression, apply at 14-day intervals beginning at emergence and continuing to harvest. Applications weekly or biweekly, beginning 4-6 weeks prior to harvest, will also offer suppression but may not be as effective as a season-long program.	
	*Not registered for use in California Do not apply more than 60 fl. oz. product (2 lbs. a.i.) per acre per season from any combination of application timings. Thiophanate Methyl 4.5F Select can be tank mixed with mancozeb or chlorothalonil for additional disease control and resistance management. Follow resistance management guidelines under DIRECTIONS FOR USE. The PHI is 1 day.				

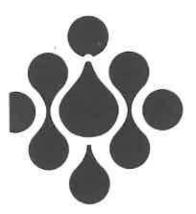




TM 4.5F SELECT

CROP	DISEASES	FL. OZ./ACRE/ Application	FL. OZ.J 100 GAL	REMARKS			
Cucursits: Cantaloupe, Casaba Cucumbers, Melons, Pumpkins, Summer and winter squash, Watermelons	Acremonium/ Cephalosporium Hypocotyl rot	10	_	Apply in-furrow, on top of the seeds at planting. Do not use less than 10 gallons of water per acre.			
	Anthracnose* (Colletotrichum) Gummy Stem Blight* (Didymella) Powdery Mildew (Erysiphe) Target Spot* (Corynespora)	10	ੱ ਵੱ	Begin applications when plants begin to run or when disease first appears and repeat at 7- to 14-day intervals as needed. For Target Spot, use 7-day intervals as needed.			
	Belly Rots (Rhizoctonia,Fusarium)	10	-	For Belly Rots, apply in sufficient volume to allow runoff to the soil. Will not control <i>Pythium or Phytophthora</i> .			
	Suppression of vine decline (Monosporascus) Charcoal rot (Macrophomina)	For disease suppression, apply at 14-day beginning at emergence and continuing to Applications weekly or biweekly, beginning weeks prior to harvest, will also offer supp but may not be as effective as a season-lo program.					
	Do not apply more than 6 timings. Thiophanate Methyl 4.5F control and resistance m	ot registered for use in California On not apply more than 60 fl. oz. product (2 lbs. a.i.) per acre per season from any combination of application mings. Thiophanate Methyl 4.5F Select can be tank mixed with mancozeb or chlorothalonil for additional disease control and resistance management. Follow resistance management guidelines under DIRECTIONS FOR USE. The PHI is 1 day.					

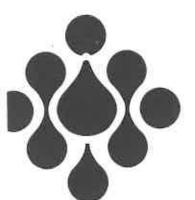




TM 4.5F SELECT

PHI is 0 days. rot otinia cepivorum) egistered for use in Californior this use through any type ot apply more than 40 fl. oz. PHI is 0 days. REI is 3 days. Leaf Spot (Cercospora) eaf Spot (recospora) eaf Spot (recospora) eaf Cosporidium) Puccinia) rot (Rhizoctonia) olotch (Ascochyta)	of irrigation sys	ate Methyl 4.	Completely immerse garlic cloves in suspension for at least five minutes. Continuously agitate the solution tank by hydraulic or mechanical means. After treatment, remove cloves from solution and drain over sand. Dry cloves after treatment and prior to planting. Apply Thiophanate Methyl 4.5F Select by spraying directly into the open furrow at the time of planting seed, sets, or bulbs. 5F Select per year. Begin applications when disease first appears and repeat at 14-day intervals, as needed.			
rot otinia cepivorum) egistered for use in Californi or this use through any type ot apply more than 40 fl. oz. PHI is 0 days. REI is 3 days. Leaf Spot (Cercospora) Leaf Spot L	ia of irrigation sys /acre Thiophana 10	ate Methyl 4.	directly into the open furrow at the time of planting seed, sets, or bulbs. 5F Select per year. Begin applications when disease first appears and			
egistered for use in Californi or this use through any type ot apply more than 40 fl. oz. PHI is 0 days. REI is 3 days. Leaf Spot (Cercospora) Leaf Spot (Puccinia) Pruccinia) Cot (Rhizoctonia) Colotch (Ascochyta)	ia of irrigation sys /acre Thiophana 10	ate Methyl 4.	directly into the open furrow at the time of planting seed, sets, or bulbs. 5F Select per year. Begin applications when disease first appears and			
or this use through any type of apply more than 40 fl. oz. PH I is 0 days. REI is 3 days. _eaf Spot (Cercospora) eaf Spot ercosporidium) (Puccinia) fol (Rhizoctonia) ool (Chizoctonia)	of irrigation sys	ate Methyl 4.	Begin applications when disease first appears and			
Leaf Spot (Cercospora) Leaf Spot Lea	4 5E Solect alor	-	Begin applications when disease first appears and repeat at 14-day intervals, as needed.			
not use Thiophanate Methyl	4 5E Select alor					
 Do not use Thiophanate Methyl 4.5F Select alone. Use only in combination with another non-benzimidazole fungicide such as mancozeb at 1.5 lbs./acre or chlorothalonil. Follow resistance management guidelines under DIRECTIONS FOR USE. Do not apply more than 40 fl. oz./acre of Thionphanate Methyl 4.5F Select per year. The PHI is 14 days. The REI is 1 day. 						
n Spot (Cercospora) y Spot (Mycosphaerella) Spot (Gnomonia) lery Mildew (Microsphaera) (Fusicladium) end blight otryosphaeria sp.) te leaf spot ristulariella sp.)	20	_	Begin applications when first leaves are showing and repeat at 3- to 4-week intervals until shuck split. Do not spray after shuck split.			
Do not apply more than 60 fl. oz./acre of Thiophanate Methyl 4.5F Select per season. Follow resistance management guidelines under DIRECTIONS FOR USE. The PHI is 1 days. The REI is 3 days.						
t blight (Botrytis, stryosphaeria)	30-40	-	Apply at bloom. Apply in a minimum of 100 gallons per acre by ground or 20 gallons per acre by air. For aerial application, fly over every row or center.			
	y Spot (Mycosphaerella) Spot (Gnomonia) lery Mildew (Microsphaera) (Fusicladium) end blight otryosphaeria sp.) te leaf spot ristulariella sp.) not apply more than 60 fl. or ow resistance management PHI is 1 days. REI is 3 days. It blight (Botrytis, stryosphaeria)	y Spot (Mycosphaerella) Spot (Gnomonia) Hery Mildew (Microsphaera) (Fusicladium) end blight otryosphaeria sp.) tel leaf spot ristulariella sp.) not apply more than 60 fl. oz./acre of Thiopl ow resistance management guidelines under PHI is 1 days. REI is 3 days. It blight (Botrytis, ttryosphaeria) 1 days Agolium (Botrytis) 1 day	y Spot (Mycosphaerella) Spot (Mycosphaerella) Spot (Gnomonia) Hery Mildew (Microsphaera) (Fusicladium) end blight btryosphaeria sp.) tee leaf spot tristulariella sp.) not apply more than 60 fl. oz./acre of Thiophanate Meth- bow resistance management guidelines under DIRECTIO PHI is 1 days. REI is 3 days. t blight (Botrytis, ttryosphaeria) not apply more than 40 fl. oz./acre of Thiophanate Meth-			



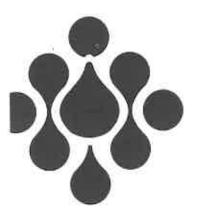


TM 4.5F SELECT

CROP	DISEASES	FL. OZ./ACRE/ APPLICATION	FL. OZ./ 100 GAL	REMARKS		
POTATOES	White mold (Sclerotinia spp.)	20-30	-	Make first application just prior to row closure to full bloom of the primary flower clusters, prior to petal drop, followed by a second application 14 days later, and at 14-day intervals if conditions for disease development are favorable. Thorough coverage of the flowers, stems and branches is essential for disease control. Apply prior to the development of disease for best results. May be tank mixed with other fungicides labeled for early and late blight control. Prime Source, LLC does not recommend aerial application for control of this disease on this crop.		
	 Do not apply more than 80 fl. oz./acre of Thiophanate Methyl 4.5F Select per season. The PHI is 21 days. The REI is 2 days. 					

CROP	DISEASES	FL. OZJACRE/ Application	FL. OZ.J 100 GAL	REMARKS
SOYBEANS	Anthracnose (Colletotrichum) Brown Spot (Septoria) Frog-eye Leaf Spot (Cercospora) Stem and Pod Blight (Diaporthe, Phomopsis) Purple Seed Stain (Cercospora)	10-20	_	Apply from full bloom when pods are 1/8-1/4 inch in length. Make a second application 14 to 21 days later. Do not make the second application later than 14 days after pods average 1/4 inch in length or when beans form in the pod. Use the high rate under severe disease pressure.
		20	_	FOR SEED BEANS ONLY: For seed quality, make a single application at the high rate when beans form in the pod.
	White mold (Sclerotinia)	15-20	-	Make one application at early bloom (R-1 to R-2 stage) followed by a second application 14 days later if conditions are favorable for continued disease pressure. Thorough coverage of the flowers, stems and branches is essential for disease control. Use a minimum of 5 gallons of water per acre by air.
	Aerial blight (suppression)	20	_	Make initial application when disease threatens (before visual symptoms appear) and repeat 14-21 days later if needed. Applications later than 14 days after pods average 1/4 inch in length are prohibited.
	 Do not apply more than 40 fl. o Do not make more than 2 appli Do not graze or feed treated vir The PHI is 21 days. The REI is 1 day. 	cations per year	r.	/i 4.5F Select per year.





TM 4.5F SELECT™

CROP	DISEASES	FL. OZ./ACRE/ Application	FL. 0Z./ 100 GAL	REMARKS
STONE <u>FRUITS</u> : Apricots	Brown Rot Blossom Blight Fruit Brown Rot (<i>Monilinia</i>)	20-30(use 30 in California)	6.7-10	Apply at early bloom (red bud). Make a second application at full bloom. If needed under severe disease pressure, apply additional sprays at 10- to 14-day intervals between full bloom and final preharvest spray.
Cherries: Sweet and Sour	Brown Rot Blossom blight Fruit Brown Rot (Monilinia)	20-30 (use 30 in California	6.7-10	Apply at early bloom (early popcorn). Make a second application at full bloom. If needed under severe disease pressure, apply additional sprays at 10- to 14-day intervals between full bloom and final preharvest spray.
	Cherry leaf spot (Coccomyces)	22.5-30	7.5-10	Apply at petal fall or before, when leaves first unfold, and at first, second and third cover sprays at 10- to 14-day intervals and one spray 14 to 21 days after harvest.
	Powdery Mildew (Podosphaera and Sphaerotheca)	20-30 (use 30 in California) PLUS 22.5-30	6.7-10 PLUS 7.5-10	Apply at early bloom (early popcorn). Make a second application at full bloom. PLUS Apply at shuck fall and first cover.
Nectarines	Brown Rot Blossom Blight Fruit Brown Rot (Monilinia)	20-30 (use 30 in California)	6.7-10	Apply at early bloom (pink bud). Make a second application at full bloom if conditions favor disease development. If needed under severe disease pressure, apply additional sprays at 10- to 14-day intervals between full bloom and final preharvest sprays.
Peaches	Brown Rot Blossom Blight Fruit Brown Rot (Monilinia)	20-30 (use 30 in Califomia)	6.7-10	Apply at early bloom (pink bud). Make a second application at full bloom if conditions favor disease development. If needed under severe disease pressure, apply additional sprays at 10- to 14-day intervals between full bloom and final preharvest sprays.
	Peach Scab (Cladosporium)	20-30 (use 30 in California) PLUS 22.5-30	6.7-10 PLUS 7.5-10	Apply at early bloom (pink bud). Make a second application at full bloom if conditions favor disease development. PLUS Apply at shuck split and at first cover spray.





TM 4.5F SELECT

CROP	DISEASES	FL. OZ./ACRE/ Application	FL. OZ./ 100 GAL	REMARKS
Plums and Prunes	Brown Rot Blossom Blight Fruit Brown Rot (Monilinia)	20-30 (use 30 in California)	6.7-10	Apply at early bloom (green tip). Make a second application at full bloom. If needed under severe disease pressure, apply additional sprays at 10- to 14-day intervals between full bloom and final preharvest sprays.
	Black knot (Dibotryon)	20-30 (use 30 in California)	6.7-10	Apply at pre-bloom, petal fall, and at first, second, and third cover spray at 10- to-14-day intervals.
	Leaf spot (Coccomyces)	20-30 (use 30 in California)	6.7-10	Apply at petal fall, shuck, and at first, second, and third cover sprays at 10- to 14-day intervals and 1 spray 14 to 21 days after harvest.
	Do not apply more than 80 fl. Follow resistance management The PHI is 1 day. The REI is 2 days.	oz./acre of Thioph nt guidelines under	anate Methy DIRECTIO	/I 4.5F Select per year INS FOR USE.

CROP	DISEASES	FL. OZ./ACRE/ Application	FL. 02./ 100 GAL	REMARKS	
STRAWBERRIES	Suppression only: Crown Rot* (Colletotrichum spp.)	15-20	-	Begin applications after establishment of the transplants and continue through first bloom at 10- to 14-day intervals. Use the higher rate if the fields have a history of Colletotrichum crown rot and/or conditions are favorable for development of the disease. Will not control Phytophthora species.	
	Fruit rot (Botrytis) Leaf blight (Dendrophoma) Leaf scorch (Diplocarpon) Powdery mildew (Sphaerotheca)	15-20	_	Begin applications at early bloom and continue at 7- to 10-day intervals. Use higher rate under conditions of severe disease pressure.	
	*Not registered for use in California. • Do not apply more than 80 fl. oz. of this product per acre per year. • Follow resistance management guidelines under DIRECTIONS FOR USE. • The PHI is 1 day. • The REI is 1 day.				





TM 4.5F SELECT™

CROP	DISEASES	FL. OZ./ACRE/ Application	FL 0Z./ 100 GAL	REMARKS		
SUGARBEET	Cercospora leaf spot (Cercospora)	10-20 (use 10 in California)	-	Apply when conditions become favorable for disease development before the disease appears and follow with a non-benzimidazole fungicide within 14 days of application or as needed. Tank mix Thiophanate Methyl 4.5F Select with a protectant fungicide such as mancozeb or triphenyltin hydroxide when resistant strains of Cercospora are present in the field. For areas east of the Rocky Mountains: Do not make more than one application of Thiophanate Methyl 4.5F Select per season for Cercospora Leaf Spot.		
	Powdery mildew (Erysiphe spp.)	10-20 (use 10 in California)	_	Apply as soon as disease symptoms appear and follow with a non-benzimidazole fungicide at a 14-day interval or as needed. Thiophanate Methyl 4.5F Select can be tank mixed with sulfur products such as Microthiol® Disperss® at 5 to 10 lbs/acre for additional disease control and resistance management.		
	Do not apply more than 60 fl. oz./acre of Thiophanate Methyl 4.5F Select per year. Follow resistance management guidelines under DIRECTIONS FOR USE. The PHI is 21 days. The REI is 1 day.					
TRITICALE AND FALL SEEDED WHEAT Idaho, Oregon, and Washington only	Foot Rot Strawbreaker Eye Spot (Pseudocercosporella spp.)	20	_	Apply Thiophanate Methyl 4.5F Select at the rate indicated in a single application by air or ground after wheat is tillered but before stem elongation has begun. Use sufficient water to obtain thorough coverage.		
	Do not apply more than 20 fl. oz./acre of Thiophanate Methyl 4.5F Select per year. Do not cut for hay within 90 days of application. Do not allow livestock to graze in treated areas before harvest. The PHI is 90 days. The REI is 1 day.					

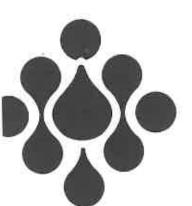




TM 4.5F SELECT

CROP	DISEASES	MAXIMUM Applicable rate Per acre	RATE, MINIMUM Gallonage	REMARKS
CONIFERS Pine Austrian Red Scots Christmas Trees	Tip blight (Diplodia)	60 fl. oz.	20 fl. oz. product per acre applied in spray solution at a rate of 100 gallons of spray per acre	Apply at bud break. Repeat 10 to 14 days later, just before needles emerge from sheath; repeat again 10 to 14 days after needle emergence.
Fir Douglas	Swiss needle cast (Phaecryptopus) Rhabdocline needle cast	100 fl. oz.	20 fl. oz. product per acre applied in spray solution at a rate of 50 gallons of spray per acre	Apply initially in early May. Repeat at 4-week intervals.
	• Fir: Do not apply more	than 100 tl. oz./ad r to improve covera ge with mist-blowe	re of Intophanate M	Nethyl 4.5F Select per year. lethyl 4.5F Select per year. nd higher gallonage with conventional sprayers.
CONIFERS (Seedling treatment) Longleaf	Brown needle blight (Scirrhia)	-	1.25 fl. oz. per 9,5 oz. of dry kaolinite clay for seedling roots	Wet seedling roots in clean water, then apply Thiophanate Methyl 4.5F Select / kaolinite mixture to wet roots.
Lobiolty Longleaf Slash	Fusarium and Rhizoctonia root rot	_	2 fl. oz. / 50 oz. kaolinite clay, plus enough water to make a slurry	Thoroughly cover seedling roots with Thiophanate Methyl 4.5F Select / kaolinite slurry.
	Do not apply mixture During treatment, avo Thiophanate Methyl The REI is 12 hours.	d exceptive drying	a of roots or exposur	re to temperatures greater than 90° or less than 32°F. r Phytophthora.





TM 4.5F SELECT

FUNGICIDE

HORTICULTURAL APPLICATIONS GREENHOUSE, NURSERY, AND LANDSCAPE REI-12 HOURS

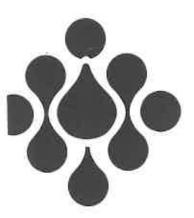
Thiophanate Methyl 4.5F Select provides broad-spectrum control of many foliar, stem, and below-ground diseases on a wide range of horticultural plants grown or maintained under a variety of conditions. Apply Thiophanate Methyl 4.5F Select 14 to 21 days prior to when a particular disease usually appears and at the very latest, upon first sign of disease. Use 7- to 14-day spray intervals with 14 days being for preventive treatments and the 7-day interval for times when conditions are conducive to disease development. Add an acceptable wetting agent to the spray tank to increase product efficacy for hard-to-wet foliage. Use a spreader-sticker when excessive and repeated foliar wetting occurs. Use Thiophanate Methyl 4.5F Select to control listed diseases on non-commercial fruit and nut trees. Do not use fruit or nuts from trees treated with this product as food. Do not apply this product to home orchards or backyard fruit trees after fruit set.

Note: Thiophanate Methyl 4.5F Select has been determined to be safe for use on the plant types listed in these directions for use based on cumulative data derived from research trials and historical field use. As all species and cultivars have not been tested, perform trial applications if a user wishes to make an application to a plant type not listed on the label but found on a similar use site and for disease that is listed on the label. To conduct a trial application, apply at least two applications to at least 25 trial plants at the highest concentration, 7 days apart. Evaluate 7 days after the last application before initiating full-scale application. Do not use this product on the following plants: Swedish Ivy (Nephrolepsis exaltata), Boston Fern (Plectranthus australis), and Easter Cactus (Hatiora gaertneri).

PLANT TYPE	SUCH AS BUT NOT LIMITED TO:	
Herbaceous Bedding	Ageratum, Begonia, Canna, Coleus, Dahlia, Dusty Miller, Foxglove, Fuchsia, Geranium, Impatiens, Lavender, Marigold, Pansy, Petunia, Pinks, Primrose, Salvia, Statice, Strawflower, Tickseed,	
	Verbena Like Beingettig	
Flowering	Chrysanthemum, Hydrangea, Hollyhock, Iris, Lily, Poinsettia	
Tropical Foliage	Dieffenbachia, Dracaena, English Ivy, Philodendron, Pothos	
	Azalea, Hibiscus, Holly, Ligustrum, Rhododendron, Rose, Pyracantha	
Woody Omamentals		
Evergreen Trees	Douglas Fir, Fir, Larch, Pine, Spruce	
Deciduous Trees*	Ash, London Plane, Maple, Oak, Sycamore, Walnut	
Flowering Trees*	Cherry, Crabapple, Hawthorn, Mountain Ash, Pear	

^{*}Do not use fruit or nuts from treated trees as food or feed.





TM 4.5F **SELECT**

Scab Woody and herbaceous ornamentals

Woody and herbaceous ornamentals, ornamental nut and fruit trees

Pyracantha, flowering crab, ornamental fruit and nut trees

Woody and herbaceous ornamentals

Woody and herbaceous ornamentals

Ornamental nut and fruit trees

Herbaceous ornamentals

Woody ornamentals

FUNGICIDE

FOLIAR SPRAY PLANT TYPES AND DISEASES CONTROLLED

PLANT TYPES

PIGEOCICE)	PLANT TYPES
DISEASE(S)	Woody ornamentals, shade trees1
Anthracnose	Herbaceous ornamentals
Ascochyta Blight	
Black spot	Roses
Botrytris (Gray Mold)	Woody and herbaceous omamentals
	Woody and herbaceous ornamentals
Brown Rot	Woody and herbaceous ornamentals
Colletotrichum	Woody and herbaceous ornamentals
Cercospora Leaf Spot	
Corynespora Leaf Spot	Ligustrum
Did all a Last Cost	Iris
Didymellina Leaf Spot	Shade and ornamental trees
Diplodia Tip Blight (Diplodia pinea)	Azalea, rhododendron2
Ovulinia	Azaisa, moudenantale
Entomosporiumi eaf	Spot Woody and herbaceous ornamentals

FOLIAR SPRAY APPLICATIONS

EntomosporiumLeaf

Fusicaladium Leaf

Phomopsis Blight

Pine Tip Blights

Powdery Mildew

Ramularia Leaf Spot

Septoria Leaf Spot

Rust Diseases

Scab

APPLICATION RESTRICTIONS

Maximum Single Application Rates:

Ornamentals: Do not exceed the maximum single application rate of 85.3 oz. Thiophanate Methyl 4.5F Select per acre (3.0 lbs. thiophanate-methyl active ingredient per acre)

Cut Flowers: Do not exceed the maximum single application rate of 14.2 oz. Thiophanate Methyl 4.5F Select per acre (0.5 lb. thiophanatemethyl active ingredient per acre)

All Ornamentals: Do not apply more than 66.6 gallons Thiophanate Methyl 4.5F Select (300 lbs. thiophanate methyl active ingredient per acre per season)

Hydraulic Application Mixing Instructions

Add the required amount of Thiophanate Methyl 4.5F Select to a partially filled spray tank agitated by mechanical or hydraulic means and then add the remaining volume of water. Maintain continuous agitation to keep the material in suspension and apply with properly calibrated spray equipment.

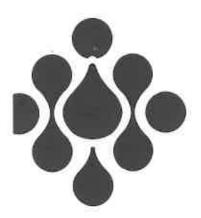
Application Concentrations (Mechanical or Hand-Held):

Use the labeled amount of Thiophanate Methyl 4.5F Select per 100 gallons of water for the prevention and control of the diseases shown below.



Woody and herbaceous ornamentals Venturia Leaf Scab ¹ Begin at bud and make 2 or 3 additional applications at 10- to 14-day intervals.

² Begin treatment as flowers open. Addition of a spray surfactant to the spray mixture improves distribution of the spray on hard-to-wet plants such as roses.



TM 4.5F SELECT™

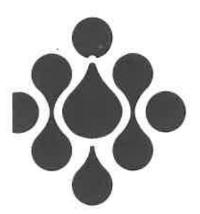
FUNGICIDE

ENLIAR DISEASES

DISEASE(S) CONTROLLED	CONCENTRATION OF THIOPHANATE METHYL 4.5F SELECT FL. OZ./100 GALS	REMARKS
Anthracnose (Colletotrichum)	10.75-20	Apply as buds break or at first sign of disease. Repeat application at 7- to 14-day intervals as needed during disease period.
Black Spot of Rose (Diplocarpon rosae)	10.75-20	Apply early summer or at first sign of disease. Repeat application every 7 to 14 days as needed during disease period.
Brown Rot and Blight (Monlinia,Sclerotina, Whetzellinia)	10.75-20	Apply late spring or at first sign of disease. Repeat application every 7 to 14 days as needed during the disease period.
Fusicladium and Venturia Leaf Scabs on: Crabapple, Hawthorn, Pear, Mountain Ash, Pyracantha, etc.	10.75-20	Apply as buds break. Repeat application every 7 to 14 days during disease period. Effective control requires coverage during expansion. Rotations with chlorothalonil or propiconazole can be utilized.
Leaf Spots and Blights caused by: Ascochyta, Blumeriella, Botrytis, Cercospora, Coccomyces, Corynespora, Curvularia, Didymellina, Entomosporium, Fabraea, Fusarium, Ramularia, Rhizoctonia, Marssoninia, Mycosphaerella, Myrothecium, Phoma, Physalaspora, Schizothyrium, Septoria, Sphaceloma	10.75-20 (10-14.5; California Only)	Make applications when disease symptoms first appear. Repeat every 7 to 14 days during disease period. Rotations with chlorothalonil can be used.
Ovulinia Blight	7.25-20	Apply as flowers open. Repeat every 7 to 14 days during disease period.
Powdery Mildews Erysiphe,Microsphaera, Phyllactinia,Podosphaera, Oidium,Sphaerotheca	10-20	Apply when disease first appears and repeat application every 7 to 14 days. Rotations with other effective products can be used.
Rust Diseases caused by: Puccinia, Gymnosporangium, Uromyces	10.75-20	Apply late spring or when symptoms first appear. Repeat applications every 7 to 14 days during disease period. Rotations with other effective products can be used.
Tip Blight of Pine Sphaeropsis sapinea, Diplodia pinea	14.5-20	Begin applications in the spring when new growth starts. Make a second application just prior to needle emergence from the sheath and a third application 7 days later. Ensure thorough coverage.
Twig Blights, Cankers, and Diebacks Diaporthe, Kabatina, Phoma, Phomopsis	14.5-20	Apply when symptoms first appear. Repeat applications every 7 to 14 days during disease period.

Adjuvants: Where rainfall and/or overhead irrigation is the norm, use of a compatible spreader/sticker is suggested. Where wetting of foliage is difficult, use a compatible wetting agent. Follow the phytotoxicity precautions described in the HORTICULTURAL APPLICATIONS section of this label.





TM 4.5F SELECT

FUNGICIDE

SOIL DRENCH APPLICATIONS

Mixing Instructions: Add required amount of Thiophanate Methyl 4.5F Select to a partially filled tank agitated by mechanical or hydraulic means. Add the remaining required amount of water. Maintain continuous agitation throughout application to keep the material in suspension.

Application Concentrations/Rates and Timing for Disease Control: Create a drench solution by mixing 7.5 to 20 fl. oz. of Thiophanate Methyl 4.5F per 100 gallons of water. Apply as a drench or heavy spray at the rate of 0.5 to 2 pints per square foot (100 gallons per 400 to 1,600 square feet). For small pots and shallow flats up to 4 inches in size, apply at 1 pint per square foot. For containers and pots 4 inches or larger, refer to the following table for the volume to apply. Make repeat applications at 4- to 8- week intervals depending on disease presence and conditions for disease development.

Container Type	Drench Solution Volume to Apply/Container		
	1 pt./ sq. ft. Rate	2 pt./sq. ft. Rate	
4 inch	2 fl. oz.	_	
5 inch	2.5 fl. oz.	_	
6 inch	(iii)	6.5 fl. oz.	
7 inch	12	8.5 fl. oz.	
8 inch	_	11 fl. oz.	
9 inch	2,5	14 fl. oz.	
10 inch	35	17.5 fl. oz.	

For containers larger than 10 inches, a drench volume of 21/2 to 3 pints per square foot of surface area is required.

Plant Types: Containerized woody shrubs, trees, herbaceous/bedding, flowering, and tropical foliage plants and flowers and bedding plants in the landscape.

Note: Do not apply this product to plug trays or seedling flats at time of seeding.

Soil Diseases Controlled: Botrytis, Cylindrocladium, Fusarium, Gliocladium, Myrothecium, Penicillium, Ramularia, Rhizoctonia, Sclerotinia, and Thielaviopsis.

Note: Pythium, Phytophthora and Cylindrocladium spathiphylli are not controlled by Thiophanate Methyl 4.5F Select.

PLANT DIP TREATMENT

Mixing Instructions: Mix as described in the FOLIAR DISEASES and SOIL DRENCH APPLICATIONS sections of this label. Maintain continuous agitation during application.

Application Concentration and Dipping Time

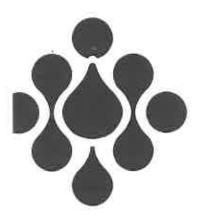
Plants or Cuttings: Use 14.5 to 20 fl. oz. of Thiophanate Methyl 4.5F Select per 100 gallons of water. Immerse plants or cuttings for 10 to 15 minutes, remove, and allow to drain and dry. Note that the PERSONAL PROTECTIVE EQUIPMENT section of this label included protective clothing for dip treatment.

Bulbs, Corms, Tubers, and Rhizomes: Use 14.5 to 20 fl. oz. of Thiophanate Methyl 4.5F Select per 100 gallons of water or two teaspoons of Thiophanate Methyl 4.5F Select per gallon of water. Soak cleaned bulbs for 15 to 30 minutes in warm dip (80-85°F) within 48 hours of digging. Dry bulbs after treatment. If bulbs are for forcing, treat bulbs that have been heat cured.

Plant Types: Plants, cuttings, cane sections of woody herbaceous, flowering and tropical foliage plants. Bulbs, corms, tubers, and rhizomes of plants such as but not limited to Caladium, Easter Lily, Tulip, Gladiolus, Daffodil, Iris.

Diseases Controlled: Botrytis, Cylindrocladium, Fusarium, Gliocladium, Myrothecium, Penicilium, Ramularia, Rhizoctonia, Sclerotinia, and Thielaviopsis.





TM 4.5F SELECT™

FUNGICIDE

TURF APPLICATIONS

Use Thiophanate Methyl 4.5F Select against certain foliar and soil diseases for use on all turf types such as golf course greens, tees and fairways, athletic fields, cemeteries, parks, and commercial and home lawns. Use Thiophanate Methyl 4.5F Select both preventatively and curatively; it is not phytotoxic on turfgrass. Do not use Thiophanate Methyl 4.5F Select on turf being grown for sale or other commercial uses such as sod.

For use only by certified applicators and those under their direct supervision. Do not apply with fixed wing or rotary aircraft.

Mixing Instructions: Add the required amount of Thiophanate Methyl 4.5F Select to a partially filled tank agitated by mechanical or hydraulic means. Add the remaining required amount of water. Maintain continuous agitation to keep the material in suspension. For best results, use spray mixture the same day it is prepared.

Turf Types: All cool season and warm season grasses (such as but not limited to Bentgrasses, Bermudagrasses, Bluegrasses, Fescues, Ryegrasses, St. Augustinegrasses and Zoysiagrasses) or their mixtures.

DISEASE(S) CONTROLLED	RATE OF Thiophamate Methyl 4.5F select Fl. 0z./1,000 Sq. ft. *	REMARKS
Anthracnose (Colletotrichum graminicola)	2-3.5 (3.5-5.3)**	Apply when disease first appears. Make additional applications at 14-day intervals as needed. Allow spray to dry on leaves with no watering in.
Dollar Spot (Sclerotinia homoeocarpa) Copper Spot (Gloeocercospora sorghi) Brown Patch and Zoysia Patch (Rhizoctonia solani) Red Thread (Laetisaria fuciformis)	2-3.5	Apply when disease first appears. Make additional applications at 14-day intervals as needed. Allow spray to dry on leaves with no watering in.
Pink Snow Mold (Microdochium nivale) (Only for those areas where snow cover is not present the entire winter)	2-3.5	Apply Thiophanate Methyl 4.5F Select in middle to late November before turf has stopped all growth activity. Lightly water application into the root zone for best results. For best results, use a spreader-sticker. Let second spray dry on leaf surfaces with no watering-in. Minimum spray interval is 14 days.
Gray Leaf Spot (Pyricularia grisea)	3,5-5,3	Apply when conditions are favorable for disease development. Continue at 14-day intervals. Let spray dry on leaves with no watering in.
Summer Patch (Magnaporthe poae)	3.5-5.3	For preventative treatment, make 3 applications at 21-day intervals beginning in early May. Water product into the root zone thoroughly after application. For suppression, apply two applications at 14-day intervals, beginning applications when the disease first appears.
Fusarium Blight (Fusarium roseum) Necrotic Ring Spot and Spring Dead Spot (Leptosphaeria korrae)	3.5-5.3	Make two applications at 14-day intervals beginning applications when the disease first appears.
Stripe Smut (Ustilago striiformis)	3.5-5.3	Make two applications at 14-day intervals when disease first appears. Water into root zone after application. For prevention, apply in the spring (just before grass begins growth) and in the fall.

^{*}Refer to the use sites and maximum application rates table to determine allowable rates for each application.



^{**}Use the 3.5 - 5.3 fl. oz. rate for curative response to Basal Stem Anthracnose.



TM 4.5F SELECT

FUNGICIDE

Turf Application Directions

Apply Thiophanate Methyl 4.5F Select uniformly over the area to be treated with a properly calibrated power sprayer. Apply after mowing or avoid mowing for 12 hours after application. Apply sufficient water to obtain thorough coverage; usually 1½ to 2½ gallons per 1,000 sq. ft. of turf area. When treating golf course greens, always treat aprons and approaches to golf greens.

SITE	MAXIMUM SINGLE APPLICATION RATE PER FL. 0z./1,000 Sq. Ft.	MAXIMUM SEASONAL APPLICATION RATE FL. 02.11,000 Sq. Ft.
Golf course green/tees/aprons	5.3	14.25
Golf Course Fairways (Except Florida)	3.5	3.5
Golf Course Fairways (Florida only)	1.75	1.75
Residential and Public areas (home lawns, parks, athletic fields, schools, day care centers)	1.75	7

Note to User: Do not graze animals on treated turf. Do not feed clippings to livestock or poultry.

STORAGE AND DISPOSAL

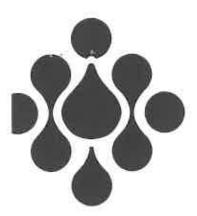
Do not contaminate water, food, or feed by storage or disposal or cleaning of equipment.

PESTICIDE STORAGE: Store in original container in dry area. Do not store in a manner where cross-contamination with other pesticides, fertilizers, food or feed could occur. If spilled during storage or handling, absorb with sand or other inert material and dispose of absorbent in accordance with the Pesticide Disposal instructions listed below.

PESTICIDE DISPOSAL: Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be used 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: 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. If recycling is not available, puncture or 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.





TM 4.5F SELECT

FUNGICIDE

LIMITATION OF WARRANTY AND LIABILITY

Read the entire directions for use, conditions 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 Prime Source, LLC. All such risks shall be assumed by the user or buyer.

DISCLAIMER OF WARRANTIES: To the extent consistent with applicable law, Prime Source, LLC 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 Prime Source, LLC is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. To the extent consistent with applicable law, Prime Source, LLC 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 Prime Source, LLC election, the replacement of product.

Penbotec is a registered trademark of Janssen Pharmaceutica N.V. Schlor is a registered trademark Mertect is a trademark of a Syngenta Group Company





Safety Data Sheet

1. IDENTIFICATION

Product Identifier

Product Name

Thiophanate Methyl 4.5F Select ABN: TM 4.5F Select

Registration Number(s)

UN/ID No

EPA Reg. No. 89442-14

UN3082

Recommended use of the chemical and restrictions on use

Recommended Use

EPA registered pesticide.

Details of the supplier of the safety data sheet

Manufacturer Address

Prime Source, LLC 4609 E. Boonville-New Harmony Rd. Evansville, IN 47725

Emergency Telephone Number

Emergency Telephone (24 hr)

For fire, spill and/or leak contact INFOTRAC: 1-800-535-5053 (North America) 1-352-323-3500 (International) For medical emergencies and health/safety inquiries, contact PROSAR: 1-877-250-9291

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: This chemical is a product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-EPA registered chemicals. Please see Section 15 for additional EPA information. The product contains no substances which, at their given concentration, are considered to be hazardous to health

Appearance Off-white, opaque viscous liquid

Physical State Liquid

Odor No odor

Classification

Skin sensitization Category 1	icity - Inhalation (Dusts/Mists)	Category 4
	()	Category 1
Germ cell mutagenicity Category 2		Category 2

Signal Word

Warning



Hazard Statements

Harmful if inhaled May cause an allergic skin reaction Suspected of causing genetic defects



Precautionary Statements - Prevention

Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Use personal protective equipment as required
Avoid breathing dust/fume/gas/mist/vapors/spray
Use only outdoors or in a well-ventilated area
Contaminated work clothing should not be allowed out of the workplace
Wear protective gloves

Precautionary Statements - Response

If exposed or concerned: Get medical advice/attention
IF ON SKIN: Wash with plenty of soap and water
If skin irritation or rash occurs: Get medical advice/attention
Wash contaminated clothing before reuse
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Other Hazards

Very toxic to aquatic life with long lasting effects

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Thiophanate-methyl	23564-05-8	45.27-48-07

^{**}If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.**



4. FIRST-AID MEASURES

First Aid Measures

IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician. When **General Advice**

possible, have the product container or label 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 Eye Contact

present and easy to do. Continue rinsing. If eye irritation persists: Get medical

advice/attention.

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Wash skin **Skin Contact**

with soap and water. If skin irritation or rash occurs: Get medical advice/attention. Wash

contaminated clothing before reuse.

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Give Inhalation

oxygen if breathing is difficult. If breathing has stopped, call 911, give artificial respiration.

Call a physician if you feel unwell.

Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth Ingestion

to an unconscious person. Do not induce vomiting without medical advice. Immediately call

a poison center or doctor/physician.

Most important symptoms and effects

Symptoms

May cause an allergic skin reaction. Harmful if inhaled.

Indication of any immediate medical attention and special treatment needed

Notes to Physician

Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Dry chemical. Carbon dioxide (CO2). Foam. Water spray (fog). Sand/earth.

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical

Product is not flammable.

Hazardous Combustion Products None known.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Evacuate area of unprotected personnel. Remain upwind of fire to avoid hazardous vapors and decomposition products. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply.



6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Wear protective clothing as described in Section 8 of this safety data sheet. Isolate hazard **Personal Precautions**

area. Keep unnecessary and unprotected personnel from entering.

Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See **Environmental Precautions**

Section 12, Ecological Information. See Section 13: DISPOSAL CONSIDERATIONS.

Methods and material for containment and cleaning up

Prevent further leakage or spillage if safe to do so. **Methods for Containment**

Cover liquid spill with sand, earth or other non-combustible absorbent material. Sweep up Methods for Clean-Up

and shovel into suitable containers for disposal. Dispose of in accordance with federal,

state and local regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Handle in accordance with good industrial hygiene and safety practice. Use personal Advice on Safe Handling

protective equipment as required. Wash face, hands, and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Avoid contact with skin, eyes

or clothing. Use only outdoors or in a well-ventilated area. Do not breathe

dust/fume/gas/mist/vapors/spray. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Contaminated work clothing should

not be allowed out of the workplace.

Conditions for safe storage, including any incompatibilities

Keep container tightly closed and store in a cool, dry and well-ventilated place. Do not **Storage Conditions**

contaminate water, food, or feed by storage or disposal. Keep/store only in original container. Protect container from physical damage. Store at ambient conditions. Store

locked up.

Do not reuse container. **Packaging Materials**

None known based on information supplied. Incompatible Materials



8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

This product, as supplied, does not contain any hazardous materials with occupational

exposure limits established by the region specific regulatory bodies

Appropriate engineering controls

Engineering Controls

THE FOLLOWING RECOMMENDATIONS FOR EXPOSURE CONTROLS/PERSONAL PROTECTION ARE INTENDED FOR THE MANUFACTURE, FORMULATION, PACKAGING AND USE OF THIS PRODUCT. FOR COMMERCIAL APPLICATIONS AND/OR ON-FARM APPLICATIONS OF END USE PRODUCTS CONTAINING THIS MATERIAL, CONSULT THE SDS OR PRODUCT LABEL FOR THE END USE PRODUCT.

Individual protection measures, such as personal protective equipment

Eye/Face Protection

Wear safety glasses with side shields (or goggles).

Skin and Body Protection

Wear appropriate clothing to prevent repeated or prolonged skin contact. Wear longsleeved shirt, long pants, and shoes plus socks. Use chemical resistant gloves, such as

P.V.C., butyl-rubber, nitrile-rubber, or neoprene.

Respiratory Protection

NIOSH-approved respirator or mask in the absence of adequate ventilation.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice. Wash face, hands and any exposed skin thoroughly after handling. Take off all contaminated clothing and wash it before reuse. 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, use detergent and hot water. Keep and wash PPE separately from other

laundry.



9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State Appearance Color

Off-white, opaque viscous liquid

Odor **Odor Threshold** Off-white/opaque

No odor Not determined

Property

рΗ Melting Point/Freezing Point Boiling Point/Boiling Range **Flash Point**

Evaporation Rate Flammability (Solid, Gas) **Upper Flammability Limits** Lower Flammability Limit

Vapor Pressure **Vapor Density Specific Gravity** Water Solubility

Solubility in other solvents **Partition Coefficient** Auto-ignition Temperature **Decomposition Temperature Kinematic Viscosity Dynamic Viscosity**

Explosive Properties Oxidizing Properties **Bulk Density**

Values_

5.0-6.0 Not applicable ~ 100 °C / ~212 °F Not applicable Not determined Liquid-not applicable Not available

Not available Not determined Not determined 1.1652 Dispersible Not determined Not determined Not available

Not determined Not determined Not determined Not determined Not determined 1.62 g/ml (9.69 lb/gal) Remarks • Method

(1=Water)

10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions.

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous Polymerization

Hazardous polymerization does not occur.

Conditions to Avoid

Keep out of reach of children. Contamination.



Incompatible Materials

None known based on information supplied.

Hazardous Decomposition Products

None known.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Eye Contact

Avoid contact with eyes.

Skin Contact

Avoid contact with skin.

Inhalation

Harmful if inhaled.

Ingestion

Do not taste or swallow.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Thiophanate-methyl	= 6640 mg/kg (Rat)	> 10 g/kg (Rat) > 10 g/kg (Rabbit	= 1700 mg/m³ (Rat) 4 h
23564-05-8			

Information on physical, chemical and toxicological effects

Symptoms

Please see section 4 of this SDS for symptoms.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization

May cause an allergic skin reaction.

Germ cell mutagenicity

Suspected of causing genetic defects.

Carcinogenicity

This product does not contain any carcinogens or potential carcinogens as listed by OSHA,

IARC or NTP.



Numerical measures of toxicity

Not determined

12. ECOLOGICAL INFORMATION

Ecotoxicity

Very toxic to aquatic life with long lasting effects. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment wash water.

Component Information

1	Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
	Thiophanate-methyl 23564-05-8		7.8: 48 h Oncorhynchus mykiss mg/L LC50		

Persistence/Degradability

Not determined.

<u>Bioaccumulation</u>

Not determined.

Mobility

Not determined

Other Adverse Effects

Not determined

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of Wastes

END USERS MUST DISPOSE OF ANY UNUSED PRODUCT AS PER THE LABEL

RECOMMENDATIONS.

Pesticide wastes are acutely hazardous. 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

Under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified

as a hazardous waste.

Contaminated Packaging

Disposal should be in accordance with applicable regional, national and local laws and regulations.

US EPA Waste Number



Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Thiophanate-methyl	U409			U409
23564-05-8				

14. TRANSPORT INFORMATION

Note Please see current shipping paper for most up to date shipping information, including

exemptions and special circumstances.

DOT Packaging < 2.13 gal : Not regulated

UN/ID No UN3082

Proper Shipping Name Environmentally hazardous substance, liquid, n.o.s. (Thiophanate-methyl)

Hazard Class 9
Packing Group III

Reportable Quantity (RQ) RQ = 10 lb

IATA Not regulated

<u>IMDG</u>

Marine Pollutant This material may meet the definition of a marine pollutant

15. REGULATORY INFORMATION

International Inventories

TSCA

All ingredients are listed or exempt from listing on Chemical Substance Inventory

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

US Federal Regulations

CERCLA

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Thiophanate-methyl	10 lb		RQ 10 lb final RQ
23564-05-8			RQ 4.54 kg final RQ



SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

SARA 313

Chemical Name	CAS No	Weight-%	SARA 313 - Threshold Values %
Thiophanate-methyl - 23564-05-8	23564-05-8	45.27-48-07	1.0

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals.

Chemical Name	California Proposition 65
Thiophanate-methyl - 23564-05-8	Female Reproductive
, , , , , , , , , , , , , , , , , , ,	Male Reproductive

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Thiophanate-methyl	X		
23564-05-8			

EPA Pesticide Registration Number_EPA Reg. No. 89442-14

EPA Statement

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:



EPA Pesticide Label Signal Word: Caution

Difference between SDS and EPA pesticide label

	EPA	OSHA
Signal Word	Caution	Warning
Acute toxicity - Oral	Harmful if swallowed	N/A
Acute toxicity - Dermal	Harmful if absorbed through the skin	N/A
Acute toxicity - Inhalation (Gases)	Harmful if inhaled	Harmful if inhaled
Skin sensitization	N/A	May cause an allergic skin reaction
Germ cell mutagenicity	N/A	Suspected of causing genetic defects

16. OTHER INFORMATION

NEPA	Health Hazards	Flammability 0	Instability 0	Special Hazards Not determined
<u>HMIS</u>	Health Hazards	Flammability 0	Physical Hazards 0	Personal Protection Not determined

Revision Date: Revision Note: 5/27/2015 New format

<u>Disclaimer</u>

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet

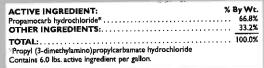


3 - 4



Turf and Ornamental Fungicide

For Control of Pythium and Phytophthora



CAUTION

FIRST AID			
Call a poison control center or doctor 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 poiso 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 doctor, or going for treatment. For medical emergencies, call (800) 858-7378.

FOR 24-HOUR EMERGENCY ASSISTANCE (SPILL, LEAK, OR FIRE)

CALL CHEMTREC® (800) 424-9300.

EPA Reg. No. 55260-9, EPA Est. No. 70815-GA-001

9504525-000-70090913

NET CONTENTS | Gal



PROPLANT

PRECAUTIONARY STATEMENT'S HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

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

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of any waterproof material.

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.

ENGINEERING CONTROLS STATEMENT

When handlers use closed systems, closed 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 toiler.
- Remove clothing immediately if pesticide gets inside. Then 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.

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, secure place.

PESTICIDE DISPOSAL: Wastes resulting from the use of this product may be disposed of on site or at an

approved water disposal facility.

CONTAINER DISPOSAL: Triple rinse (or equivalent). Then offer for recycling or reconditioning, 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.

DO NOT REUSE ORIGINAL CONTAINER

CONTAINER HANDLING:

Nonrefillable Container: Do not reuse or refill this container. Offer for recycling, if available. Clean container promptly after emptying.

Nonrefillable container equal to or less than 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 & 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 cimes.

DIRECTIONS FOR USE

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 in your State responsible for pesticide regulation. Only for use on golf courses, sod farms, commercially grown ornamentals in greenhouses and container-grown ornamentals in nurseries. Not for use on sod farms in Arizona.

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, notigreeninouses, and emergency assistance. It also contains specific instructions and exceptions pertaining to the state-ments on this label about personal protective equipment 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 into 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, and greenhouses.

Do not enter or allow others to enter treated areas until spray deposit has dried completely.

USE RESTRICTIONS

Do not graze or feed clippings from treated areas to livestock. Do not apply this product through any type of Irrigation system.

GENERAL INFORMATION

Proplant is a completely water miscible fungicide concentrate. Proplant is intended for use on turfgrass, which is subject to Pythium Blight (Cottony Blight, Grease Spot). It may be used after germination to control Pythium damping-off in turf, or on established turf to prevent or control Pythium Blight. Proplant does not afford broad-spectrum disease control for Rhizoctonia spp. (Brown Patch), Sclerotinia spp. (Dollarspot), or Helminthosporium spp. (Leafspot). Use a broad-spectrum fungicide if these diseases coexist with Pythium Blight.

Proplant is also recommended for prevention of root rot and damping-off caused by Pythium spp. and Phytophthora spp. at all stages of ornamental propagation.

COMPATIBILITY: Proplant is compatible with iprodione, chloroneb, triadlmefon, chlorothalonil, chlorpyrifos and thiram. For control of other soil-borne diseases such as Rhizoctonia spp, or Fusanium spp, Proplant can be tank mixed with thiophanate-methyl. Use the full rate of each fungicide and follow all directions and restrictions appearing on the labels of these products. Follow most restrictive label requirements. Do not tank mix with any product that contains a prohibition on tank mixing.

 $x_{-2},\dots = 2$

CROP USE DIRECTIONS

CROP	APPLICATION RATE OF PROPLANT PER 1000 SQ. FT.	COMMENTS
TURFGRASS: For control of Pythium Blight and Pythium Damping-Off on Established Turf and Overseeded Areas	Preventive Treatment: 1.3 - 2 fluid ounces per 1000 sq. ft. In 2 - 5 gallons of water	ESTABLISHED TURF: Apply as a preventive treatment during periods of high humidity favorable to the development of Pythium Blight.
	Curative Treatment: 3 - 4 fluid ounces in 2 - 5 gallons of water	OVERSEEDED AREAS: Apply after germination to control Pythium Damping-Off.
		RETREATMENT: Retreat at 7- to 21-day intervals if conditions remain favorable for disease devel- opment. Use the lower rate for the shorter interval and the higher rate for the longer interval within the application rate range. Under severe disease pressure conditions, use the highest recommended rate and shortest interval.

(continued)

CROP	APPLICATION RATE OF PROPLANT PER 1000 SQ. FT.	COMMENTS
ORNAMENTALS: For control of Pythium and Phytophthora on ornamental plants: African Violet, Ageratum, Alyssum, Aster, Azalea, Browallia, Carnation, Celosia, Chrysanthemum, Coleus, Dahlia, Dusty Miller, Easter Lily, Ferns, Geranium, Gloxinia, Impatiens, Lobelia, Marigold, Pansy, Petunia, Poinsettla, Portulaca, Salvia, Snapdragon, Verbena, Violet and Vinca	3 fluid ounces per 10 gallons of water	Proplant is recommended for prevention of root rot and damping- off at all stages of ornamental proprigation. Proplant requires no agitation after initial mixing. Proplant should be used within one week of mixing. Proplant does not cause phytotoxic symptoms on the listed plants when used as direct- ed. Trials on other ornamental species should be conducted before extensive use. SEEDING: Apply to the seeding area using 3 quarts of solution per 10 sq. ft. Treat before sowing of seeds requiring light and after cov- ering of seeds requiring dark for germination. TRANSPLANTING SEEDLINGS: Apply to the trans- planting area using 3 quarts of solution per 10 sq. ft. before trans- planting.
	2 fluid ounces per 10 gallions of water	TRANSPLANTING CUT- TINGS: Drench cutting bed using a gallons of solution per 10 sq. fc. before setting. POTTING: Dip bare root plants in the solution before potting. After potting, drench each pot at the rate of 3.5 fluid ounces of solution per 4-inch pot. Repeat the drench treatment at 3- to 6-week intervals
WOODY ORNAMENTALS: For control of <i>Phytophthora</i> spp. on species such as azalea etc.	2.5 fluid ounces per 10 gallons of water	Drench each container at the rate of 5 quarts of solution per 10 sq. f of surface. Repeat the drench treatment at 3- to 4-month intervals.

₩ 4 - 22 -

NOTICE ON CONDITIONS OF SALE

Directions for use of this product are based upon tests believed to be reliable. The use of this product being beyond the control of the manufacturer, no guarantee, expressed or implied, is made as to the effects of such or the results to be obtained if not used in accordance with directions or established safe practices. To the extent consistent with applicable law, the buyer assumes all responsibility including injury or damage, resulting from its misuse as such, or in combination with other materials.

Manufactured by: Agriphar S.A.
Rue de Renory 26, Bte I
B-4102 OUGREE
BELGIUM

200 9

Proplant™ is a registered trademark of Agriphar S.A. Master label - EPA approved May 31, 2007; EPA notification 09/14/2009



Safety Data Sheet

according to Regulation (EC) No. 453/2010

Date of issue: 27/06/2011

Revision date: 26/05/2014

Supersedes: 22/02/2013

Version: 9.3

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product form

Mixture

Trade name

PROPLANT

Product code

:: CA701337

Synonyms

: Propamocarb hydrochloride 722 g/L SL

1.2.1. Relevant identified uses of the substance or mixture and uses advised against
1.2.1. Relevant identified uses

Industrial/Professional use spec

: Agriculture.

Pesticide

Use of the substance/mixture

: Fungicide

1.2.2. Uses advised against No additional information available

1.3 Details of the supplier of the safety data sheet

AGRIPHAR S.A. Rue de Renory, 26/1 B-4102 Ougrée - Belgium

T +32 (0)4 385 97 11 - F +32 (0)4 385 97 49 info@agriphar.com - http://www.agriphar.com

1.4. Emergency telephone number

Emergency number

= +32 (0)4 385 97 11 (8h - 16h35)

112 (European Emergency Number)

Country	Organisation/Company	Address	Emergency number
BELGIUM	Centre Anti-Poisons/Antigifcentrum c/o Hôpital Central de la Base - Reine Astrid	Rue Bruyn B -1120Brussels	+32 70 245 245
Worldwide	WHO	http://www.who.lnt/gho/phe/chemical_saf ety/polsons_centres/en/index.html	

SECTION 2: Hazards identification

2 1 Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin Sens. 1

H317

Full text of H-phrases: see section 16

Classification according to Directive 67/548/EEC or 1999/45/EC

R43

Full text of R-phrases: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

Safety Data Sheet

according to Regulation (EC) No. 453/2010

2.2 Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)



CLP Signal word

: Warning

Hazardous ingredients

Propamocarb HCI

Hazard statements (CLP)

H317 - May cause an allergic skin reaction

Precautionary statements (CLP)

P261 - Avoid breathing vapours

P280 - Wear protective gloves, eye protection

P302+P352 - IF ON SKIN: Wash with plenty of soap and water P501 - Dispose of contents/container to National regulations

P333+P313 - If skin irritation or rash occurs: Get medical advice/attention

EUH phrases

EUH401 - To avoid risks to human health and the environment, comply with the instructions for

use

2.3 Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

31. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	Classification according to Directive 67/548/EEC
Propamocarb HCI	(CAS No)25606-41-1 (EC no)247-125-9	64 - 68	R43
Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Propamocarb HCl	(CAS No)25606-41-1 (EC no)247-125-9	64 - 68	Skin Sens. 1, H317

Full text of R- and H-phrases: see section 16

SECTION 4: First aid measures

4.1 Description of first aid measures

First-aid measures general

: If medical advice is needed, have product container or label at hand.

First-aid measures after inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. In case of breathing difficulties administer oxygen. In case of irregular breathing or respiratory arrest provide artificial respiration. In all cases of doubt, or when symptoms persist, seek medical advice.

First-aid measures after skin contact

After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water and soap. If skin irritation occurs: Get medical advice/attention.

First-aid measures after eye contact

Rinse immediately carefully and thoroughly with eye-bath or water. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion

If swallowed, rinse mouth with water (only if the person is conscious). Do not induce vomiting. Immediately get medical attention.

Most important symptoms and effects, both acute and delayed

No additional information available

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5 1 Extinguishing media

Suitable extinguishing media

Foam. Dry extinguishing powder. Carbon dioxide (CO2). Water fog.

Unsuitable extinguishing media

High power water jet.

5.2 Special hazards arising from the substance or mixture

Fire hazard

Non-flammable.

2/7

Safety Data Sheet

according to Regulation (EC) No. 453/2010

5.3. Advice for firefighters

Precautionary measures fire

No naked lights. No smoking.

Firefighting instructions

Evacuate and limit access. Use water spray jet to protect personnel and to cool endangered

containers.

Protection during firefighting

Wear full chemical protective clothing. If technical exhaust or ventilation measures are not

possible or insufficient, respiratory protection must be worn.

Other information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

General measures : When leaks or spills occur, only properly protected personnel should remain in the area.

6.1.1. For non-emergency personnel

Protective equipment

Wear suitable protective clothing, gloves and eye or face protection. In case of insufficient

ventilation, wear suitable respiratory equipment.

Emergency procedures

: Evacuate area. Provide adequate ventilation to minimize dust and/or vapour concentrations. Call

in an expert. Eliminate every possible source of ignition.

6.1.2. For emergency responders

Protective equipment

: Wear a self-contained breathing apparatus and chemical protective clothing.

6.2. Environmental precautions

Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point. Notify authorities if product enters sewers or public waters.

6.3 Methods and material for containment and cleaning up

For containment

Prevent spreading in sewers. Impound and recover large spill by mixing it with inert granular

solids

Methods for cleaning up

Collect spills and put it into appropriated container.Special danger of slipping by leaking/spilling product.

Other information

Exposure controls/personal protection. Disposal considerations.

SECTION 7: Handling and storage

Reference to other sections

7.1 Precautions for safe handling

Precautions for safe handling

Handle in accordance with good industrial hygiene and safety procedures. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not allow to enter into surface water or

drains

Handling temperature

: at room temperature

Hygiene measures

Do no eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

Conditions for safe storage, including any incompatibilities

Technical measures

: Ground well. Use explosion-proof machinery, apparatus, ventilation facilities, tools etc.

Storage conditions

: Protect against direct sunlight.

Incompatible products

Strong acid. Strong bases. Oxidizing agents, strong.

Maximum storage period Storage temperature 2 year(s)

Storage area

16/06/2014

Keep container tightly closed in a cool, well-ventilated place. Provide for retaining containers, eg.

floor pan without outflow.

Packaging materials

Keep only in the original container. Keep locked up.

7.3 Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

B 1. Control parameters

No additional information available

Safety Data Sheet

according to Regulation (EC) No. 453/2010

8 2 Exposure controls

Personal protective equipment

; Gloves, Gas mask, Safety glasses.



Hand protection : Wear suitable gloves resistant to chemical penetration. NBR (Nitrile rubber). For special

purposes, it is recommended to check the resistance to chemicals of the protective gloves

mentioned above together with the supplier of these gloves.

Eye protection Face shield. Chemical goggles or safety glasses.

Skin and body protection \$\frac{1}{2}\$ Skin protection appropriate to the conditions of use should be provided.

Respiratory protection If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection

must be worn.

Environmental exposure controls Notify authorities if product enters sewers or public waters.

Other information Emergency eye wash fountains and safety showers should be available in the immediate vicinity

of any potential exposure.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state Liquid

Colour : colourless. light yellow.

Odour Fruity.

Odour threshold : No data available pH : 5.33 (1%, 25°C)
Relative evaporation rate (butylacetate=1) : No data available Melting point : No data available

Freezing point : No data available
Boiling point : No data available
: No data available

Flash point : No flash point - measurement carried out until boiling temperature.

Auto-ignition temperature : > 400 °C

: No data available Decomposition temperature Flammability (solid, gas) No data available No data available Vapour pressure No data available Relative vapour density at 20 °C No data available Relative density 1.08 g/ml (20°C) Density Soluble in water. Solubility No data available Log Pow II No data available Viscosity, kinematic No data available Viscosity, dynamic

Explosive properties

The study does not need to be conducted because there are no chemical groups associated with

explosive properties present in the molecule.

Oxidising properties : not oxidizing.

Explosive limits : No data available

9 2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

When exposed to heat, may decompose liberating hazardous gases.

10.2 Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

None under normal conditions. Refer to section 10.1 on Reactivity.

10.4. Conditions to avoid

Protect against direct sunlight. Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

4/7

PROPLANT

Safety Data Sheet according to Regulation (EC) No. 453/2010

Incompatible materials

Strong acid. Strong bases. Strong oxidizing agents.

Hazardous decomposition products

When heated to decomposition, emits dangerous fumes. Carbon dioxide (CO2). Carbon monoxide. Nitrogen oxides (NOx).

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity Not classified

PROPLANT		
LD50 oral rat	> 2000 mg/kg	
LD50 dermal rat	> 2000 mg/kg	
LC50 inhalation rat (mg/l)	> 5.01 mg/l/4h	

Propamocarb HCI (25606-41-1)				
LD50 oral rat	> 2000 mg/kg			
LD50 dermal rat	> 2000 mg/kg			
LC50 inhalation rat (mg/l)	> 5 mg/l/4h			

Not classified Skin corrosion/irritation

pH: 5.33 (1%, 25°C)

Not classified Serious eye damage/irritation

pH: 5.33 (1%, 25°C)

May cause an allergic skin reaction. Respiratory or skin sensitisation

Not classified Germ cell mutagenicity Carcinogenicity Not classified Reproductive toxicity Not classified

Specific target organ toxicity (single exposure) Specific target organ toxicity (repeated : Not classified

: Not classified

exposure)

Aspiration hazard

Not classified

SECTION 12: Ecological information

12.1 Toxicity

PROPLANT		
LC50 fishes 1	> 140 mg/l (96h Oncorhynchus mykiss)	
EC50 Daphnia 1	> 140 mg/l (48h Daphnia magna)	
ErC50 (algae)	182 mg/l (72h Selenastrum capricornutum)	
ErC50 (other aquatic plants)	5940 mg/l (Lemna Gibba)	

Propamocarb HCI (25606-41-1)		
LC50 fishes 1 > 99 mg/l (96h Oncorhynchus mykiss)		
EC50 Daphnia 1	> 100 mg/l (48h Daphnia magna)	
LC50 fish 2	> 92 (96h Lepomis macrochirus)	
ErC50 (algae)	> 85 mg/l (72h Pseudokirchneriella subcapitata)	
ErC50 (other aquatic plants)	> 18 mg/l (14d Lemna Gibba)	
NOEC (chronic)	> 6.3 mg/l (32d Lepomis macrochirus)	

12.2 Persistence and degradability

Propamocarb HCI (25606-41-1)	
Persistence and degradability	Readily biodegradable.

12.3 **Bioaccumulative potential**

Propamocarb HCl (25606-41-1)		
BCF fish 1	3.2 - 4.7 mg/g	
Log Pow	-1.36	
Bioaccumulative potential	There is no bioaccumulation.	

PROPLANT

Safety Data Sheet

according to Regulation (EC) No. 453/2010

12.4.	Mobility in	soil

PROPLANT

70.2 mN/m (20°C) Surface tension

Results of PBT and vPvB assessment 12.5

No additional information available

Other adverse effects

No additional information available

SECTION 13: Disposal considerations

Waste treatment methods

Regional legislation (waste)

: Disposal must be done according to official regulations.

Waste treatment methods

: Dispose of this material and its container to hazardous or special waste collection point.

Additional information

Do not contaminate water with the product or its container (Do not clean application equipment near surface water/Avoid contamination via drains from farmyards and roads). Notify authorities if

product enters sewers or public waters.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

UN number

Not regulated for transport

UN proper shipping name

Proper Shipping Name (ADR)

: Not applicable : Not applicable

Proper Shipping Name (IMDG) Proper Shipping Name (IATA)

: Not applicable

Proper Shipping Name (ADN) Proper Shipping Name (RID)

: Not applicable : Not applicable

14.3 Transport hazard class(es)

ADR

Transport hazard class(es) (ADR)

Not applicable

Transport hazard class(es) (IMDG)

Not applicable

IATA

Transport hazard class(es) (IATA)

Not applicable

ADN

Transport hazard class(es) (ADN)

ii Not applicable

RID

Transport hazard class(es) (RID)

Not applicable

Packing group

Packing group (ADR) Not applicable Packing group (IMDG) Not applicable Packing group (IATA) Not applicable Packing group (ADN) Not applicable Not applicable Packing group (RID)

Environmental hazards

Dangerous for the environment No Marine pollutant No

Other information No supplementary information available

PROPLANT

Safety Data Sheet

according to Regulation (EC) No. 453/2010

14 6 Special precautions for user

14.6.1. Overland transport

14.6.2. Transport by sea

14.6.3. Air transport

14.6.4. Inland waterway transport

Not subjected to ADN

: No

14.6.5. Rall transport

Carriage prohibited (RID)

; No

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

No REACH Annex XVII restrictions

Contains no REACH candidate substance

15.1.2. National regulations

No additional information available

15.2 Chemical safety assessment

No additional information available

SECTION 16: Other information

Indication of changes:

12.1 Ecotoxicity. Precautionary statements (CLP).

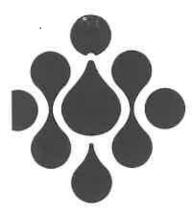
Full text of R-, H- and EUH-phrases:

Skin Sens. 1	Sensitisation — Skin, category 1
H317	May cause an allergic skin reaction
R43	May cause sensitisation by skin contact

SDS EU (REACH Annex II)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product





FOSAL SELECT

FUNGICIDE

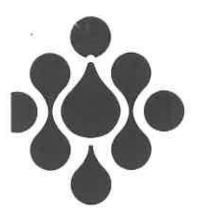
ACTIVE INGREDIENT:	
Aluminum tris (0-ethyl phosphonate):	 80.00%
OTHER INGREDIENTS:	
	100.00%

KEEP OUT OF REACH OF CHILDREN CAUTION

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. 	
lf 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 affected 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 inhaled:	 Move person to fresh air. If person is not breathing, call 911 or an ambulance, give artificial respiration immediately, preferably by mouth-tomouth. Call a poison control center or doctor for treatment advice. 	

Have the product 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 a.m. to 4:30 p.m. Pacific Time (NPIC Website: www.npic.orst.edu). Outside of these times call your poison control center at 1-800-222-1222.





FOSAL SELECT

FUNGICIDE

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Harmful if absorbed through the skin or inhaled. Causes moderate eye irritation. Avoid contact with eyes, skin, or clothing.

Environmental Hazards

This product is toxic to aquatic and estuarine invertebrates. Drift and runoff may be hazardous to aquatic and estuarine organisms in neighboring areas. 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.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and Other Handlers Must Wear:

- · Long-sleeved shirt and long pants
- · Waterproof gloves
- · Shoes plus socks
- · Protective eyewear

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 STATEMENT

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 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.

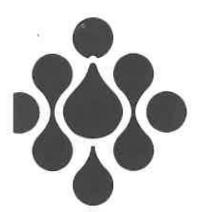
DIRECTIONS FOR USE

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.

This product is not to be used on home or residential sites.





FOSAL SELECT

FUNGICIDE

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 entry into treated areas during the restricted-entry interval 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
- · 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 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 unprotected persons out of the treated areas until sprays have dried.

DIRECTIONS FOR USE

Fosal Select is a systemic fungicide that, when used according to label directions, and as part of a good management practices program, will control or suppress listed fungal diseases in a variety of crops.

COMPATIBILITY

Turf and Ornamentals

Some foliar fertilizers and copper-based fungicides are not compatible with Fosal Select, and a tank mix of these products with Fosal Select may result in phytotoxicity to various plants. To avoid this phytotoxicity, apply Fosal Select at least 14 days before or after an application of a copper-based fungicide; and in these spray programs, avoid applying with air blast equipment. Stickers, extenders, and wetting agents must not be mixed with Fosal Select. Do not tank mix Fosal Select with the following products because they are not compatible with Fosal Select: Daconil 2787 Flowable Fungicide (or other registered flowable formulations containing chlorothalonil), Fore Fungicide flowable formulations (or other registered flowable formulations containing triadimefon), Rubigan™ A.S. (or other registered flowable formulations containing fenamirol), Spectro™ 90 WDG (or other similar registered formulations containing thiophanate-methyl and chlorothalonil).

Physical Compatibility Test

Before mixing Fosal Select with any other product including but not limited to soluble concentrate or flowable formulations, conduct a physical compatibility test. Use a clear container (1 pint) and mix a small amount of spray solution by adding each component in the order and ratio as required for making large amounts of the tank mix solution. Stir the contents and allow to settle for 5-15 minutes. Solutions that stay in suspension or can be remixed readily are considered to be compatible. Increased compatibility may result if a buffering agent is used.

Tolerance

Although Fosal Select has been found to be safe to use with the species listed on this label, it is impossible to test all species or varieties under all types of growing conditions for tolerance to Fosal Select. Always test for plant phytotoxicity on a small scale using the specified rates before preparing spray solutions or applying to large areas of plants.





FOSAL SELECT

FUNGICIDE

Preparation of Spray Solutions

Only prepare the amount of spray solution required for one day's application.

- 1. Always use clean water when preparing spray tank solutions. Ensure the spray tank is clean prior to use. Add clean water to fill the
- 2. With the agitator running, slowly add the required amount of Fosai Select to the tank.
- 3. Slowly add an alkaline buffering agent when required (See Tank Mixes below).
- 4. Fill the spray tank with the remaining amount of water and continue agitation until the application is completed.

Tank Mixes

Plant phytotoxicity from solubilized copper has been observed under several situations:

- 1) When products containing copper are tank-mixed with Fosal Select; OR
- 2) When unbuffered Fasal Select solutions are applied to plant foliage that bear copper residues from prior treatments with copper products. Do not tank mix Fosal Select with copper compounds.

In situations when copper compounds are applied prior to or will be applied after applications of Fosal Select, increase the pH of the Fosal Select tank solution (see Step 3 under Preparation of Spray Solutions above) to 6.0 or above using an alkaline buffer. Examples of alkaline buffers include potassium carbonate (use 3 lbs. for every 5 lbs. Fosal Select) and diammonium phosphate (use 5 lbs. for every 5 lbs. Fosal Select). Use caution when using potassium carbonate as the buffer because it reacts during the addition to form carbon dioxide gas (CO₂). Do not seal the spray tank until all of the CO₂ gas is released, a process that usually takes about 5 minutes.

Application Directions for Foliar Sprays

For systemic control of various fungal diseases, apply Fosal Select according to these label directions.

Apply Fosal Select in a sufficient amount of water to ensure thorough coverage of plant foliage. The spray volumes will vary by crop and growth stage.

Application Directions for Sprinkler Irrigation Systems

Do not apply Fosal Select through chemigation in California.

Apply this product only through sprinkler irrigation systems including mini-sprinkler or micro-jet, drip, solid set, and center pivot. Do not apply this product through any other type of irrigation system.

Spray Preparation

Remove scale, pesticide residues, and other foreign matter from the chemical tank and entire injector system. Flush with clean water.

A suspension of **Fosal Select** is prepared in a mixing tank by adding ½ to ¾ of the desired amount of water. Start the agitator and then add the required amount of **Fosal Select** followed by the remaining volume of water. Then set sprinkler to deliver 0.1 to 0.3 inch of water per acre. Start sprinkler and uniformly inject the suspension of **Fosal Select** into the irrigation water line to deliver the desired rate per acre. The suspension should be injected with a positive displacement pump into the main line ahead of a right angle turn to ensure adequate mixing. If you should have any other questions about calibration, you should contact State Extension Service Specialists, equipment manufacturers, or other experts.

Note: For mini-sprinkler and drip irrigation systems, avoid field irrigation over the treated area for 24 to 48 hours after completion of the Fosal Select treatment.

For solid set and center pivot irrigation systems, after completion of the Fosal Select treatment, do not irrigate the treated area until the foliage has dried to prevent wash-off of the chemical from the crop.

Precautions for Applications through Sprinkler Irrigation Systems

- · Maintain continuous agitation in mix tank during mixing and application to assure a uniform suspension.
- 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.





FOSAL SELECT

FUNGICIDE

- 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, when system connection or fittings leak, when nozzles do not provide uniform distribution, or when lines containing the product must be dismantled and drained.
- · Crop injury, lack of effectiveness, or illegal pesticide residues in the crop may result from non-uniform distribution of treated water.
- Allow sufficient time for pesticide to be flushed through all lines and all nozzles before turning off irrigation water. A person
 knowledgeable of the chemigation system and responsible for its operation shall shut the system down and make necessary adjustments
 should the need arise. Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public
 water system unless the label-prescribed safety devices for public water supplies are in place.

Ornamentals and Bedding Plants

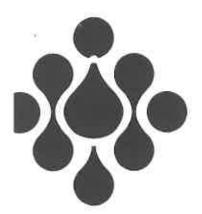
Fosal Select controls diseases caused by:

- Pythium and Phytophthora in ornamentals and bedding plants grown in field nursery, greenhouse, landscaping and conifer nursery situations; and
- . Downy mildew and fire blight in ornamentals

Fosal Select suppresses bacterial blight caused by certain pathovars of Xanthomonas campestris.

Time applications to occur before signs of disease appear. Use Fosal Select along with good cultural management practices. To avoid plant injury, follow these label directions and do not apply Fosal Select above the specified rates or at shorter spray intervals than specified on this





FOSAL SELECT

FUNGICIDE

Omamentals

Species	Application Method	Application Rate	Application Directions
Aglaonema, Aphelandra, Azalea, Bougainvillea, Boxwood, Cattelya skinneri, Cissus, Dieffenbachia, Hibiscus, Juniper, Leather-leaf Fern, Pittosporum, Philodendron, Pothos, Rhododendron, Spathiphyllum, Taxus media	Foliar	2.5 - 5.0 lbs. product per 100 gals. of water	Apply to wet the foliage. Use 2.5-5.0 lb./A when applying in spray volumes less than 100 gals./A Do not exceed 400 gals. of spray solution per acre. Make repeat applications as needed but not more often than every 30 days.
Aphelandra, Azalea, Boxwood, Cissus, Dieffenbachia, Japanese Holly, Juniper, Monterrey Pine, Philodendron Pieris, Pittosporum, Rhododendron, Schefflera, Spathiphyllum, Taxus media	Drench	0.4 – 0.8 lbs. product (6.4-12.8 oz.) per 100 gals. of water	Apply spray solution to 400 sq. ft. (2 pts. solution per sq. ft.) of plants. Make repeat applications as needed but not more often than every 30 days.
Azalea Pieris Rhododendron	Soil Incorporation (to control <i>Phytophthora</i> species only)	0.5-0.8 lbs. product (8-12.8 oz.) per cubic yard of soil	Mix product with soil immediately before potting. Soil incorporate only to plants with established root system. Foliar or drench applications may be made when disease development is expected, but do not apply more often than every 30 days.

Bedding Plants

Species	Application Method	Application Rate	Application Directions
Begonia Pansy Vinca Marigold Zinnia Petunia Geranium Impatiens	Foliar	1.25 - 4.0 lbs. product per 100 gals. of water	Apply to wet the foliage. Do not exceed 400 gals. of spray solution per acre. Make repeat applications as needed but not more often than every 14 days.





FOSAL SELECT

FUNGICIDE

Tank Mixes for Ornamental and Bedding Plants

Fosal Select is compatible with most commonly used fungicides. Fosal Select will provide control of additional diseases (such as Aerial Web Blight, Alternaria Leaf Blight, Botrytis Blight, Fusarium Leaf Spot, Helminthosporium Leaf Spot, and Ray Blight) when tank mixed with other fungicides such a CHIPCO® 26019 fungicide or other iprodione-containing fungicides. Consult the label of the tank mix product for use directions, the diseases controlled, and application rates. When another fungicide is used in combination with Fosal Select, follow all label directions for the use of the other product. Make applications at the specified rates for control of the target disease organism.

Refer to the section above on compatibility for a list of products that cannot be tank mixed with Fosal Select.

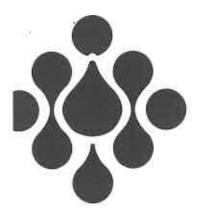
Conifer Murseries (To control Phytophthora Root Rot) (Not registered for use on Conifer Murseries in California)

Species	Application Method	Application Rate	Application Directions		
Douglas firs Spruce Pines	Dip	2.5 lbs. product per 100 gals. of water	Thoroughly wet plant and roots by dipping into the Fosal Select solution immediately prior to transplanting. MOTE: During the dipping process, users must wear chemical/water-resistant gloves, goggles or face shield, long pants (coveralls), long-sleeved shirt, and shoes plus socks.		
Douglas firs Spruce Pines Foliar		2.5 - 5.0 lbs. product per 100 gals. of water	Apply to wet the foliage. Use 2.5-5.0 lbs./A when applying in spray volumes of less than 100 gals./A Do not exceed 400 gals. of spray solution per acre. Make repeat applications as needed but not more often than every 30 days		

Roses

Disease Controlled	Application Method	Application Rate	Application Directions
Downy Mildew (Peronospora sparsa)	Foliar: Field, container, landscape, miniature varieties	2.5 lbs. product per 100 gals. of water	Apply to wet the foliage. Use 2.5-5.0 lbs./A when applying in spray volumes of less than 100 gals./A Do not exceed 400 gals. of spray solution per acre. Make repeat applications as needed but not more often than every 7 days. NOTE: Use Fosal Select in combination with a sanitation program designed to prevent the spread of this disease to healthy plants.





FOSAL SELECT

FUNGICIDE

For Suppression of Fire Blight

Species	Application Method	Application Rate	Application Directions
Ornamental pear Pyracantha Hawthorn	Foliar	2.5 lbs. product per 100 gals. of water	 Apply to wet the foliage. Use 2.5-5.0 lbs./A when applying in spray volumes of less than 100 gals./A Do not exceed 400 gals. of spray solution per acre. Applications must be made early (start at prebloom) to prevent Fire Blight infection. Make repeat applications as needed until blooming ends but not more often than every 7days. WOTE: Use Fosal Select in combination with a sanitation program designed to prevent the spread of this disease to healthy plants.

For Suppression of Bacterial Blight
(Mot registered for use on Bacterial Blight in California)

To suppress: Xanthomanas campestris pathovars hederae, dieffenbachiae, syngonii, and fici on the following species:	pathovars <i>hederae,</i> hiae, syngonii, and <i>fici</i> on		Application Directions
English ivy Schefflera Anthurium Dieffenbachia Spathiphyllum Syngonium Ficus	Foliar	2.0 - 4.0 lbs. product per 100 gals. of water	 Apply to wet the foliage. Use 2.5-5.0 lbs./A when applying in spray volumes of less than 100 gals./A Do not exceed 400 gals. of spray solution per acre. Make repeat applications as needed but not more often than every 7days. NOTE: Use Fosal Select in combination with a sanitation program designed to prevent the spread of this disease to healthy plants. Read the section on compatibility and the use of Fosal Select with copper fungicides or other compounds.





FOSAL SELECT

FUNGICIDE

Turf - Fosal Select Alone

Disease Controlled	Application Method	Application Rate	Application Directions		
Pythium diseases including blight and root rot, Yellow tuft	Foliar use on: Turf grass on golf courses, sod farms, commercial turf areas NOT for use on home or residential turf	4.0 oz. product per 1,000 sq. ft. at 14-day intervals 8.0 oz. product per 1,000 sq. ft. at 21-day intervals	 Apply in 1-5 gals. of water per 1,000 sq. ft. Agitate solutions during the spray operations. Calibrate equipment before making application. Use in a season long program to control listed diseases by applying when conditions favor disease. Make repeat applications at the spra interval listed based on use rate. Allow the foliage to dry before water or mowing treated areas. 		

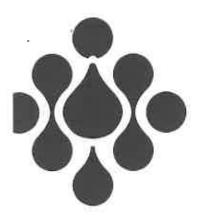
Restrictions:

- Do not graze animals on treated turf.
- Do not feed clippings from treated turf to livestock and poultry.

Turf - Fosal Select & Tank Mix Partners

Disease Controlled	Application Method	Application Rate	Application Directions	
Summer stress Complex/Summer Decline (Pythium, Anthracnose, Rhizoctonia spp.) AND/OR Anthracnose (Colletotrichum graminicola)	Foliar uses on turf grasses on: Golf courses Sod farms Industrial & Municipal turf areas NOT for use on home or residential turf.	Fosal Select Plus: 26GT or Daconil Ultrex® or Manicure® DG or Dithane® T/O or Protect T/O or Mancozeb DG or Fore® WP or Heritage or Banner® Maxx® or ProStar® 70WP	4.0 - 8.0 Plus: 3.0 - 4.0 or 3.2 or 3.3 or 8.0 or 8.0 or 4.0 - 8.0 or 4.0 - 8.0 or 1.0 - 2.0 or 1.5 - 3.0	
Bengrass Deadspot (Ophlosphaerella agrostis)		Fosal Select Plus: Fore® Rainshield™ or Daconil Ultrex®	4.0 Plus: 8.0 or; 3.2	





FOSAL SELECT

FUNGICIDE

Turf - Fosal Select & Tank Mix Partners (cont'd.)

INII - LASOI DEIERT & TONK MIN L'OLINOIS (C	1911 - 1990) Octobr & thirk mix I drive (concur)									
Disease Controlled	Application Method	Application Rate	Application Directions							

Use Directions:

- Use the most restrictive of label limitations for Fosal Select or tank mix partner.
- Always apply at the specified rates.
- Do not mix with products that prohibit such mixing.
- Apply in 1 5 gals. of water per 1,000 sq. ft.
- Agitate solutions during the spray operations.
- Calibrate equipment prior to use.
- Repeat at specified intervals.
- Allow foliage in treated areas to dry before watering or mowing.
- To improve the control of anthracnose, use Fosal Select in a preventative, multi-application program in which applications begin prior to outbreak of the disease.
- To improve the control of deadspot, use Fusal Select in a preventative, multi-application program in which applications begin prior to outbreak of the disease and when conditions favor development of the disease.

Note: When used in turf management programs, Fosal Select promotes turf that is thick and vigorous and tolerant to such stress factors as heat and humidity. This healthy grass is less susceptible to diseases and other turf pests such as weeds and algae.

Restrictions

- Do not graze animals on treated turf.
- Do not feed clippings from treated turf to livestock and poultry.

The following fungicides are known to be compatible with Fosal Select and any one may be used in place of products listed above for use as a tank mix with Fosal Select to control Summer Stress Complex:

Bayleton®50* Fungo®50 WSB Cavalier 50WSB MANhandle™ Manicure™ 6 Flowable Cavalier Flowable Manicure™ T/O Flowable Chlorostar Manicure™ Ultrex® Cleary's 3336™ WP* Cleary's 3336™ F* Medallion® Compass™ Penthathlon® Concorde™ DF Penthathlon® DF Revere™ 4000 Concorde™ SST SysStar® Consyst SysTec® 1998 Curalan® EG Daconil® Weather Stik®* SysTec® 1998 WDG Daconil ZN® Rainshield NT™ Systhane® WSP Terrachlor® 75WP and 400* Eagle®

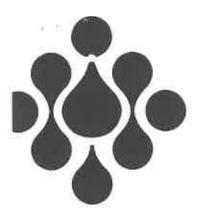
Echo® 90DF Terraguard® 50W
Echo® Flowable Terrazole 35% WP
Endorse™ Touche EG

Endorse™ Touche EG
Fluid Fungicide Turfcide® 400

Fungo® Flo TwoSome™ Flowable Fungicide

*Note: When preparing spray tank mixtures, add these products to the spray tank and allow complete dispersion in water before adding Fosal Select.





FOSAL SELECT

FUNGICIDE

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Store in original container and keep tightly closed. Store in a cool dry place.

PESTICIDE DISPOSAL: Pesticide wastes are acutely hazardous. 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:

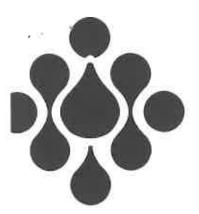
Nonrefillable Container (flexible-bag-all weights): Non refillable container. Do not reuse or refill this container. Offer for recycling, if available. Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Nonrefillable Container (rigid-fifty lbs. 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. 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 incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Nonrefllable Container (rigid-greater than fifty lbs.): Non refillable 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 by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Refillable Container: Refillable container. Refill this container with aluminum tris 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 percent 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, if allowed by state and local authorities, by burning. If burned, stay out of smoke.





FOSAL SELECT

FUNGICIDE

IMPORTANT INFORMATION - READ BEFORE USING PRODUCT CONDITION OF SALE AND LIMITATION OF WARRAWTY 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 tor 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 Prime Source 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 Prime Source LLC and Seller harmless for any claims relating to such factors.

Prime Source 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 abnormal conditions or under conditions not reasonably foreseeable to or beyond the control of Seller or Prime Source LLC, and Buyer and User assume the risk of any such use.TO THE EXTENT CONSISTEN WITH APPLICABLE LAW, PRIME SOURCE LLC MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

To the extent consistent with state law, neither Prime Source LLC nor Seller shall be liable for any incidental, consequential or special damages resulting from the use or handling of this product. THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF PRIME SOURCE 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 PRIME SOURCE LLC OR SELLER, THE REPLACEMENT OF THE PRODUCT.

Prime Source 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 Prime Source LLC.

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Endorse™ is a trademark of Arvesta.

Banner Maxx, Heritage, Daconil, Daconil Ultrex, Weather Stik, Daconil ZN, and Medallion are registered trademarks of Syngenta.

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Fungo is a registered trademark of the Scotts Company.

Terrachlor, Terraguard, Terrazole and Turcide are registered trademarks of Uniroyal Chemical Company, Inc.

Concorde is a trademark and Pentathlon is a registered trademark of the DuPont Company.

Quali-Pro® is a registered trademark of Makhteshim Agan of North America, Inc.

Rubigan A.S. is a registered trademark of Gowan Company, LLC.

Eagle Fungicide is a registered trademark of Dow AgroSciences, LLC.





Issue Date: 13-Jan-2009

Revision Date: 06-Jan-2016

Version 2

1. IDENTIFICATION

Product Identifier

Product Name

Prime Source Fosal Select™

Other means of identification

SDS#

Registration Number(s)

EPA Reg. No. 89442-8

Recommended use of the chemical and restrictions on use

Recommended Use

EPA registered pesticide.

Details of the supplier of the safety data sheet

Manufacturer Address

Prime Source, LLC 10025 US 264 Alternate Middlesex, NC 27557 877-235-0043

Emergency Telephone Number

Emergency Telephone (24 hr)

For fire, spill and/or leak contact INFOTRAC:

1-800-535-5053 (North America) 1-352-323-3500 (International)

For medical emergencies and health/safety inquiries, contact PROSAR:

1-877-250-9291

2. HAZARDS IDENTIFICATION

This chemical is a product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-EPA registered chemicals. Please see Section 15 for additional EPA information.

Appearance White granules

Physical State Solid

Odor Faint

Classification

Serious eye damage/eye irritation

Category 2

Hazards Not Otherwise Classified (HNOC)

May be harmful in contact with skin

Signal Word Warning

Hazard Statements

Causes serious eye irritation





Precautionary Statements - Prevention

Wear eye protection/face protection

Wash hands, face, and any exposed skin thoroughly after handling

Precautionary Statements - Response

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing If eye irritation persists: Get medical advice/attention

Other Hazards

Harmful to aquatic life with long lasting effects

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name Fosal Select Technical	CAS No 39148-24-8	Weight-% 77.6-82.4
Proprietary Additive	Proprietary	3.8-4.2

^{**}If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.**

4. FIRST-AID MEASURES

First Aid Measures

IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician. When **General Advice**

possible, have the product container or label 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 **Eye Contact**

present and easy to do. Continue rinsing. If eye irritation persists: Get medical

advice/attention.

Remove contaminated clothing and shoes. Wash affected areas thoroughly with soap and **Skin Contact**

water for at least 15 minutes.

Give oxygen if breathing is difficult. If breathing has stopped, call 911, give artificial Inhalation

respiration. Seek medical attention.

Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth Ingestion

to an unconscious person. Do not induce vomiting without medical advice. Immediately call

a poison center or doctor/physician.

Most important symptoms and effects

Symptoms

Causes serious eye irritation.

Indication of any immediate medical attention and special treatment needed

Notes to Physician

Treat symptomatically.



5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Dry chemical. Carbon dioxide (CO₂). Foam.

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical

May form explosive dust mixtures with air.

Hazardous Combustion Products Smoke, furnes or vapors, and oxides of carbon. Aluminum oxides. Phosphorus oxides.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Evacuate area of unprotected personnel. Remain upwind of fire to avoid hazardous vapors and decomposition products. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions

Wear protective clothing as described in Section 8 of this safety data sheet. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Avoid contact with skin,

eyes or clothing. Avoid creating dust.

Environmental Precautions

Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section

12, Ecological Information. See Section 13: DISPOSAL CONSIDERATIONS.

Methods and material for containment and cleaning up

Methods for Containment

Prevent further leakage or spillage if safe to do so.

Methods for Clean-Up

Shovel waste material into properly labeled container. Avoid creating dust. Scrub area with detergent and water. Rinse area thoroughly. Place rinsate into chemical waste container.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling

Handle in accordance with good industrial hygiene and safety practice. Use personal protection recommended in Section 8. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact with skin, eyes or clothing. Use only outdoors or in a well-ventilated area. Avoid generation of dust. Avoid spillage which can cause very slippery conditions on floors. Do not contaminate water, food, or feed by storage or disposal.

Conditions for safe storage, including any incompatibilities

Storage Conditions

Do not contaminate water, food, or feed by storage or disposal. Keep/store only in original container. Store at ambient conditions. Keep container tightly closed and store in a cool, dry

and well-ventilated place. Avoid excessive temperatures & high humidity.

Packaging Materials

Do not reuse container.

Incompatible Materials

Strong acids. Strong bases.



8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

This product, as supplied, does not contain any hazardous materials with occupational

exposure limits established by the region specific regulatory bodies

Appropriate engineering controls

Engineering Controls

Please refer to the product label. Use only with adequate ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to keep worker exposure to airborne

contaminants below any recommended or statutory limits.

Individual protection measures, such as personal protective equipment

Eye/Face Protection

Wear safety glasses with side shields (or goggles).

Skin and Body Protection

Wear appropriate clothing to prevent repeated or prolonged skin contact. Wear long-sleeved shirt, long pants, and shoes plus socks. Use chemical resistant gloves, such as P.V.C., butyl-

rubber, nitrile-rubber, or neoprene.

Respiratory Protection

Melting Point/Freezing Point

Boiling Point/Boiling Range

NiOSH-approved respirator or mask in the absence of adequate ventilation.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice. Wash face, hands and

any exposed skin thoroughly after handling. Take off all contaminated clothing and wash it before reuse. 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, use detergent and hot water. Keep and wash PPE separately from other laundry.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State Appearance

Solid

White granules

Odor

Faint

Color

White

Odor Threshold

Remarks • Method

Not determined

Property pН

Flash Point

Values

3.4 Not determined

Not determined

Not determined Not applicable

Evaporation Rate Flammability (Solid, Gas) Not determined

Not determined **Upper Flammability Limits** Not determined **Lower Flammability Limit** Not determined

Vapor Pressure Not determined **Vapor Density** Not determined **Specific Gravity**

Insoluble in water Water Solubility Not determined Solubility in other solvents Not determined **Partition Coefficient**

>400 °C / >752 °F Auto-ignition Temperature Not determined Decomposition Temperature Kinematic Viscosity Not determined

Not determined **Dynamic Viscosity** Dust can form an explosive mixture with air **Explosive Properties**

Not determined **Oxidizing Properties** 0.65 g/ml Density



10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions.

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous Polymerization

Hazardous polymerization does not occur.

Conditions to Avoid

Keep out of reach of children. High humidity is to be avoided.

Incompatible Materials

Strong acids. Strong bases.

Hazardous Decomposition Products

Smoke, fumes or vapors, and oxides of carbon. Aluminum oxide. Phosphorous oxides.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Eye Contact

Causes serious eye damage.

Skin Contact

May be harmful in contact with skin.

Inhalation

Harmful if inhaled.

Ingestion

Do not ingest.

Component Information

Component Internation			
Chemical Name	Oral LD50	Dermal LD50 > 2 g/kg (Rabbit)	Inhalation LC50 > 1,73 mg/L (Rat) 4 h
Fosal Select Technical 39148-24-8	= 5 g/kg (Rat)	- 2 g/kg (Nabok)	
Proprietary Additive	> 10000 mg/kg (Rat)		

Information on physical, chemical and toxicological effects

Symptoms

Please see section 4 of this SDS for symptoms.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Carcinogenicity

Based on the information provided, this product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP



Product Information (Numerical measures of toxicity)

Acute Oral LD50 (Rat): 2,860 mg/kg Acute Dermal LD50 (Rabbit): >2,000 mg/kg Acute Inhalation LC50 (Rat): >5.0 mg/L (4-hr)

Eye Irritation: Mildly irritating. Dermal Irritation: Slightly irritating. Dermal Sensitization: Not a sensitizer.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Harmful to aquatic life with long lasting effects. This product is toxic to aquatic and estuarine invertebrates. Drift and runoff may be hazardous to aquatic and estuarine organisms in neighboring areas. 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.

Component Information

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Fosal Select Technical 39148-24-8	21.9: 90 h Scenedesmus pannonicus mg/L EC50	430: 96 h Oncorhynchus mykiss mg/L LC50		178 - 365: 48 h Daphnia magna mg/L EC50 Static 172 - 207.5: 96 h Daphnia pulex mg/L EC50 Static
Proprietary Additive		13500 - 14500: 96 h Pimephales promelas mg/L LC50 6800: 96 h Pimephales promelas mg/L LC50 static 3040 - 4380: 96 h Lepomis macrochirus mg/L LC50 static 13500: 96 h Lepomis macrochirus mg/L LC50		630: 96 h Daphnia magna mg/L EC50 2564: 48 h Daphnia magna mg/L EC50

Persistence/Degradability: Not determined.

Bioaccumulation: Not determined.

Mobility	
Chemical Name	Partition Coefficient
Fosetyl-Al Technical	-2.28 - 2.77
39148-24-8	

Other Adverse Effects

Not determined

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods Disposal of Wastes

END USERS MUST DISPOSE OF ANY UNUSED PRODUCT AS PER THE LABEL RECOMMENDATIONS.

Pesticide wastes are acutely hazardous. 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.

Under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as

a hazardous waste.

Contaminated Packaging

Disposal should be in accordance with applicable regional, national and local laws and regulations.



14. TRANSPORT INFORMATION

<u>DOT</u>

Not regulated

<u>IATA</u>

Not regulated

<u>IMDG</u>

Marine Pollutant

This material may meet the definition of a marine pollutant

15. REGULATORY INFORMATION

International Inventories

Chemical Name	TSCA	DSL	NDSL	EINECS	ELINCS	ENCS	IECSC	KECL	PICCS	AICS
Fosal Select Technical				Present			X	Present		X
Proprietary Additive	Present	х		Present		Present	X	Present	X	X

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

SARA 313

Not determined

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Fosal Select Technical	X		[
39148-24-8			<u> </u>
Proprietary Additive		X	X

EPA Pesticide Registration Number EPA Reg. No. 89442-8



EPA Statement

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

EPA Pesticide Label Signal Word: Caution

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

Difference between SDS and EPA pesticide label

	EPA	OSHA
Signal Word	Caution	Warning
Acute toxicity - Oral	Harmful if swallowed	N/A
Acute toxicity - Dermal	Harmful if absorbed through the skin	N/A
Acute toxicity - Inhalation (Vapors)	Harmful if inhaled	N/A
Serious eye damage/eye irritation	N/A	Causes serious eye irritation

16. OTHER INFORMATION

NFPAHealth HazardsFlammabilityInstabilitySpecial Hazards100NoneHMISHealth HazardsFlammabilityPhysical HazardsPersonal Protection100See section 8

Issue Date: 13-Jan-2009
Revision Date: 06-Jan-2016

Revision Note: Updated format from 13-Jan-2015

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet

GROUP 28 INSECTICIDE

Not for Sale, Sale Into, Distribution and/or Use in Nassau, Suffolk, Kings, Queens Counties of New York State.



Insecticide

For foliar and systemic control of white grubs and other listed pests infesting landscape and recreational turfgrass (including golf courses) as well as landscape ornamentals, interior plantscapes and sod farms.

EPA Est. No. 46073-TN-003 NTM EPA Est. No. 072344-MO-004 TRR

(Superscript is first three letters of batch code on container) EPA Reg. No. 100-1489

*Chlorantraniliprole belongs to the anthranilic diamide chemical class.

Product of USA

KEEP OUT OF REACH OF CHILDREN

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.)

SCP 1489A-L1B 0414

FIRST AID

HOT LINE NUMBER

For 24-Hour Medical Emergency Assistance (Human or Animal) or Chemical Emergency Assistance (Spill, Leak, Fire, or Accident), Call 1-800-888-8372

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

When used as directed this product does not present a hazard to humans or domestic animals.

Personal Protective Equipment

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants.
- · Shoes plus socks.

After the product has been diluted in accordance with label directions for use, shirt, pants, socks, and shoes are sufficient Personal Protective Equipment (PPE). Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables are available, 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 immediately if pesticide gets inside.
- Then wash thoroughly and put on clean clothing.

Environmental Hazards

This pesticide is toxic to aquatic invertebrates, oysters and shrimp. Do not apply directly to water. Drift and runoff may be hazardous to aquatic organisms in water adjacent to use sites.

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 ground water. This product is classified as having a 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 such as ponds, streams, and springs will reduce the potential loading of chlorantraniliprole from runoff water and sediment. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours.

Ground Water Advisory

This chemical has properties and characteristics associated with chemicals detected in ground water. This chemical may leach into ground water if used in areas where soils are permeable, particularly where the water table is shallow.

DIRECTIONS FOR USE

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

 Not for use on plants being grown for sale or other commercial use, or for commercial seed production.

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 (sod farms included), 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 the label about personal protective equipment, restricted-entry interval, and notification to workers (as applicable).

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.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 4 hours.

For early entry into 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, wear:

- Long-sleeved shirt and long pants
- 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.

Professional applications to golf courses, residential, industrial and commercial lawns and sports fields are not within the scope of the Worker Protection Standard. Do no enter or allow others to enter the treated area until sprays have dried.

Acelepryn® must be used only in accordance with specifications on this label or in separate Syngenta supplemental labeling that may be made temporarily available through local distributors, as a result of new EPA approvals. Syngenta will not be responsible for losses or damages resulting from the use of this product in any manner not specifically stated on this label or other labels or bulletins published by Syngenta. User assumes all risks associated with such non-specified uses.

PRODUCT INFORMATION

Acelepryn is a suspension concentrate that may be applied for the control of white grubs and other listed pests infesting land-scape and recreational turfgrass (including golf courses) as well as caterpillars, clearwing moth borers and other pests of landscape ornamentals including trees, shrubs, foliage plants, flowers and non-bearing fruit and nut trees that will not produce fruit or nuts during the season of application.

Acelepryn may be used on plants or turfgrasses that are being grown for aesthetic or recreational purposes or climatic modification in or around home lawns, residential dwellings, business and office complexes, shopping complexes, multi-family residential complexes, institutional buildings, airports, cemeteries, interior plantscapes, ornamental gardens, wildlife plantings, parks, playgrounds, schools, day-care facilities, golf courses (tee box areas, roughs, fairways, greens, collars etc.), athletic fields, other landscaped areas, and sod farms.

Acelepryn is in GROUP 28 of the EPA's Insecticide and Acaricide Groups Based on Target Site of Action (EPA PR Notice 2001-5) and may be used in rotational resistance management programs.

Acelepryn must be diluted with water before application.

Consult your local Syngenta Professional Products representative, Cooperative Extension Service specialist or pest control advisor for regionally specific information regarding application timing.

APPLICATION TIMING

White Grubs: Apply Acelepryn from early April to early September for preventative and early curative control of all the major white grub species infesting turfgrass. The need for an application may be based on historical monitoring of the site, previous records or experiences, current season adult trapping or other methods. The higher rate listed for white grub control in Table 1 may be required [for early season (April and May) applications where a long residual is required or] in late August or early September when less sensitive mid-instar grubs are present at the time of application. Irrigate turf immediately after application or allow rainfall to move the product into the soil.

Annual Bluegrass Weevil: Apply Acelepryn when overwintered adult annual bluegrass weevils are observed in late April or early May to prevent damage from first generation larvae in late-May and June. An application of Acelepryn at this time will also provide excellent white grub control. The higher rates listed in Table 1 may be required for applications made after mid-May.

Billbugs: Apply Acelepryn when overwintered adult billbugs are first observed. This will usually occur in late April or early May in regions with cool-season turfgrasses. An application of Acelepryn at this time will also provide excellent white grub control. The higher rates listed in Table I may be required for applications made after early May or when billbug species other than bluegrass billbug are present.

Chinch Bugs: For suppression of chinch bugs, apply Acelepryn before eggs hatch.

European Crane Fly: Apply Acelepryn between September and November to control European crane fly larvae in turfgrass. The higher rate listed in Table 1 may be required to achieve control when applications are made in November.

Spittlebugs: Acelepryn will provide control of two-lined spittlebug when applications are made in spring or summer.

Turf Caterpillars: Acelepryn will provide excellent curative caterpillar control in turfgrass. To ensure optimum control, delay watering (irrigation) or mowing for 24 hours after application. If the area being treated is maintained at a mowing height of greater than one inch, then the higher rate listed in Table 1 may be required during periods of high pest pressure.

APPLICATION RATES FOR LAWNS, GOLF COURSES AND OTHER RECREATIONAL TURFGRASS AREAS

For maximum residual effectiveness or for optimal control of large pest infestations, apply Acelepryn at up to 24 fluid ounces per acre (= 0.55 fluid ounces per 1,000 square feet or 0.313 lb Al/A) to control any of the pests listed below. Apply Acelepryn in sufficient water to provide optimal distribution in the treated area. Use properly calibrated application equipment that will produce a uniform, coarse droplet spray, using a low pressure setting to eliminate off target drift. Restriction: Do not apply more than 38.3 fluid ounces (equivalent to 0.5 lb of active ingredient) of product per acre per year in broadcast applications to turfgrass.

TABLE 1: Turf Application Rates

	Acelepr	yn Turf Applicatio	n Rates
Target Pest	Product (fl oz) per Acre	Product (fl oz) per 1,000 Square Feet	Lb Al/A
Turf Caterpillars (including armyworms, cutworms and sod webworms)	2 to 4	0.046 to 0.092	0.026 to 0.052
White Grubs (including Aphodius spp., Asiatic garden beetle, black turfgrass ataenius, European chafer, green June beetle, Japanese beetle, May/June beetles (Phyllophaga spp.), northern masked chafer, oriental beetle and southern masked chafer)	8 to 16	0.184 to 0.367	0.104 to 0.208
European Crane Fly	8 to 16	0.184 to 0.367	0.104 to 0.208
Billbugs	8 to 20	0.184 to 0.46	0.104 to 0.26
Annual bluegrass weevil	12 to 20	0.275 to 0.46	0.157 to 0.26
Spittlebugs	12 to 20	0.275 to 0.46	0.157 to 0.26
Chinch bugs (suppression only)	8 to 20	0.184 to 0.46	0.104 to 0.26

TABLE 2: Turf Application Dilution Chart

Application Volume	Turf	Application Ra	ates	Fluid ounces of Acelepryn diluted to these volumes of finished spray			
(Gallons per 1,000 Square Feet)	Product (fl oz) per Acre	Product (fi oz) per 1,000 sq ft	lb Al/A	1 gallon	5 gallons	10 gallons	100 gallons
	1	0,023	0.013	0.023	0.115	.023	2.3
	2	0.046	0.026	0.046	0.23	0.46	4.6
	4	0,092	0.052	0,092	0.46	0.92	9.2
1	8	0,184	0.104	0.184	0,92	1.84	18.4
	16	0.367	0.208	0.367	1.84	3.67	36.7
	20	0.46	0.26	0.46	2.3	4.6	46.0
	24	0.55	0.313	0.55	2.76	5.5	55.0
	1	0.023	0.013	0.0115	.0.58	0.115	1.15
	2	0.046	0.026	0.023	0.115	0.23	2.3
	4	0.092	0.052	0.046	0.23	0.46	4.6
2	8	0,184	0.104	0.092	0.46	0.92	9.2
	16	0.367	0.208	0,184	0.92	1.84	18.4
	20	0.46	0.26	0,23	1.15	2.3	23.0
	24	0.55	0.313	0.275	1.38	2.75	27.5
_	1	0.023	0.013	0.0077	0.039	0.077	0.77
3	2	0.046	0.026	0.015	0.077	0.15	1.5
	4	0.092	0.052	0.03	0.154	0.3	3.0
	8	0.184	0.104	0.06	0.308	0.6	6.0
	16	0.367	0.208	0,123	0.616	1.23	12.3
	20	0.46	0.26	0.153	0.77	1,53	15.3
	24	0.55	0.313	0.184	0.92	1.84	18.4
	1	0.023	0,013	0.0058	0.029	0.058	0.58
	2	0.046	0.026	0.0115	0.058	0.115	1.15
	4	0.092	0.052	0.023	0.116	0.23	2.3
4	8	0.184	0.104	0.046	0.23	0.46	4.6
4	16	0.367	0.208	0.092	0.46	0.92	9.2
	20	0.46	0.26	0.115	0.58	1.15	11.5
		0.46	0,313	0.113	0.7	1,38	13.8
	24	0.023	0.013	0.0046	0.023	0.046	0.46
	1		0.015	0.0092	0.023	0.092	0,92
	2	0.046	-	0.0092	0.092	0.184	1.84
_	4	0.092	0.052	_	0.184	0.104	3.7
5	8	0.184	0.104	0.037	0.368	0.74	7.4
	16	0,367	0.208	0.074	0.46	0.74	9.2
	20	0.46	0.26	0.092	_	1.1	11.0
	24	0.55	0.313	0.11	0.55	0.023	0.23
	1	0.023	0.013	0.0023	0.0115		
	2	0.046	0.026	0.0046	0.023	0.046	0.46
	4	0.092	0.052	0.0092	0.046	0.092	0.92
10	8	0.184	0.104	0.0184	0.092	0.184	1.84
	16	0.367	0.208	0.0367	0.184	0.367	3.67
	20	0,46	0.26	0.046	0.23	0.46	4.6
	24	0.55	0.313	0.55	0.276	0.55	5.5

- To convert from fluid ounces to milliliters, multiply by 29.57.
- 1 fluid ounce = 29.57 ml = 2 tablespoons = 6 teaspoons
- Do not use household utensils to measure Acelepryn

APPLICATION RATES FOR ORNAMENTAL PLANTS (EXTERIOR LANDSCAPES AND INTERIOR PLANTSCAPES)

Foliar Applications:

Acelepryn mixes readily with water and may be applied with many types of application equipment. Foliar treatment application rates are listed in Table 3. Mix the appropriate amount Aceleptyn with the required amount of water and apply as a full coverage foliar spray to control the selected target pest. Foliar applications offer locally systemic activity against insect pests. Repeat treatment as necessary to maintain control using higher application rates as pest pressure and foliage area increases. Repeat applications must be limited to no more than once per seven days. Certain plant species or cultivars may be sensitive to the final spray solution. If local experience is not available, then a small number of plants should be treated and observed for phytotoxicity for at least one week before making an application to the entire planting. When making foliar applications to hard-towet foliage such as holly, pine, or ivy, the addition of a spreader/ sticker is recommended. If concentrate or mist type spray equipment is used, an equivalent amount of product should be used on the area sprayed, as would be used in a dilute application. For outdoor landscape ornamentals, broadcast applications cannot exceed a total of 38.3 fluid ounces (equivalent to 0.5 lb of active ingredient) of product per acre per year.

TABLE 3: Foliar Ornamental Application Rates

Acelepryn Ornamental Foliar Application Rates					
Target Pests	Product (fl oz) per 100 Gallons	Lb Al per 100 Gallons	PPM	Percent Al (wt/vol)	Maximum Gallons per Acre per Year
Leaf-feeding caterpillars	1	0.013	15.6	0.00156	3840
(such as bagworms and tussock	2	0.026	31.3	0.00313	1920
moth caterpillars	4	0.052	62.5	0.0625	960
(including whitemarked tussock moth))	8	0.104	125	0.0125	480
For maximum residual control of the pests listed above	16	0,208	250	0,025	240

Soil Applications:

Acelepryn is a systemic product and will be translocated upward into the plant from root uptake. Soil treatment application rates are listed in Table 4. To assure optimum effectiveness, the product must be placed where the growing portion of the target plant can absorb the active ingredient. For this reason, basal application within one to three feet of the root flare of trees and shrubs is recommended. Application can be made by soil injection, soil drenches and broadcast sprays. When making soil applications to plants with woody stems, systemic activity will be delayed until the active ingredient is translocated throughout the plant. In some cases, this delay could be 60 days or longer. For this reason, applications should be made prior to anticipated pest infestation to achieve optimum levels of control.

TABLE 4: Ornamental Soil Treatment Application Rates

	Trees: Amount per inch of diameter (DBH) Product (fl oz) Lb At		Shrubs: Amoun of heigl	
Target Pests			Product (fl oz)	Lb Al
Lace bugs Aphids, including apple aphid	0.0625	8000,0	0.0625	0.0008
	0.125	0.0016	0.125	0.0016
-p	0.25	0.0032	0.25	0.0032
Birch leafminer	0.25	0.0032	0.25	0.0032

The calculations for soil injection/drench applications of Acelepryn involve five easy steps:

- Step 1: Calibrate the application equipment to determine its flow rate in gallons per minute.
- Step 2: Select an injection volume per inch of tree diameter at breast height (DBH) or foot of shrub height.

- Step 3: Refer to the Table 5 below to determine the amount of time that is required to deliver the desired volume per injection site. The example highlighted in Table 5 shows that 10 seconds are required per inch of tree DBH or foot of shrub height when injecting 1 quart of solution per site using a flow rate of 1.5 gallons per minute.
- Step 4: Determine how much solution to mix.
- Step 5: Refer to the Table 6 below to determine the amount of Acelepryn that must be mixed in the desired volume of water based on the injection volume identified above. The example highlighted in Table 6 shows that 25 fluid ounces of Acelepryn must be mixed in 50 gallons of water when applying 0.125 fluid ounces of product per inch of DBH or foot of shrub height using one quart of solution per inch of DBH or foot of shrub height.

TABLE 5: Ornamental Soil Treatment Application Calibration Chart

	Flow Rate (Gallons per minute)					
Volume per Site*	0.5 gallon	0.75 gallon	1.0 gallon	1.5 gallons	2.0 gallons	3.0 gallons
1 pint	15.0 sec	10.0 sec	7.5 sec	5.0 sec	3,75 sec	2.5 sec
1 quart	30.0 sec	20.0 sec	15.0 sec	10.0 sec	7.5 sec	5.0 sec
2 quarts	1.0 min	40.0 sec	30.0 sec	20.0 sec	15.0 sec	10.0 sec
1 gallon	2.0 min	1 min 20 sec	1.0 min	40.0 sec	30.0 sec	20.0 sec

^{*} Site = Soil injection site - the selected volume is applied per inch of tree DBH or foot of shrub height.

TABLE 6: Ornamental Soil Treatment Application Mixing Chart

Volume per Site*	Application Rate (fl oz) ¹	Product (fl oz) per 100 Gallons	Product (fl oz) per 50 Gallons	Product (fl oz) per 25 Gallons	Product (fl oz) per 10 Gallons	Product (fl oz) per 1 Gallon
	0.0625	50	25	12.5	5	0.5
1 pint	0.125	100	50	25	10	1
	0.25	200	100	50	20	2
	0.0625	25	12.5	6.25	2.5	0.25
1 quart	0.125	50	25	12.5	5	0.5
	0.25	100	50	25	10	1
	0.0625	12.5	6.25	3.125	1,25	0.125
2 quarts	0.125	25	12.5	6.25	2.5	0.25
	0.25	50	25	12.5	5	0.5
	0.0625	6.25	3.125	1.56	0.625	0.0625
1 gallon	0.125	12.5	6.25	3.125	1.25	0.125
	0.25	25	12.5	6.25	2.5	0.25

¹Rate per inch Diameter at Breast Height (DBH); or rate per foot of shrub height.

Broadcast Applications to Flower Beds and Groundcovers:

Acelepryn may be applied for white grub control in flower beds and groundcovers. Flower bed and groundcover application rates are listed in Table 7. Apply in sufficient water to uniformly cover the area being treated (a minimum of 2 gallons per 1,000 square feet is recommended for flower bed and groundcover applications). Irrigate immediately after application or allow rainfall to move the product into the soil. Acelepryn may be applied to flower beds and groundcovers either before planting or after plants have been established.

TABLE 7: Ornamental Flowers and Groundcovers Soil Treatment Application Rates

Target Pest	Product (fi oz) per. Acre	Product (fl oz) per 1,000 Square Feet	lb Ai/A
White Grubs (Asiatic garden beetle, European chafer, green June beetle,	8.0	0.184	0.104
Japanese beetle, May/June beetles (Phyllophaga spp.), northern masked chafer, oriental beetle and southern masked chafer)	16.0	0.367	0,208

Bark Applications:

Apply Acelepryn to the trunks and lower branches of trees and shrubs to control clearwing moth borer larvae. Bark treatment application rates are listed in Table 8. Make applications after the emergence of adult moths and before their eggs hatch. Thorough coverage of the bark is required for satisfactory control. Adult emergence varies according to pest species, host tree, environmental conditions and geographic location. Consult your local Syngenta Professional Products representative, Cooperative Extension Service specialist or pest control advisor for regionally specific information regarding application timing.

TABLE 8: Ornamental Application Bark Treatment Rates

Target Pests	Product (fl oz) per 100 Gallons	Lb Al per 100 Gallons	PPM	Percent Al (wt/vol)
Clearwing Borers, including	4	0.052	62.5	0.00625
peachtree borer	8	0.104	125	0,0125
	16	0.208	250	0.025
For maximum residual control of the pests listed above.	32	0.416	500	0.05

Formula for Determining the Active Ingredient Content of the Finished Spray Mixture:

The following formula may be used to determine the percent active ingredient (wt/wt) that is in the spray tank after mixing Acelepryn.

(18.4) X (Fluid ounces of Acelepryn

ion if it (i laid outlieds of i testopi jii	
added to spray tank)	= Percent Active Ingredient
(Gallons of finished spray mix) X (128)	of spray mix
Spray IIIIX) A (120)	

APPLICATION EQUIPMENT PREPARATION

- Application equipment must be clean and free of previous pesticide deposits before mixing Acelepryn.
- Use clean, well maintained and properly calibrated application equipment.
- 3. Fill sprayer tank 1/4 to 1/2 full of water.
- 4. Shake the container of Acelepryn well before pouring.
- 5. Then add Acelepryn directly to the sprayer tank.
- Mix thoroughly to fully disperse the insecticide and continue agitation to keep the insecticide in suspension. Use mechanical or hydraulic agitation. Do not use air agitation.
- 7. It is recommended that the mixture not be stored in the spray or mix tank overnight.

Tank-mixtures:

Acelepryn may be tank-mixed with other pesticides. When tank-mixing Acelepryn with other pesticides, observe all precautions and limitations on each separate product label. Do not exceed label dosage rates. Acelepryn may not be mixed with any product containing a label prohibition against such mixing. The physical compatibility of Acelepryn will vary with different sources of pesticide products and local cultural practices. For a tank-mixture test, prepare on a small scale (pint or quart jar) using the proper proportions of pesticides and water to ensure the physical compatibility of the mixture.

Tank-mixing Sequence:

Add different formulation types in the sequence indicated below. Allow time for complete mixing and dispersion after the addition of each product.

- Water-soluble bags
- Water-dispersible granules
- 3. Wettable powders
- 4. Acelepryn and other water-based suspension concentrates
- 5. Water-soluble concentrates
- 6. Oil-based suspension concentrates
- 7. Emulsifiable concentrates
- 8. Adjuvants, surfactants, oils
- 9. Soluble fertilizers
- 10. Drift retardants

APPLICATION EQUIPMENT CLEANING

Prior to application, start with clean, well maintained application equipment. Immediately following application, thoroughly clean all application equipment to reduce the risk of forming hardened deposits that might become difficult to remove. Drain application equipment. Thoroughly rinse application equipment and flush hoses, boom and nozzles with clean water. Clean all other associated application equipment. Take all necessary safety precautions when cleaning equipment. Do not clean equipment near wells, water sources or desirable vegetation. Dispose of waste rinse water in accordance with local regulations.

INTEGRATED PEST MANAGEMENT (IPM) PROGRAMS

Acelepryn is recommended for IPM programs on turf and landscape ornamentals because it does not directly impact natural arthropod predator and parasitoid populations including ladybird beetles, lacewings, minute pirate bugs and predatory mites. The feeding behavior of predatory beneficial arthropods will aid in extending natural control of other insect and mite pests and will reduce the possibility of secondary pest outbreaks. Acelepryn will reduce the target pest species that may serve as a food source for beneficial arthropods. If Acelepryn is tank-mixed with an insect control product that negatively impacts beneficial arthropods, then the full benefit of Acelepryn to the IPM program may not be realized.

RESISTANCE MANAGEMENT

Some insects are known to develop resistance to products used repeatedly for control. When this occurs, the labeled dosages fail to suppress the pest population below threshold levels. Because the development of resistance cannot be predicted, the use of this product should conform to resistance management strategies established for the use area. These strategies may include incorporation of cultural and biological control practices, alternation of active classes of insecticides on succeeding generations and targeting the most susceptible life stage. Consult your local Syngenta Professional Products representative, Cooperative Extension Service specialist or pest control advisor for the latest information on resistance management in your area.

Restrictions

- Do not formulate this product into other end-use products without written permission from Syngenta Professional Products.
- Do not apply this product through any type of irrigation system.
- Do not apply this product with aerial application equipment.
- Do not apply this product in commercial nurseries and greenhouses.
- Do not apply more than 38.3 fluid ounces (equivalent to 0.5 lb of active ingredient) of product per acre per year in broadcast applications to turfgrass.
- Keep people and pets away from treated area until treatment has dried
- Wait a minimum of 7 days to retreat.
- Always shake container well before use.

• The following restrictions are required to permit use of Acelepryn in the State of New York:

Golf courses:

Greens, tee boxes: Do not apply this product within 25 feet of a water body (lake, pond, river, stream, wetland, or drainage ditch). Fairways: Do not apply this product within 50 feet of a water body (lake, pond, river, stream, wetland, or drainage ditch).

All other use sites:

Do not apply this product within 100 feet of a water body (lake, pond, river, stream, wetland, or drainage ditch).

STORAGE AND DISPOSAL

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

Pesticide Storage

Do not subject to temperatures below 32 degrees F. Store product in original container only in a location inaccessible to children and pets. Do not contaminate water, other pesticides, fertilizer, food or feed in storage. Not for use or storage in or around the home.

Pesticide Disposal

Do not contaminate water, food or feed by storage or disposal. Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

Container Handling

Refer to the Net Contents section of this product's labeling for the applicable "Refillable Container" or "Nonrefillable Container" designation.

For Small (Capacity Equal to or Less Than 5 Gallons) Nonrefillable Plastic Containers:

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 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.

For Large (Capacity Greater Than 5 Gallons) Nonrefillable Plastic Containers:

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. 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.

continued...

STORAGE AND DISPOSAL (continued)

For All Refillable Containers:

Refilable container. Refill this container with chlorantraniliprole 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 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. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Prior to refilling, inspect carefully for damage such as cracks, punctures, abrasions, worn out threads and closure devices. Check for leaks after refilling and before transporting. Do not transport if this container is damaged or leaking.

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. Crop injury, ineffectiveness or other unintended consequences 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 SYNGENTA CROP PROTECTION, LLC or Seller. To the extent permitted by applicable law, Buyer and User agree to hold SYNGENTA and Seller harmless for any claims relating to such factors.

SYNGENTA 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, when used in accordance with directions under normal use conditions. To the extent permitted by applicable law: (1) 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 SYNGENTA, and (2) Buyer and User assume the risk of any such use. TO THE EXTENT PERMITTED BY APPLICABLE LAW, SYNGENTA MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS WARRANTED BY THIS LABEL.

To the extent permitted by applicable law, in no event shall SYNGENTA be liable for any incidental, consequential or special damages resulting from the use or handling of this product. TO THE EXTENT PERMITTED BY APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF SYNGENTA 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 SYNGENTA OR SELLER, THE REPLACEMENT OF THE PRODUCT.

SYNGENTA and Seller offer this product, and Buyer and User accept it, subject to the foregoing Conditions of Sale and Limitation of Warranty and of Liability, which may not be modified except by written agreement signed by a duly authorized representative of SYNGENTA.

Acelepryn®, the ALLIANCE FRAME, the SYNGENTA Logo and the PURPOSE ICON are Trademarks of a Syngenta Group Company ©2014 Syngenta

For non-emergency (e.g., current product information), call Syngenta Crop Protection at 1-800-334-9481.

Manufactured for: Syngenta Crop Protection, LLC P.O. Box 18300 Greensboro, North Carolina 27419-8300

SCP 1489A-L1B 0414



ACELEPRYN®

Date:

4/2/2015

Replaces:

6/4/2014

1. PRODUCT IDENTIFICATION

Product identifier on label: ACELEPRYN®

Product No.:

A16130A

Use:

Insecticide

Manufacturer:

Syngenta Crop Protection, LLC

Post Office Box 18300 Greensboro NC 27419

Manufacturer Phone:

1-800-334-9481

Emergency Phone:

1-800-888-8372

2. HAZARDS IDENTIFICATION

Classifications:

Not Applicable

Signal Word (OSHA):

Not Applicable

Hazard Statements:

Not Applicable

Hazard Symbols:

Precautionary Statements:

Not Applicable

Other Hazard Statements:

This product presents no significant hazards under normal conditions

of use.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	Common Name	CAS Number	Concentration
Other ingredients	Other ingredients	Trade Secret	81.6%
3-Bromo-N-[4-chloro-2-methyl-6- [(methylamino)carbonyl]phenyl]-1-(3-	Chlorantraniliprole	500008-45-7	18.4%

chloro-2-pyridinyl)-1H-pyrazole-5-

carboxamide

Ingredients not precisely identified are proprietary or non-hazardous. Values are not product specifications.



ACELEPRYN®

Date:

4/2/2015

Replaces:

6/4/2014

4. FIRST AID MEASURES

Have the product container, label or Safety Data Sheet with you when calling Syngenta (800-888-8372), a poison contol center or doctor, or going for treatment.

Ingestion:

If swallowed: Call Syngenta (800-888-8372), a poison control center or doctor immediately for treatment advice. Do not give any liquid to the person. Do not induce vomiting unless told to do so after calling 800-888-8372 or by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

Eye Contact:

If in eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after 5 minutes, then continue rinsing eye. Call Syngenta (800-888-8372), a poison control center or doctor for treatment advice.

,

Skin Contact: If on skin or

If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20

minutes. Call Syngenta (800-888-8372), a poison control center or doctor for treatment advice.

Inhalation:

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 Syngenta (800-888-8372), a poison control center or

doctor for further treatment advice.

Most important symptoms/effects:

Not Applicable

Indication of immediate medical attention and special treatment needed:

There is no specific antidote if this product is ingested.

Treat symptomatically.

5. FIRE FIGHTING MEASURES

Suitable (and unsuitable) extinguishing media:

Use dry chemical, foam or CO2 extinguishing media. If water is used to fight fire, dike and collect runoff.

Specific Hazards:

During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion.

Special protective equipment and precautions for firefighters:

Wear full protective clothing and self-contained breathing apparatus. Evacuate nonessential personnel from the area to prevent human exposure to fire, smoke, fumes or products of combustion.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures:

Follow exposure controls/personal protection outlined in Section 8.

Methods and materials for containment and cleaning up:

Control the spill at its source. Contain the spill to prevent from spreading or contaminating soil or from entering sewage and drainage systems or any body of water. Clean up spills immediately, observing precautions outlined in Section 8. Cover entire spill with absorbing material and place into compatible disposal container. Scrub area with hard water detergent (e.g. commercial products such as Tide, Joy, Spic and Span). Pick up wash liquid with additional absorbent and place into compatible disposal container. Once all material is cleaned up and placed in a disposal container, seal container and arrange for disposition.



ACELEPRYN®

Date:

4/2/2015

Replaces:

6/4/2014

7. HANDLING AND STORAGE

Precautions for safe handling:

Store the material in a well-ventilated, secure area out of reach of children and domestic animals. Do not store food, beverages or tobacco products in the storage area. Prevent eating, drinking, tobacco use, and cosmetic application in areas where there is a potential for exposure to the material. Wash thoroughly with soap and water after handling.

Conditions for safe storage, including any incompatibilities:

Not Applicable

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

THE FOLLOWING RECOMMENDATIONS FOR EXPOSURE CONTROLS/PERSONAL PROTECTION ARE INTENDED FOR THE MANUFACTURE, FORMULATION AND PACKAGING OF THIS PRODUCT.

FOR COMMERCIAL APPLICATIONS AND/OR ON-FARM APPLICATIONS CONSULT THE PRODUCT LABEL.

Occupational Exposure Limits:

Chemical Name	OSHA PEL	ACGIH TLV	Other	Source
Other ingredients	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Chlorantraniliprole	Not Established	Not Established	10 mg/m³ TWA (Total); 5 mg/m³ TWA (Resp)	Manufacturer

Appropriate engineering controls:

Use effective engineering controls to comply with occupational exposure limits (if applicable).

Individual protection measures:

Ingestion:

Prevent eating, drinking, tobacco usage and cosmetic application in areas where there is a potential for exposure to the material. Wash thoroughly with soap and water after handling.

Eye Contact:

Where eye contact is likely, use splash-proof chemical goggles.

Skin Contact:

Where contact is likely, wear chemical-resistant gloves (such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyethylene, polyvinyl chloride [PVC] or Viton), coveralls, socks and chemical-resistant footwear.

Inhalation

A respirator is not normally required when handling this substance. Use effective engineering controls to comply with occupational exposure limits.

In case of emergency spills, use a NIOSH certified respirator with any N, R, P or HE filter.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: White semi-viscous liquid

Odor: Alcohol-like

Odor Threshold: Not Available

pH: 7.8 @ 10 g/l

Melting point/freezing point: Not Available

Initial boiling point and boiling range: Not Available



ACELEPRYN®

Date:

4/2/2015

Replaces:

6/4/2014

Flash Point (Test Method):

Not Available

Flammable Limits (% in Air):

Not Available

Flammability:

Product is not flammable

Vapor Pressure: Chlorantraniliprole

1.6 x 10(-9) mm Hg @77° F (25° C)

Vapor Density: Not Available

Relative Density: 1.094

Solubility (ies):

Chlorantraniliprole

1.023 mg/l @ 68°F (20°C)

Partition coefficient: n-octanol/water: Not Available

Autoignition Temperature: Not Available

Decomposition Temperature:

Not Available

Viscosity: Not Available

Other: None

10. STABILITY AND REACTIVITY

Reactivity:

Not reactive.

Chemical stability: Stable under normal use and storage conditions.

Possibility of hazardous reactions: Will not occur.

Conditions to Avoid: Not Available

Incompatible materials:

None known.

Hazardous Decomposition Products: Nitrogen oxides, carbon monoxide and unidentified organic compounds may be

formed upon combustion.

11. TOXICOLOGICAL INFORMATION

Health effects information

Likely routes of exposure:

Dermal, Inhalation

Symptoms of exposure:

Not Applicable

Delayed, immediate and chronic effects of exposure:

Not Applicable

Numerical measures of toxicity (acute toxicity/irritation studies (finished product))

Ingestion:

Oral (LD50 Rat):

> 5000 mg/kg body weight

Dermal:

Dermal (LD50 Rat):

> 5000 mg/kg body weight

Inhalation:

Inhalation (LC50 Rat):

> 2 mg/l air - 4 hours

Eye Contact:

Non-Irritating (Rabbit)

Skin Contact:

Non-Irritating (Rabbit)

Skin Sensitization:

Not a Sensitizer (Mouse)



ACELEPRYN®

Date:

4/2/2015

Replaces:

6/4/2014

Reproductive/Developmental Effects

Chlorantraniliprole: Did not show developmental or reproductive effects in animal experiments.

Chronic/Subchronic Toxicity Studies

Chlorantraniliprole: There were no adverse effects in subchronic feeding studies in rats and dogs. There was a decreased body weight gain at high doses in a 28-day feeding study in mice.

Carcinogenicity

Chlorantraniliprole: Chlorantraniliprole was not carcinogenic in either a 2-year study in rats or an 18-month study in mice.

Chemical Name

NTP/IARC/OSHA Carcinogen

Other ingredients

No

3-Bromo-N-[4-chloro-2-methyl-6-

Nο

[(methylamino)carbonyl]phenyl]-1-(3-chloro-2-

pyridinyl)-1H-pyrazole-5-carboxamide

Other Toxicity Information

This product presents no significant hazards under normal conditions of use.

Toxicity of Other Components

Other ingredients

Not Applicable

Target Organs

Active Ingredients

Chlorantraniliprole:

Not Applicable

Inert Ingredients

Other ingredients:

Not Applicable

12. ECOLOGICAL INFORMATION

Eco-Acute Toxicity

Chlorantraniliprole:

Fish (Rainbow Trout) 96-hour LC50 12.6 mg/l

Invertebrate (Water Flea) Daphnia Magna 48-hour EC50 0.0204 mg/l

Green Algae 72-hour ErC50 > 13 mg/l

Environmental Fate

Chlorantraniliprole:

The following information is for the active ingredient, chlorantraniliprole.

According to the results of tests of biodegradability this product is not readily biodegradable.



ACELEPRYN®

Date:

4/2/2015

Replaces:

6/4/2014

13. DISPOSAL CONSIDERATIONS

Disposal:

Do not reuse product containers. Dispose of product containers, waste containers, and residues according to local, state, and federal health and environmental regulations.

Characteristic Waste: Not Applicable

Listed Waste:

Not Applicable

14. TRANSPORT INFORMATION

DOT Classification

Ground Transport - NAFTA

Not regulated

Comments

Water Transport - International

Proper Shipping Name: Environmentally Hazardous Substance, Liquid, N.O.S. (Chlorantraniliprole), Marine Pollutant

Hazard Class: Class 9

Identification Number: UN 3082

Packing Group: PG III

Air Transport

Proper Shipping Name: Environmentally Hazardous Substance, Liquid, N.O.S. (Chlorantraniliprole)

Hazard Class: Class 9

Identification Number: UN 3082

Packing Group: PG III

15. REGULATORY INFORMATION

Pesticide Registration:

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

No Signal Word Required: Keep out of reach of children.

EPA Registration Number(s):

100-1489

EPCRA SARA Title III Classification:

Section 311/312 Hazard Classes:

Acute Health Hazard

Section 313 Toxic Chemicals:

None

CERCLA/SARA 304 Reportable Quantity (RQ):

Not Applicable

RCRA Hazardous Waste Classification (40 CFR 261):

Not Applicable



ACELEPRYN®

Date:

4/2/2015

Replaces:

6/4/2014

Exempt from TSCA, subject to FIFRA

16. OTHER INFORMATION

NFPA Hazard Ratings

HMIS Hazard Ratings

0 Minimal

Health:

1

1 Slight

Flammability:

Health: Flammability:

2 Moderate

Instability:

1 0 Reactivity:

Serious 3

Syngenta Hazard Category: A

Extreme Chronic

For non-emergency questions about this product call:

1-800-334-9481

Original Issued Date:

3/25/2013

Revision Date:

4/2/2015

Replaces:

6/4/2014

Section(s) Revised:

1-16

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein.

FLOWABLE FUNGICIDE

For Control of Turf and Ornamental Diseases

Active Ingredient:

Chlorothalonil (tetrachloroisophthalonitrile) . . . 54.0%
Other Ingredients: 46.0%

Total:

100.0%

Contains 6.0 pounds chlorothalonil per gallon (720 grams per liter)

EPA Reg. No. 50534-209-100 EPA Est. 50534-TX-001

KEEP OUT OF REACH OF CHILDREN. CAUTION

See additional precautionary statements and directions for use inside booklet.

SCP 50534-209B-L1 0505

2.5 gallons
Net Contents

	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.
lf 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 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.
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.

NOTE TO PHYSICIAN

Persons suffering with temporary allergic skin reactions may respond to treatment with oral antihistamines and topical or oral steroids.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

HOT LINE NUMBER

For 24 Hour Medical Emergency Assistance (Human or Animal) or Chemical Emergency Assistance (Spill, Leak, Fire, or Accident), Call

1-800-888-8372

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

CAUTION

Harmful if swallowed, absorbed through skin, or inhaled. Causes moderate eye irritation. Avoid contact with skin, eyes, or clothing. Avoid breathing spray mist. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

Personal Protective Equipment (PPE)

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

Mixers, Loaders, Applicators and all other handlers must wear:

- long-sleeved shirt and long pants
- chemical resistant gloves made of any waterproof material
- shoes plus socks
- NIOSH approved dust/mist filtering respirator (MSHA/NIOSH approval number prefix TC-21C) or a NIOSH approved respirator with any N, R, P or HE filter for applicators and handlers in enclosed areas such as a greenhouse.

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.

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 before eating, drinking, chewing gum, using tobacco or using the toilet.
- · 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.
- · Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

Environmental Hazards

This product is toxic to aquatic invertebrates and wildlife. DO NOT apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Drift and runoff may be hazardous to aquatic organisms in neighboring areas. DO NOT contaminate water when disposing of equipment wash water or rinsate.

This chemical is known to leach through soil into groundwater under certain conditions as a result of label use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

This chemical can contaminate surface water through spray drift. Under some conditions, it may have a high potential for runoff into surface water for several days to weeks after application. These include poorly draining or wet soils with readily visible slopes toward adjacent surface waters, frequently flooded areas, areas over-laying extremely shallow ground water, areas with infield canals or ditches that drain to surface water, areas not separated from adjacent surface waters with vegetated filter strips, and areas over-laying tile drainage systems that drain to surface water.

CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

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The Directions for Use of this product should be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences 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 SYNGENTA or Seller. All such risks shall be assumed by Buyer and User, and Buyer and User agree to hold SYNGENTA and Seller harmless for any claims relating to such factors.

SYNGENTA 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 SYNGENTA, and Buyer and User assume the risk of any such use. SYNGENTA MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

In no event shall SYNGENTA or Seller be liable for any incidental, consequential or special damages resulting from the use or handling of this product. THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF SYNGENTA 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 SYNGENTA OR SELLER, THE REPLACEMENT OF THE PRODUCT.

SYNGENTA 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 SYNGENTA.

Read entire label carefully and use only as directed.

DIRECTIONS FOR USE

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

Docket WS should be used only in accordance with recommendations on this label or in separately published SYNGENTA supplemental labeling recommendations for this product.

DO NOT apply this product in a way that will contact workers or other persons, or pets 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 workers to enter 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, protective eyewear.

Special Eye Irritation Provisions: This product is a severe eye irritant. Although the restricted entry interval expires after 12 hours, for the next 6.5 days entry is permitted only when the following safety measures are provided:

- (1) At least one container designed specifically for flushing eyes must be available in operating condition at the WPS required decontamination site intended for workers entering the treated area.
- (2) Workers must be informed, in a manner they can understand:
 - that residues in the treated area may be highly irritating to their eyes
 - that they should take precautions, such as refraining from rubbing their eyes, to keep the residues out of their eyes
 - that if they do get residues in their eyes, they should immediately flush their eyes using the
 eyeflush container that is located at the decontamination site or using other readily available clean water, and
 - · how to operate the eyeflush container

Non-Agricultural Uses

For use to control diseases on turf on golf courses, lawns around institutional, public, commercial and industrial buildings, parks, recreational areas, and athletic fields. NOTE: Use of this product on home lawns is prohibited.

For use to control diseases on ornamentals on golf courses and landscape areas around residential, institutional, public, commercial and industrial buildings, parks, recreational areas and athletic fields.

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 others to enter area until sprays have dried.

GENERAL INFORMATION

Docket WS is an excellent disease control agent when used according to label directions for control of a broad spectrum of plant diseases. Docket WS is recommended for use in programs that are compatible with the principles of Integrated Pest Management (IPM), which include the use of disease resistant crop varieties, cultural practices, pest scouting and disease forecasting systems, which reduce unnecessary applications of pesticides.

Docket WS is effective for strategic use in programs that attempt to minimize disease resistance to fungicides. Some other fungicides that are at risk from disease resistance exhibit a single-site mode of fungicidal action. Docket WS, with a multi-site mode of action, may be used to delay or prevent the development of resistance to single-site fungicides. Consult your federal or state Cooperative Extension Service representatives for guidance on the proper use of Docket WS in programs which seek to minimize the occurrence of disease resistance to other fungicides.

GENERAL PRECAUTIONS AND RESTRICTIONS

Use of this product on home lawns is prohibited.

Agricultural Use Sites Only (sod farms, farms, forests, nurseries and greenhouses): This product must not be applied within 150 feet (for aerial applications) or 25 feet (for ground applications) of marine/estuarine water bodies unless there is an untreated buffer area of that width between the area to be treated and the water body.

DO NOT combine Docket WS in the spray tank with pesticides, surfactants or fertilizers, unless your prior use has shown the combination physically compatible, effective and noninjurious under your conditions of use. DO NOT combine Docket WS with Dipel®, Latron B-1956® or Latron AG-98®, horticultural oil, and products containing xylene as phytotoxicity may result from the combination when applied to some species on this label.

The required amount of Docket WS should be added slowly into the spray tank during filling. With concentrate sprays, pre-mix the required amount of Docket WS in a clean container and add to the spray tank as it is being filled. Keep agitator running when filling spray tank and during spray

SPRAY DRIFT PRECAUTIONS

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 to agricultural field crops. These requirements do not apply to forestry applications, public health uses or applications using dry formulations.

- 1. The distance of the outer most nozzles on the boom must not exceed 3/4 the length of the
- 2. Nozzles must always point backward parallel with the air stream and never be pointed downwards

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

The applicator should be familiar with and take into account the information covered in the Aerial **Drift Reduction Advisory Information.**

Aerial Drift Reduction Advisory Information

[This section is advisory in nature and does not supercede the mandatory label requirements.]

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 conditions (see Wind, Temperature).

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 the 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 potential.

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 should not be made at a height greater than 10 ft. 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 downward. Therefore, on the upwind 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

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

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

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).

APPLICATION

Application and Calibration Techniques for Sprinkler Irrigation - Chemigation

Apply this product only through center pivot, motorized lateral move, solid set or portable (wheel move, side roll, end tow, or hand move) irrigation system(s). DO NOT apply this product through any other type of irrigation system. DO NOT use Docket WS through sprinkler irrigation equipment on golf courses.

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

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

DO NOT apply this product through irrigation systems connected to a public water system. "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 per year.

Controls for both irrigation water and pesticide injection systems must be functionally interlocked, so as to automatically terminate pesticide injection when the irrigation water pump motor stops. A person knowledgeable of the irrigation system and responsible for its operation shall be present so as to discontinue pesticide injection and make necessary adjustments, should the need arise.

The irrigation water pipeline must be fitted with a functional, automatic, quick-closing check valve to prevent the flow of treated irrigation water back toward the water source. The pipeline must also be fitted with a vacuum relief valve and low pressure drain, located between the irrigation water pump and the check valve, to prevent back-siphoning of treated irrigation water into the water source.

Always inject Docket WS into irrigation water after it discharges from the irrigation pump and after it passes through the check valve. Never inject pesticides into the intake line on the suction side of the pump.

Pesticide injection equipment must be fitted with a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump. Interlock this valve to the power system, so as to prevent fluid from being withdrawn from the chemical supply tank when the irrigation system is either automatically or manually turned off.

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 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.

Spray mixture in the chemical supply tank must be agitated at all times, otherwise settling and uneven application may occur. DO NOT apply when wind speed favors drift beyond the area intended for treatment.

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.

Docket WS may be used through two basic types of sprinkler irrigation systems as outlined in Sections A and B below. Determine which type of system is in place, then refer to the appropriate directions provided for each type.

A. Center Pivot, Motorized Lateral Move and Traveling Gun Irrigation Equipment

For injection of pesticides, these continuously moving systems must use a positive displacement injection pump, of either diaphragm or piston type, constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock and capable of injection at pressures approximately 2-3 times those encountered within the irrigation water line. Venturi applicator units cannot be used on these systems.

Fill chemical supply tank of injection equipment with water. Operate system for one complete revolution or run across the field, measuring time required, amount of water injected, and acreage covered.

Thoroughly mix recommended amount of Docket WS for acreage to be covered into same amount of water used during calibration and inject into system continuously for one revolution or run. Mixture in the chemical supply tank must be continuously agitated during the injection run. Shut off injection equipment after one revolution or run, but continue to operate irrigation system until Docket WS has been cleared from last sprinkler head.

B. Solid Set and Portable (Wheel Move, Side Roll, End Tow, or Hand Move) Irrigation Equipment

With stationary systems, an effectively designed in-line Venturi applicator unit is preferred which is constructed of materials that are compatible with pesticides; however, a positive-displacement pump can also be used.

Determine acreage covered by sprinkler. Fill tank of injection equipment with water and adjust flow to use contents over a thirty to forty-five minute period. Mix desired amount of Docket WS for acreage to be covered with water so that the total mixture of Docket WS plus water in the injection tank is equal to the quantity of water used during calibration, and operate entire system at normal pressures recommended by the manufacturer of injection equipment used, for amount of time established during calibration. Agitation is recommended. Docket WS can be injected at the beginning or end of the irrigation cycle or as a separate application. Stop injection equipment after treatment is completed and continue to operate irrigation system until Docket WS has been cleared from last sprinkler head.

DIRECTIONS FOR APPLICATION

TURF

Group A. Golf Course Fairways, Sod Farms, Lawns (around institutional, public, commercial and industrial buildings), and Other Turfgrasses (parks, recreational areas and athletic fields) and Ornamental Turfgrass:

NOTE: Use of this product on home lawns is prohibited.

NOTE: Sod farm turf treated with chlorothalonil prior to harvest must be mechanically cut, rolled and harvested.

Do not apply more than 34.7 pints/acre (12.7 fl. oz/1000 sq. ft.) of Docket WS per growing season (26 lb. a.i./acre/growing season). The minimum re-treatment interval for single application rates up to 9.75 pints/acre (3.6 fl. oz./1000 sq. ft.) of Docket WS (7.3 lb. a.i./acre) is 7 days. Do not apply more than one application of a rate greater than 9.75 pints/acre (3.6 fl. oz./1000 sq. ft.) of Docket WS (7.3 lb. a.i./acre) per growing season. The maximum single application rate is 15.1 pints/acre (5.5 fl. oz./1000 sq. ft.) of Docket WS (11.3 lb. a.i./acre).

Apply Docket WS in 30 to 40 gallons of water per acre. Begin applications when conditions favor disease development and repeat applications as long as these conditions persist. Under severe disease conditions use the highest rate and shortest interval corresponding with the application schedule selected from the table below.

DO NOT mow or water after treatment until spray deposited on turfgrass is thoroughly dry; Docket WS should always be used in conjunction with good turf management practices.

Group B. Golf Course Tees and Greens

Golf Course Tees: Do not apply more than 69.3 pints/acre (25.4 fl. oz./1000 sq. ft.) of Docket WS (52 lb. a.i./acre) per growing season. The minimum re-treatment interval for single application rates up to 9.75 pints/acre (3.6 fl. oz./1000 sq. ft.) of Docket WS (7.3 lb. a.i./acre) is 7 days. The minimum re-treatment interval after an application of a rate greater than 9.75 pints/acre (3.6 fl. oz./1000 sq. ft.) of Docket WS (7.3 lb. a.i./acre) is 14 days. Do not apply more than two applications of a rate greater than 9.75 pints/acre (3.6 fl. oz./1000 sq. ft.) of Docket WS (7.3 lb. a.i./acre) per growing season. The maximum single application rate is 15.1 pints/acre (5.5 fl. oz./1000 sq. ft.) of Docket WS (11.3 lb. a.i./acre).

Golf Course Greens: Do not apply more than 97.3 pints/acre (35.7 fl. oz./1000 sq. ft.) of Docket WS (73 lb. a.i./acre) per growing season. The minimum re-treatment interval for single application rates up to 9.75 pints/acre (3.6 fl. oz./1000 sq. ft.) of Docket WS (7.3 lb. a.i./acre) is 7 days and the minimum retreatment interval after an application of a rate greater than 9.75 pints/acre (3.6 fl. oz./1000 sq. ft.) of Docket WS (7.3 lb. a.i./acre) is 14 days. Do not apply more than two applications of a rate greater than 9.75 pints/acre (3.6 fl. oz./1000 sq. ft.) of Docket WS (7.3 lb. a.i./acre) per growing season. The maximum single application rate is 15.1 pints/acre (5.5 fl. oz./1000 sq. ft.) of Docket WS (11.3 lb. a.i./acre).

Apply Docket WS in an adequate amount of water to provide complete coverage. This amount may vary from 90 to 450 gallons per acre. See table below for suggested rates and timing. Under severe disease conditions use the highest rate and shortest interval corresponding with the application schedule selected from the table below.

DO NOT mow or water after treatment until spray deposited on turfgrass is thoroughly dry; Docket WS should always be used in conjunction with good turf management practices.

		P	re-Disease Rate	esa	Post-Disease Rates ^a		
Diseases Controlled*	Application Interval (Days)	fl. oz. product/ 1000 sq ft	pints product/ acre	lb a.i./acre	fl. oz. product/ 1000 sq ft	pints product/ acre	lb a.i./acre
Dollar Spot	7 to 10	1.0 ^b to 2.0	2.8 b to 5.0	2.1 ^b to 4.1	-	-	-
	7 to 21	2.0 to 3.6	5.5 to 9.75	4.1 to 7.3	-	-	-
	14	-	-	-	4.0 to 5.5	11 to 15.1	8.25 to 11.3
Leafspot	7 to 10	2.0	5.5	4.1		-	-
Vielting-out	7 to 21	2.0 to 3.6	5.5 to 9.75	4.1 to 7.3	-	-	-
Brown blight	14	-	-	-	4.0 to 5.5	11 to 15.1	8.25 to 11.3
Brown patch	7 to 14	2.0 to 3.6	5.5 to 9.75	4.1 to 7.3	-		-
	14	-	-	-	4.0 to 5.5	11 to 15.1	8.25 to 11.3
Gray Leafspot	7 to 10	2.0 to 3.6	5.5 to 9.75	4.1 to 7.3	-		-
	14		-	-	4.0 to 5.5	11 to 15.1	8.25 to 11.3
Red Thread	7 to 10	2.0 to 3.6	5.5 to 9.75	4.1 to 7.3	-	-	-
	14	3.6 to 5.5	9.9 to 15.1	7.4 to 11.3	5.5	15.1	11.3
Anthracnose	7 to 14	3.0 to 3.6	8.3 to 9.75	6.2 to 7.3		-	
	14	3.6 to 5.5	9.9 to 15.1	7.4 to 11.3	- 1	-	
Copper Spot	14	4.0 to 5.5	11 to 15.1	8.25 to 11.3	5,5	15.1	11.3
Stem Rust Bluegrass)	14	4.0 to 5.5	11 to 15.1	8.25 to 11.3	5.5	15.1	11.3
DICHONDRA: Leafspot (CA polly)	14	4.0 to 5.5	11 to 15.1	8.25 to 11.3	5.5	15.1	11.3
Fray Snow Mold ^c	30	5.5	15.1	11.3	-		-
usarium Gerlachia) atch ^c	21 to 28	5.5	15.1	11.3	-	-	-
lgae ^c	7 to 14	2.0 to 3.6	5.5 to 9.75	4.1 to 7.3	2.0 to 3.6	5.5 to 9.75	4.1 to 7,3
	14	- ,	-	-	4.0 to 5.5	11 to 15.1	8.25 to 11.3

^aGroup A Turf: Limit of one application per season at rates greater than 7.3 lb a.i./acre (9.75 pints/acre or 3.6 fl oz/1000 sq ft of Docket WS.

Group B Turf: Limit of two applications per season at rates greater than 7.3 lb ai/acre (9.75 pints/acre or 3.6 oz/1000 sq ft of Docket WS.

bLow rate is not effective on intensively mowed turfgrasses such as golf course tees and greens.

^cSee specific use directions below.

*Diseases listed are caused by fungi, some of which are named as follows:

- Dollar spot: Sclerotinia homeocarpa; Lanzia or Moellerodiscus spp.
- Leafspots, Melting-out, Brown blight: Drechslera spp. (including D. poae, D. siccans), Bipolaris sorokiniana, Curvularia spp.
- Brown patch: Rhizoctonia solani, R. zeae, R. cerealis
- Gray leafspot: Pyricularia grisea, P. oryzae
- Red thread: Laetisaria fuciformis
- Anthracnose: Colletotrichum graminicola
- Copper spot: Gloeocercospora sorghi
- Stem rust: Puccinia graminis
- Dichondra leaf spot: Alternaria spp.
- Gray Snow Mold: Typhula spp.
- Fusarium (Gerlachia) Patch
- Algae

Gray snow mold caused by *Typhula* spp. - Group A and B - Turf: Apply in sufficient water to obtain adequate coverage (2 to 10 gallons per 1,000 sq ft). Apply one application 15.1 pints/acre (5.5 fl. oz./1000 sq. ft.) of Docket WS (11.3 lb. a.i./acre). Application must be made before snow cover in autumn. Group B Turf: if snow cover is intermittent or lacking during the winter, a second application of Docket WS at 15.1 pints/acre (5.5 fl. oz./1000 sq. ft.) may be applied one month after the first application.

Fusarium (Gerlachia) Patch: Group A and B Turf: In areas where pink snow mold (Gerlachia or Fusarium patch) is likely to occur, apply Docket WS at 15.1 pints/acre (5.5 fl. oz./1000 sq. ft.) (11.3 lb. a.i./acre) in combination with products containing iprodione at 88 oz. a.i./acre (2 oz. a.i./1000 sq ft) of turf area. Read and observe all label directions for products containing these active ingredients. For control of Fusarium patch only in areas where snow cover is intermittent or lacking during the winter, apply 15.1 pints/acre (5.5 fl. oz./1000 sq. ft.) of Docket WS (11.3 lb. a.i./acre). Make application in late autumn. Group B Turf: Apply a second application of 15.1 pints/acre (5.5 fl. oz./1000 sq. ft.) of Docket WS 21 to 28 days after the first application unless conditions favorable for Fusarium patch no longer prevail.

Algae: Group A and B Turf: For prevention of algae on turfgrasses, apply Docket WS at the rate of 5.5 to 9.75 pints/acre (2.0 to 3.6 fl. oz./1000 sq. ft.) (4.1 to 7.3 lb. a.i./acre) on a 7 to 14 day schedule. Under severe algae conditions use the 9.75 pints/acre (3.6 fl. oz./1000 sq. ft.) rate and apply on a 7 day schedule.

When algae is well established, every attempt should be made to dry out the afflicted area. Once dry, spiking or verticutting should be done to enhance turfgrass recovery in conjunction with a Docket WS application at the rate of 11 to 15.1 pints/acre (4.0 to 5.5 fl. ozs./1000 sq. ft.). Group B Turf: A second application of Docket WS at the 15.1 pints/acre (5.5 fl. ozs./1000 sq. ft.) rate may be made 14 days after the first application.

Group A and B Turf: Following application of the 15.1 pints/acre (5.5 fl. oz./1000 sq. ft.) rate, several applications of Docket WS at a rate of 5.5 to 9.75 pints/acre (2.0 to 3.6 fl. ozs./1000 sq. ft.) (4.1 to 7.3 lb. a.i./acre) on a 7 to 14 day interval may be necessary for turfgrass recovery. Only a preventive spray program with Docket WS will prevent a recurrence of the algae when environmental conditions are favorable.

ORNAMENTAL PLANTS

Apply Docket WS at a rate of 1 3/8 pints (1.0 lb. a.i.) per 100 gallons of water unless other directions are given in the tables below. DO NOT apply more than 48.5 pints Docket WS (36.4 lb. a.i./acre) per growing season to field grown ornamentals. Apply in a spray to run-off, when conditions are favorable for disease development. Repeat applications at 7 to 14 day intervals until conditions are no longer favorable. During periods when conditions favor severe disease incidence, generally cloudy or wet weather, apply Docket WS at 7 day intervals. The minimum re-treatment interval is 7 days. Docket WS should be applied to plants when both foliage and flowers are dry, or nearly dry.

DO NOT combine Docket WS in the spray tank with pesticides, surfactants or fertilizers, unless your prior use has shown the combination to be physically compatible, effective and noninjurious under your conditions of use.

Docket WS may be used in greenhouses. DO NOT use mistblowers or high pressure spray equipment when making applications of Docket WS in greenhouses.

Use of Docket WS is recommended for control of fungal diseases referred to by numbers in parentheses following each ornamental. Ornamentals listed on this label have been tested and found to tolerate applications of Docket WS at the recommended rates. The user should test for possible phytotoxic responses, using recommended rates on ornamental plants on a small area prior to commercial use. Applications made during bloom may damage flowers and/or fruits.

Fruits and other structures which may be borne on treated plants MUST NOT BE EATEN.

Ornamentals recommended for treatment with Docket WS

Broadleaf Shrubs And Trees

Andromeda (Pieris) (4) Holly (1) Ash (Fraxinus) (1) Lilac (5) Aspen (1) Magnolia (1) Maple (1) Azalea (1,2,4) Buckeye, Horsechestnut (1) Mountain Laurel (1) Cherry-Laurel (1) Oak (red group only) (1,7) Oregon-Grape (Mahonia) (6) Crabapple (1,6,8) Dogwood (1) Photinia (1) Eucalyptus (3) Poplar (1) Euonymus (1) Privet (Ligustrum) (1) Rhododendron (1,2,4) Firethorn (Pyracantha) (1) Flowering Almond (1,2) Sand Cherry (1,2) Flowering Cherry (1,2) Sequoia (1) Flowering Peach (1,2) Spiraea (1) Flowering Plum (1,2) Sycamore, Planetree (1) Flowering Quince (1,2) Viburnum (5) Hawthorn (1,6) Walnut (Juglans) (1)

Flowering Plants^a and Bulbs

Arabian Violet (2) Iris, bulbous (1) Begonia (1) Lily (1) Camellia (2) Lily, Asiatic (1) Carnation (1,2) Marigold (1) Chrysanthemum (1,2) Narcissus (1) Pansy (1) Crocus (1) Daffodil (1) Petunia (1,4) Daisy (1) Phlox (1) Geranium (1,6) Poinsettiab (1) Rose^c (1) Gladiolus (1,2) Hollyhock (6) Statice (1) Hydrangea (foliage only) (1,6) Tulip (1) Iris (1,2) Zinnia (1.5)

^aAvoid applications during bloom period on plants where flower injury is unacceptable. ^bDiscontinue applications prior to bract formation; phytotoxicity is possible on the bracts.

CUse 1 pint Docket WS (0.75 lb. a.i.) per 100 gallons of water.

Foliage Plants

Aglaonema (1) Areca palm (1)

Artemesia (1)

Dumbcane (Diffenbachia) (1)

Dracaena (1) Fatsia (Aralia) (1) Ficus (1)

Ming aralia (1)

Oyster plant (Rhoeo) (1)

Pachysandrad (1) Parlor palm (Chamaedorea) (1)

Peperomia (1) Philodendron (1,4) Prayer plant (Maranta) (1)

Syngonium (1)

Lipstick plant (1) Zebra plant (Aphelandra) (1)

dUse 23/4 pints of Docket WS (2.1 lb a.i.) per 100 gallons of water.

Diseases Controlled with Docket WS

1. Leafspots/Foliar Blights:

Actinopelte leafspot Alternaria leafspot/leaf blight Anthracnose leaf blotch, spot Anthracnose (Discula) blight

Ascochyta blight Bipolaris (Helminthosporium) leafspot

Black spot on roses Botrytis leafspot, leaf blight Cephalosporium leafspot Cercospora leafspot Cercosporidium leafspot Corynespora leafspot Coryneum blight (shothole) Curvularia leafspot Cylindrosporium leafspot Dactylaria leafspot Didymellina leafspot Drechslera leafspot

Fabraea (Entomosporium) leafspot

Fusarium leafspot

Gloeosporium black leafspot

Ink spot (Drechslera) Marssonina leafspot

Monilinia blossom blight, twig blight

Mycosphaerella ray blight

Myrothecium leafspot, brown rot Nematostoma leaf blight

Phyllosticta leafspot Ramularia leafspot Rhizoctonia web blight Septoria leafspot Sphaeropsis leafspot Stagonospora leaf scorch Tan leaf spot (Curvularia) Volutella leaf blight

2. Flower spots/blights:

Botrytis flower spot, flower blight Curvularia flower spot Monilinia blossom blight Ovulinia flower blight Rhizopus blossom blight Sclerotinia flower blight

3. Cylindrocladium stem canker

4. Phytophthora leaf blight, dieback

5. Powdery mildews: Erysiphe cichoracearum Microsphaera spp.

6. Rusts:

Gymnosporangium spp. Pucciniastrum hydrangeae Puccinia spp.

7. Taphrina blister

8. Scab (Venturia inaequalis)

The following ornamental plant species which have been tested with Docket WS at recommended rates did not exhibit phytotoxicity:

Botanical Name Aechmea fasciata Common Name Aechmea

Araucaria heterophylla

Norfolk Island Pine

Bougainvillea spp.
Caladium spp.
Calathea makoyana
Calistephus chinensis
Carissa grandiflora
Clerodendron thomsonae
Codiaeum spp.

Bougainvillea Caladium Peacock plant Aster Natal plum

Bleeding Heart Croton Ti Plant Jade Plant

Dionaea muscipula Dizygotheca elegantissima Venus Fly Trap False Aralia

Epipremnum aureum

Cordyline terminalis

Crassula argentea

Golden Pothos, Scindapsus Flame Violet

Episcia cupreata Fittonia spp. Gerbera jamesonii Gynura sarmentosa Gypsophila paniculata Hoya spp.

Silver-nerve Plant Gerbera Daisy Purple Passion Vine Baby's Breath Wax Plant

llex cornuta
Ilex crenata
Impatiens spp.
Pilea cadierei

Chinese Holly Japanese Holly Impatiens Aluminum Plant

Sansevieria trifasciata "Hahnii" Tolmeia menziesii Birdsnest Sansevieria Piggy-back Plant Spineless Yucca

Tolmeia menziesii Yucca elephantipes Zygocactus truncatus

Christmas Cactus

NOTE: DO NOT apply Docket WS to either green or variegated Pittosporum or to Schefflera, as multiple applications have been demonstrated to cause phytotoxic responses.

TREE AND ORCHARD CROPS

Apply Docket WS in sufficient water and with proper calibration to obtain uniform coverage of tree canopy. Application with ground equipment is preferable to aerial application because ground applications generally give better coverage of the tree canopy. If application with ground equipment is not feasible, Docket WS may be applied with aircraft using at least 20 gallons of spray per acre. When concentrate sprays are used or when treating non-bearing or immature trees, the lower rate of Docket WS listed may be used. DO NOT allow livestock to graze in treated areas. The following spray volumes are recommended as gallons of spray per acre:

Crop	Spray Volume (Gallons per Acre)		
Peach Nectarine Apricot Tart Cherry Plum Prune	20 (concentrate) to 300 (full dilute)		
Sweet Cherry	20	(concentrate) to 300 (full dilute)	
Conifers	Dilute	Concentrate	
Forest stands	Not used	10 to 20 (aircraft)	
Christmas trees	100	10 to 50 (aircraft or ground equipment)	
Nursery beds	100	5 to 10 (ground equipment only)	

		Docket WS Rate Pints/Acre or 100 Gallon (lb. a.i./acre or 100 gal)		-
Crop Peach Nectarine Apricot Cherry Plum Prune	Diseases Leaf curl Coryneum blight (shothole)	Acre 31/8 to 41/8 pt. (2.3 to 3.1)	100 Gal 1 to 1 3/8 pt. (0.75 to 1.0)	Application Directions For best control of both diseases apply at leaf fall in late autumn, using sufficient water and proper sprayer calibration to obtain uniform coverage. When conditions favor high disease levels use the high rate of application and apply once or twice more in mid to late winter before budswell. If the leaf fall application is not practical, application of Daconil 720 (Weather Stik) for control of leaf curl may be made at any time prior to budswell the following spring. Where Coryneum blight (shothole) occurs, also apply at budbreak to protect newly emerging leaves and at shuck split to prevent fruit infections.
	Lacy (russet) scab (plum/prune)	31/8 to 41/8 pt. (2.3 to 3.1)	1 to 1 ³ / ₈ pt. (0.75 to 1.0)	Make one application at popcorn (pink, red or early white bud) and a second application at full bloom. If weather conditions favor disease development, make an additional application at petal fall.
	Cherry leaf spot Peach, Nectarine, Apricot scab Black knot (cherry, plum)	31/8 to 41/8 pt. (2.3 to 3.1)	1 to 13/8 pt. (0.75 to 1.0)	In addition to the bloom applica- cation listed above, make one application at shuck split. DO NOT apply Daconil 720 (Weather Stik) after shuck split and before harvest. If additional disease con- trol is needed before harvest, use another registered fungicide.
				For control of cherry leaf spot after harvest, make one applica- tion to foliage within 7 days after fruit is removed. In orchards with a history of high leaf spot inci- dence, make a second application 10-14 days later.

DO NOT apply more than 20.5 pints Docket WS (15.4 lb. a.i.) per acre during each growing season. The minimum re-treatment interval is 10 days.

		Docket WS Rate Pints/Acre or 100 Gallon (lb. a.i./acre or 100 gal)		
Crop	Diseases	Acre	100 Gal	Application Directions
Conifers (Pine, Spruce)	Swiss needlecast	2 ³ /4 to 5 ¹ / ₂ pt. (2.1 to 4.125)	2 ³ /4 to 5 ¹ /2 pt. (2.1 to 4.125)	Single application technique: In Christmas tree plantations or forest stands, make one application in the spring when new shoot growth is 1/2 to 2 inches in length.
	Scleroderris canker (pines) Swiss needlecast	1 ¹ / ₂ to 2 ³ / ₄ pt. (1.125 to 2.1)	1 ¹ / ₂ to 2 ³ / ₄ pt. (1.125 to 2.1)	Make the first application in spring when new shoot growth is 1/2 to 2 inches in length. Make additional applications at 3 to 4 week intervals until conditions no
	Sirococcus tip blight	2 to 3 ¹ / ₂ pt. (1.5 to 2.6)	2 to 3 ¹ / ₂ pt. (1.5 to 2.6)	longer favor disease development. For use in nursery beds, apply the highest rate specified on a 3-week
	Rhizosphaera needlecast (spruces) Scirrhia brown spot (pines)	5 ¹ / ₂ pt. (4.125)	5 ¹ / ₂ pt. (4.125)	schedule.
	Cyclaneusma and Lophodermium needlecasts (pines)	2 ³ / ₄ to 5 ¹ / ₂ pt. (2.1 to 4.125)	2 ³ / ₄ to 5 ¹ / ₂ pt. (2.1 to 4.125)	Apply in early spring prior to budbreak. Repeat applications at approximately 6 to 8 week intervals, until spore release ceases in late fall. Apply monthly during periods of frequent rainfall, and where Lophodermium infections occur during dormancy (Pacific Northwest). During drought periods, applications may be suspended, then resumed upon next occurrence of needle wetness.
	Rhabdocline needlecast (Douglas-fir)	1 ¹ / ₂ to 2 ³ / ₄ pt. (1.125 to 2.1)	1 ¹ / ₂ to 2 ³ / ₄ pt. (1.125 to 2.1)	Apply at budbreak and repeat at 3 to 4 week intervals until needles are fully elongated and conditions no longer favor disease development. In plantations of mixed provenance, or when irregular budbreak occurs, apply weekly until all trees have broken bud, then every 3 to 4 weeks as specified above. In nursery beds, use the high rate on a 3-week schedule.
	Botrytis seedling blight Phoma twig blight	1 ¹ / ₂ to 2 ³ / ₄ pt. (1.125 to 2.1)	1 ¹ / ₂ to 2 ³ / ₄ pt. (1.125 to 2.1)	Begin applications in nursery beds when seedlings are 4 inches tall and when cool, moist conditions favor disease development. Make additional applications at 7 to 14 day intervals as long as disease favorable conditions persist.
	Autoecious needle rust (Weir's cushion) (spruce)	5 ¹ / ₂ pt. (4.125)	5 ¹ / ₂ pt. (4.125)	Begin applications when 10% of buds have broken and twice thereafter at 7-10 day intervals.

DO NOT apply more than 22 pints Docket WS (16.5 lb. a.i.) per acre during each growing season. The minimum re-treatment interval for established trees is 21 days. The minimum re-treatment interval in nursery beds is 7 days.

^{*}Volumetric rates to be used only with full dilute spray volume specified on this label for tree and orchard crops.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal. Open dumping is prohibited.

Pesticide Storage

Store in a dry place.

Pesticide Disposal

Pesticide wastes are toxic. Improper disposal of excess pesticide, pesticide spray 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 Disposal

Plastic Containers

Triple rinse (or equivalent), and offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by incineration, or by alternative methods allowed by state and local authorities.

Returnable Refillable Containers

If Docket WS is packaged in a returnable refillable container, then, after use, do not rinse container. The contents of this container cannot be completely removed by cleaning. Return container intact to point of purchase.

This container must only be refilled with Docket WS. Refilling with materials other than Docket WS will result in contamination and may weaken container. DO NOT REUSE THE CONTAINER FOR ANY OTHER PURPOSE. Before refilling, inspect thoroughly for damage such as cracks, punctures, abrasions, and damaged or worn threads on closure devices. Check for leaks after refilling and before transport. Do not refill or transport a damaged or leaking container.

Bulk and Minibulk Containers

Reseal container and offer for reconditioning, or triple rinse (or equivalent) and offer for recycling or reconditioning, or clean in accordance with manufacturer's instructions.

CONTAINER IS NOT SAFE FOR FOOD, FEED OR DRINKING WATER.

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For non-emergency (e.g., current product information) call Syngenta Crop Protection at 1-800-334-9481.

Manufactured for: Syngenta Crop Protection, Inc. Greensboro, North Carolina 27409 www.syngenta-us.com

SCP 50534-209B-L1 0505

Docket[™] WS

FLOWABLE FUNGICIDE

For Control of Turf and Ornamental Diseases

Active Ingredient: Chlorothalonil (tetrachloroisophthalonitrile) 54.0% Other Ingredients: 100 0%

Contains 6.0 pounds chlorothalonil per gallon (720 grams per liter)

See additional precautionary statements and directions for use inside booklet.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. Refer to supplemental labeling under "Agricultural Use Requirements in the Directions for Use section for information about this standard.

EPA Reg. No. 50534-209-100 EPA Est. 50534-TX-001

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Manufactured for: Syngenta Crop Protection, Inc. Greensboro, North Carolina 27409 www.syngenta-us.com

SCP 50534-209B-L1 0505

2.5 gallons **Net Contents**

KEEP OUT OF REACH OF CHILDREN. **CAUTION**

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 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 pos-

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. 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.

NOTE TO PHYSICIAN: Persons suffering with temporary allergic skin reactions may respond to treatment with oral antihistamines and topical or oral steroids. Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

HOT LINE NUMBER: For 24 Hour Medical Emergency Assistance (Human or Animal) or Chemical Emergency Assistance (Spill, Leak, Fire, or Accident), Call 1-800-888-8372.

Precautionary Statements

Hazards to Humans and Domestic Animals

CAUTION

Harmful if swallowed, absorbed through skin, or inhaled. Causes moderate eye irritation. Avoid contact with skin, eyes, or clothing. Avoid breathing spray mist. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

Environmental Hazards

This product is toxic to aquatic invertebrates and wildlife. DO NOT apply directly to water, to areas where surface water is present or to Intertidal areas below the mean high water mark. Drift and runoff may be hazardous to aquatic organisms in neighboring areas. DO NOT contaminate water when disposing of equipment wash water or rinsate. This chemical is known to leach through soil into groundwater under certain conditions as a result of label use.

through soil into groundwater under certain conditions as a result of label use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination. This chemical can contaminate surface water through spray drift. Under some conditions, it may have a high potential for runoff into surface water for several days to weeks after application. These include poorly draining or wet soils with readily visible slopes toward adjacent surface waters, frequently flooded areas, areas over-laying extremely shallow ground water, areas with infield canals or ditches that drain to surface water, areas not separated from adjacent surface waters with vegetated filter strips, and areas over-laying tile drainage systems that drain to surface water.

Storage and Disposal

Do not contaminate water, food or feed by storage or disposal. Open dumping is prohibited.

Pesticide Storage

Store in a dry place.

Pesticide Disposal

Pesticide wastes are toxic. Improper disposal of excess pesticide, pesticide spray 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 Disposal

Triple rinse (or equivalent), and offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by incineration, or by alternative methods allowed by state and local authorities.



DOCKET WS

Date:

6/10/2015

Replaces:

12/4/2014

1. PRODUCT IDENTIFICATION

Product identifier on label: DOCKET WS

Product No.:

A12531B

Use:

Fungicide

Manufacturer:

Syngenta Crop Protection, LLC

Post Office Box 18300 Greensboro NC 27419

Manufacturer Phone:

1-800-334-9481

Emergency Phone:

1-800-888-8372

2. HAZARDS IDENTIFICATION

Classifications:

Oral: Category 4

Inhalation: Category 3 Skin Sensitizer: Category 1B Carcinogenicity: Category 2

Specific Target Organ Toxicity: Respiratory Irritation Category 3

Signal Word (OSHA):

Danger

Hazard Statements:

Harmful if swallowed

May cause an allergic skin reaction

Toxic if inhaled

May cause respiratory irritation Suspected of causing cancer

Hazard Symbols:







Precautionary Statements:

Wash hands and face thoroughly after handling.

Do not eat, drink or smoke when using this product.

If swallowed: Call a poison center, doctor or Syngenta if you feel unwell. Rinse mouth.

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Use only outdoors or in a well-ventilated area.

Contaminated work clothing must not be allowed out of the workplace.

Wear protective gloves, protective clothing, eye protection.

If on skin: Wash with plenty of soap and water.

If skin irritation or rash occurs: Get medical advice.



DOCKET WS

Date:

6/10/2015

Replaces:

12/4/2014

If inhaled: Remove person to fresh air and keep comfortable for breathing.

If exposed or concerned: Get medical advice/attention.

Call a poison center, doctor or Syngenta if you feel unwell.

See Section 4 First Aid Measures.

Wash contaminated clothing before reuse.

Store locked up.

Dispose of contents and container in accordance with local regulations.

Other Hazard Statements:

None

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	Common Name	CAS Number	Concentration
1,2-Propanediol	Propylene Glycol	57-55-6	Trade Secret
Silica, amorphous	Silica, amorphous	112926-00-8	Trade Secret
Other ingredients	Other ingredients	Trade Secret	46.0%
Tetrachloroisophthalonitrile	Chlorothalonil	1897-45-6	54.0%

Ingredients not precisely identified are proprietary or non-hazardous. Values are not product specifications.

4. FIRST AID MEASURES

Have the product container, label or Safety Data Sheet with you when calling Syngenta (800-888-8372), a poison contol center or doctor, or going for treatment.

Ingestion:

If swallowed: Call Syngenta (800-888-8372), a poison control center or doctor immediately for treatment advice. Do not give any liquid to the person. Do not induce vomiting unless told to do so after calling 800-888-8372 or by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

Eye Contact:

If in eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after 5 minutes, then continue rinsing eye. Call Syngenta (800-888-8372), a poison control center or doctor for treatment advice.

Skin Contact:

If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call Syngenta (800-888-8372), a poison control center or doctor for treatment advice.

Inhalation:

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 Syngenta (800-888-8372), a poison control center or doctor for further treatment advice.

Most important symptoms/effects:

Allergic skin reaction

Respiratory irritation

Indication of immediate medical attention and special treatment needed:

There is no specific antidote if this product is ingested.

Treat symptomatically.

Persons suffering a temporary allergic reaction may respond to treatment with antihistamines or steroid creams and/or systemic steroids.



DOCKET WS

Date:

6/10/2015

Replaces:

12/4/2014

5. FIRE FIGHTING MEASURES

Suitable (and unsuitable) extinguishing media:

Use dry chemical, foam or CO2 extinguishing media. If water is used to fight fire, dike and collect runoff.

Specific Hazards:

During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion.

Special protective equipment and precautions for firefighters:

Wear full protective clothing and self-contained breathing apparatus. Evacuate nonessential personnel from the area to prevent human exposure to fire, smoke, furnes or products of combustion.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures:

Follow exposure controls/personal protection outlined in Section 8.

Methods and materials for containment and cleaning up:

Control the spill at its source. Contain the spill to prevent from spreading or contaminating soil or from entering sewage and drainage systems or any body of water. Clean up spills immediately, observing precautions outlined in Section 8. Cover entire spill with absorbing material and place into compatible disposal container. Scrub area with hard water detergent (e.g. commercial products such as Tide, Joy, Spic and Span). Pick up wash liquid with additional absorbent and place into compatible disposal container. Once all material is cleaned up and placed in a disposal container, seal container and arrange for disposition.

7. HANDLING AND STORAGE

Precautions for safe handling:

Store the material in a well-ventilated, secure area out of reach of children and domestic animals. Do not store food, beverages or tobacco products in the storage area. Prevent eating, drinking, tobacco use, and cosmetic application in areas where there is a potential for exposure to the material. Wash thoroughly with soap and water after handling.

Conditions for safe storage, including any incompatibilities:

Store locked up.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

THE FOLLOWING RECOMMENDATIONS FOR EXPOSURE CONTROLS/PERSONAL PROTECTION ARE INTENDED FOR THE MANUFACTURE, FORMULATION AND PACKAGING OF THIS PRODUCT.

FOR COMMERCIAL APPLICATIONS AND/OR ON-FARM APPLICATIONS CONSULT THE PRODUCT LABEL.

Occupational Exposure Limits:

Chemical Name	OSHA PEL	ACGIH TLV	Other	Source
Propylene Glycol	Not Established	Not Established	10 mg/m³ TWA	Alha
Silica, amorphous	80 mg/m³/% SiO2 TWA	Not Established	6 mg/m³ TWA	NIOSH
Other ingredients	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Chlorothalonil	Not Established	Not Established	0.1 mg/m³ TWA	Syngenta

Appropriate engineering controls:

Use effective engineering controls to comply with occupational exposure limits (if applicable).

Individual protection measures:



DOCKET WS

Date:

6/10/2015

Replaces:

12/4/2014

Ingestion:

Prevent eating, drinking, tobacco usage and cosmetic application in areas where there is a potential for exposure to the material. Wash thoroughly with soap and water after handling.

Where eye contact is likely, use chemical splash goggles. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

Skin Contact:

Where contact is likely, wear chemical-resistant gloves (such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, polyvinyl chloride [PVC] or Viton), coveralls, socks and chemical-resistant footwear.

Inhalation:

A respirator is not normally required when handling this substance. Use effective engineering controls to comply with occupational exposure limits.

In case of emergency spills, use a NIOSH approved respirator with any N, R, P or HE filter.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Light gray liquid

Odor: Slight

Odor Threshold: Not Available

pH: 6.5 - 8.5

Melting point/freezing point: Not Applicable Initial boiling point and boiling range: 212 °F

Flash Point (Test Method):

Not Applicable

Flammable Limits (% in Air):

Not Available

Flammability:

Not Applicable

Vapor Pressure: Chlorothalonil

0.00000057mmHg @ 77°F (25°C)

Vapor Density: Not Available

Relative Density: 1.34 g/ml (water = 1)

Solubility (ies):

Chlorothalonil

0.81 mg/l @ 77°F (25°C)

Partition coefficient: n-octanol/water: Not Available

Autoignition Temperature: Not Applicable

Decomposition Temperature:

Not Available

Viscosity: Not Available

Other: None

10. STABILITY AND REACTIVITY

Reactivity: Not reactive.

Chemical stability: Stable under normal use and storage conditions. Possibility of hazardous reactions: Material is not known to polymerize.



DOCKET WS

Date:

6/10/2015

Replaces:

12/4/2014

Conditions to Avoid: None known.

Incompatible materials: None known.

Hazardous Decomposition Products: None known.

11. TOXICOLOGICAL INFORMATION

Health effects information

Likely routes of exposure:

Dermal, Inhalation

Symptoms of exposure:

Skin irritation

Delayed, immediate and chronic effects of exposure:

Possible carcinogenicity, Allergic skin reaction

Numerical measures of toxicity (acute toxicity/irritation studies (finished product))

Ingestion:

Oral (LD50 Rat):

9000 mg/kg body weight

Dermal:

Dermal (LD50 Rat):

> 2000 mg/kg body weight

Inhalation:

Inhalation (LC50 Rat):

> 0.704 mg/l air - 4 hours

Eye Contact:

Moderately Irritating (Rabbit)

Skin Contact:

Mildly Irritating (Rabbit)

Skin Sensitization:

A skin sensitizer.

Reproductive/Developmental Effects

Chlorothalonil: Did not show reproductive toxicity effects in animal experiments. Did not show teratogenic effects in animal experiments.

Chronic/Subchronic Toxicity Studies

Chlorothalonil: In dogs, 1 year administration caused a significant decrease in body weight gain and increases in absolute liver and kidney weights.

Neurotoxicity: No evidence in regulatory studies.

Carcinogenicity

Chlorothalonil: Chlorothalonil causes kidney tumors in rats and mice via a nongentoxic mode of action secondary to target organ toxicity.

Did not show mutagenic effects in animal experiments.

IARC identifies chlorothalonil as a 2B carcinogen (possibly carcinogenic to humans).

Chemical Name

NTP/IARC/OSHA Carcinogen

1,2-Propanediol

No

Silica, amorphous

IARC Group 3

Other ingredients

No

Tetrachloroisophthalonitrile

IARC Group 2B

Other Toxicity Information

Studies on rats and mice have suggested that technical chlorothalonil (97%), when fed at high levels in the diet, may have oncogenic potential to these laboratory animals. However, neither chlorothalonil nor its metabolites interact with



DOCKET WS

Date:

6/10/2015

Replaces:

12/4/2014

DNA and thus are not mutagenic. Tumor formation has been related to a non-genotoxic mechanism of action for which threshold levels have been established in rats and mice. Comprehensive dietary and worker exposure studies have shown exposure levels for humans to be well below these threshold levels. In addition, surveillance of chlorothalonil plant workers for over twenty years has not demonstrated any increase in oncogenic potential to humans.

Additional Toxicity Information:

May cause irritation of the gastrointestinal tract following ingestion of large amounts.

Mildly irritating to skin. Material rarely causes an allergic reaction.

May be irritating to the respiratory tract. This is rarely observed.

Material is not readily absorbed through intact skin.

Toxicity of Other Components

Other ingredients

Not Applicable

Propylene Glycoi

Reported to cause central nervous system depression (anesthesia, dizziness, confusion), headache and nausea. Also, eye irritation may occur with lacrimation but no residual discomfort or injury. Prolonged contact to skin may cause mild to moderate irritation and possible allergic reactions. Chronic dietary exposure caused kidney and liver injury in experimental animals.

Silica, amorphous

Dusts in high concentrations may cause skin, eye and respiratory tract irritation.

Target Organs

Active Ingredients

Chlorothalonil:

Lung, kidney

Inert Ingredients

Other ingredients:

Not Applicable

Propylene Glycol:

CNS, kidney, liver

Silica, amorphous:

Skin, eye, respiratory tract

12. ECOLOGICAL INFORMATION

Eco-Acute Toxicity

Chlorothalonil:

Green Algae 5-day EC50 190 ppb

Bird (Mallard Duck) LD50 Oral > 4640 mg/kg

Invertebrate (Water Flea) 48-hour EC50 70 ppb

Fish (Rainbow Trout) 96-hour LC50 47 ppb

Environmental Fate

Chlorothalonil:

The information presented here is for the active ingredient, chlorothalonil.

Low bioaccumulation potential. Not persistent in soil or water. Low mobility in soil. Sinks in water (after 24 h).



DOCKET WS

Date:

6/10/2015

Replaces:

12/4/2014

13. DISPOSAL CONSIDERATIONS

Disposal:

Do not reuse product containers. Dispose of product containers, waste containers, and residues according to local, state, and federal health and environmental regulations.

Characteristic Waste: Not Applicable

Listed Waste:

Not Applicable

14. TRANSPORT INFORMATION

DOT Classification

Ground Transport - NAFTA Non-Bulk: Not regulated.

Tank Truck:

Proper Shipping Name: Environmentally Hazardous Substance, Liquid, N.O.S. (Chlorothalonil), Marine Pollutant

Hazard Class or Division: Class 9 Identification Number: UN 3082

Packing Group: PG III

Comments

Water Transport - International

Proper Shipping Name: Environmentally Hazardous Substance, Liquid, N.O.S. (Chlorothalonil), Marine Pollutant

Hazard Class or Division: Class 9 Identification Number: UN 3082

Packing Group: PG III

Air Transport

Proper Shipping Name: Environmentally Hazardous Substance, Liquid, N.O.S. (Chlorothalonil)

Hazard Class or Division: Class 9 Identification Number: UN 3082

Packing Group: PG III

15. REGULATORY INFORMATION

Pesticide Registration:

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

Caution: Toxic if inhaled. May be harmful in contact with skin. Irritating to eyes and skin. May cause an allergic skin reaction. May be irritating to the respiratory tract.

EPA Registration Number(s):

50534-209-100

EPCRA SARA Title III Classification:

Acute Health Hazard Section 311/312 Hazard Classes:

Chronic Health Hazard

Section 313 Toxic Chemicals:

Chlorothalonil 54.0% (CAS No. 1897-45-6)

California Proposition 65:

This product contains a chemical known to the State of California to cause cancer.



DOCKET WS

Date:

6/10/2015

Replaces:

12/4/2014

CERCLA/SARA 304 Reportable Quantity (RQ):

None

RCRA Hazardous Waste Classification (40 CFR 261):

Not Applicable

TSCA Status:

Exempt from TSCA, subject to FIFRA

16. OTHER INFORMATION

NFPA Hazard Ratings		HMIS Hazard Ratings		0	Minimal
Health:	2	Health:	2	1	Slight
Flammability:	1	Flammability:	1	2	Moderate
Instability:	0	Reactivity:	0	3	Serious
0		•		4	Extreme
Syngenta Hazard Ca	itegory: ப,:	5		*	Chronic

For non-emergency questions about this product call:

1-800-334-9481

Original Issued Date:

11/17/2006

Revision Date:

6/10/2015

Replaces:

12/4/2014

Section(s) Revised: 2, 4, 11, 16

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein.

Dorado

Fungicide

Broad spectrum and systemic disease control for turf and ornamentals

Active Ingredient:

411

Other Ingredients: 85.7%

Dorado contains a nominal 1.3 pounds of 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 the label, find someone to explain it to you in detail.)

See additional precautionary statements and directions for use inside booklet.

EPA Reg. No. 100-741 EPA Est. 39578-TX-1

Product of Switzerland Formulated in the USA

SCP 741D-L1A 0409

2 gallons
Net Contents

syngenta

	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 the poison control center or doctor. Do not give anything by mouth to an unconscious person.
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 ingested, in	NOTE TO PHYSICIAN duce emesis or lavage stomach. Treat symptomatically.
	uct container or label with you when calling a poison control center joing for treatment.
For Ch	HOT LINE NUMBER 24-Hour Medical Emergency Assistance (Human or Animal) or nemical Emergency Assistance (Spill, Leak, Fire, or Accident), Call 1-800-888-8372

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

WARNING/AVISO

Causes substantial, but temporary eye injury Do not get in eyes or on clothing. Harmful if swallowed, inhaled, or absorbed through the skin. Avoid contact with eyes, skin or clothing. Avoid breathing vapor or spray mist.

Personal Protective Equipment (PPE)

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for Category C on an EPA chemical resistance category selection chart

Applicators and other handlers must wear:

- . Long-sleeved shirt and long pants
- Chemical-resistant gloves, such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, polyvinyl chloride (PVC), or Viton®
- Shoes plus socks
- Protective eyewear

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, 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.

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

This pesticide is toxic to fish. 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 wash waters.

Physical and Chemical Hazards

Do not use or store near heat or open flame.

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. Crop injury, ineffectiveness or other unintended consequences 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 SYNGENTA CROP PROTECTION, INC. or Seller. To the extent consistent with applicable law, Buyer and User agree to hold SYNGENTA and Seller harmless for any claims relating to such factors.

SYNGENTA 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. To the extent consistent with applicable law: (1) this warranty does not extend to the use of the product contrary to label instructions or under conditions not reasonably foreseeable to or beyond the control of Seller or SYNGENTA, and, (2) Buyer and User assume the risk of any such use. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, SYNGENTA MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS WARRANTED BY THIS LABEL.

To the extent consistent with applicable law, in no event shall SYNGENTA 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 SYNGENTA 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 SYNGENTA OR SELLER, THE REPLACEMENT OF THE PRODUCT.

SYNGENTA 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 SYNGENTA.

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, such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, polyvinyl chloride (PVC), or Viton®
- Shoes plus socks
- 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 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 treated areas without protective clothing until sprays have dried.

FAILURE TO FOLLOW THE DIRECTIONS FOR USE AND PRECAUTIONS ON THIS LABEL MAY RESULT IN PLANT INJURY OR POOR DISEASE CONTROL.

GENERAL INFORMATION

Dorado is a systemic fungicide for use on turfgrasses for the control of dollar spot (Sclerotinia homoeocarpa), brown patch (Rhizoctonia solani), anthracnose (Colletotrichum graminicola), red thread (Laetisaria fuciformis), pink patch (Limonomyces roseipellis), rust (Puccinia graminis), powdery mildew (Erysiphe graminis), stripe smut (Ustilago striiformis and Urocystis agropyri), summer patch (Magnaporthe poae), necrotic ring spot (Leptosphaeria korrae), spring dead spot (Leptosphaeria korrae, Leptosphaeria narmari, Ophiosphaerella herpotricha, Gaeumannomyces graminis), take-all patch (Gaeumannomyces graminis), leaf spot (Bipolaris spp., Drechslera spp.), gray leaf spot (Pyricularia grisea), pink snowmold (Microdochium nivale), fusarium patch (Fusarium nivale), gray snowmold (Typhula spp.), yellow patch (Rhizoctonia cerealis), and zoysia patch (Rhizoctonia solani).

Dorado also controls numerous diseases on ornamentals and other landscape and nursery plantings. It controls powdery mildews, rusts, leaf spots, scabs, and blights. Refer to the appropriate section for specified diseases and plants.

- Do not apply more than 5.4 gals. of Dorado/acre/calendar year.
- . Do not apply this product through any type of irrigation system.
- · Do not use Dorado as a tree injection.
- . Do not use Dorado in greenhouses.

MIXING INSTRUCTIONS

Fill the spray tank $^{1}/_{2}$ - $^{3}/_{4}$ full with water. Add the proper amount of Dorado and then add the rest of the water. Provide sufficient agitation during mixing and application to maintain a uniform emulsion.

If Dorado is tank mixed with other products, use the following sequence:

- Always check the compatibility of the tank mix using a jar test with proportionate amounts of Dorado, other chemicals to be used, and the water, before mixing in the spray tank.
- 2. Provide sufficient jet or mechanical agitation during filling and application to keep the tank mix uniformly suspended.
- 3. Fill tank at least 1/2 full of clean water.
- Add wettable powders to the tank first, allowing them to completely suspend in the tank before proceeding. This process can be hastened by premixing the product in water before adding to the tank.
- 5. Add flowables or suspensions next.

- 6. Add Dorado next.
- 7. Add emulsifiable concentrates last.
- 8. Do not leave tank mix combinations in the spray tank for prolonged periods without agitation. Mix and apply them the same day.

Tank Mixes

For broader spectrum control, Dorado can be tank mixed with other fungicides. For example, Subdue MAXX® may be tank mixed with Dorado or used alone when conditions are favorable for Pythium blight. Dorado is also compatible with numerous herbicides and insecticides. Check compatibility before tank mixing. Add Unite® (3 pts./100 gals.) to tank mixes which are incompatible. Follow the directions under Mixing Instructions for tank mixes. Observe all directions, precautions, and limitations on labeling of all products used in tank mixes. Tank mixtures or other applications of products referenced on this label are permitted only in those states in which the referenced products are registered.

TURFGRASS AND DICHONDRA DISEASE CONTROL

- 1. USE DORADO IN A PREVENTATIVE DISEASE CONTROL PROGRAM.
- 2. Apply in sufficient water to ensure thorough coverage.
- 3. Apply after mowing OR allow sprayed area to completely dry before mowing.
- 4. For control of foliar diseases, allow sprayed area to completely dry before irrigation.
- 5. For control of soil-borne diseases, Dorado can be watered in after application.
- 6. Under conditions optimum for high disease pressure, use the higher rate and the shorter interval.
- For optimum turf quality and disease control, use Dorado in conjunction with turf management practices that promote good plant health and optimum disease control.
- 8. Evaluate spray additives prior to use. Label directions are based on data obtained with no additives.
- Before use of any fungicide, proper diagnosis of the organism causing the disease is important. Use of diagnostic kits or other means of identification of the disease organism is essential to determine the best control measures.
- 10. Do not apply more than 16 fl. oz/1,000 sq. ft/calendar year.

IMPORTANT: Bermudagrass can be sensitive to Dorado. Do not exceed 4 fl. oz./1,000 sq. ft. every 30 days on any variety of bermudagrass. In FL, do not apply Dorado to bermudagrass golf course greens when temperatures exceed 90°F.

 $\mbox{{\bf NOTE:}}$ Do not graze animals on treated areas. Do not feed clippings from treated areas to livestock or poultry.

Turfgrass - Specific Diseases, Rates, and Application Timing

Disease	Fl. Oz. per 1,000 sq. ft.	Fl. Oz. per Acre	Application Interval/ Timing	Instructions
Dollar Spot (Sclerotinia homoeocarpa)	0.5	22	7 days	Apply when conditions are favorable for disease development.
	oeocarpa) 0.5		14 days	Tank mix with low label rate of one of the following fungicides: Daconil Weather Stik®, Daconil Ultrex®.
	1	44	21-28 days	Tank mix with low label rate of one of the following fungicides: Daconil Weather Stik® Daconil Ultrex Chipco® 26019
	1-2	44-88	14-28 days	If using the 1-2 fl. oz./1,000 sq. ft. rate without tank mixing, make no more than 3 consecutive applications for dollar spot control before rotating to an alternate EPA-registered fungicide having a different mode of action.

continued...

Turfgrass - Specific Diseases, Rates, and Application Timing (continued)

Disease	Fl. Oz. per 1,000 sq. ft.	Fl. Oz. per Acre	Application Interval/ Timing	Instructions
Anthracnose (Colletotrichum graminicola)	1-2	44-88	14-28 days	Apply when conditions are favorable for disease development. When disease pressure is high, use higher rates of Dorado and shorter intervals. For broad spectrum control, tank mix with a registered contact fungicide at the label rate.
				If disease is present, mix 2 fl. oz. of Dorado per 1,000 sq. ft. with the label rate of the above men- tioned contact fungicides.
Brown Patch (Rhizoctonia solani)	1-2	44-88	14-21 days	Begin applications in May or June before disease is present. Tank mix with a registered contact fungicide labeled for brown patch control at the label rate.
				Under conditions of high tem- peratures and high humidity, use the higher rates of Dorado and shorter intervals.
Powdery Mildew (Erysiphe graminis) Rust (Puccinia graminis)	1-2	44-88	14-28 days	Apply when conditions are favor- able for disease development. If disease is present, use 2 fl. oz. of Dorado per 1,000 sq. ft.

Disease	Fl. Oz. per 1,000 sq. ft.	Fl. Oz. per Acre	Application Interval/ Timing	Instructions
Red Thread (Laetisaria fuciformis) Pink Patch (Limonomyces roseipellis)	2	88	14-21 days	Apply when conditions are favor- able for disease development.
Stripe Smut (Ustilago striiformis) (Urocystis agropyri)	1-2	44-88	Fall or Spring	Apply once in the fall after grass becomes dormant or in the early spring before grass starts to grow.
Gray Leaf Spot (Pyricularia grisea)	1-2	44-88	14 days	Apply when conditions are favor- able for disease development. If using the 1 fl. oz./1,000 sq. ft. rate, tank mix with a registered contact fungicide at the label rate.
Melting Out Leaf Spot (Bipolaris spp.) (Drechslera spp.)	1-2	44-176	14 days	Under light to moderate pressure, apply Dorado to reduce the severity of leaf spot and melting out. For broad spectrum disease control, tank mix the 1 fl. oz. Dorado with a registered contact fungicide at the label rate.
				Tank mix the 1-2 fl. oz./1,000 sq. ft. Dorado rate with a registered con- tact fungicide at the label rates.
Summer Patch	2	88	14 days	Apply Dorado beginning in April. Use the 4 fl. oz./1,000 sq. ft.
(Magnaporthe poae)	4	176	28 days	rate on a 28-day schedule and the 2 fl. oz./1,000 sq. ft. rate on a 14-day schedule.

continued...

Turfgrass - Specific Diseases, Rates, and Application Timing (continued)

Disease	Fl. Oz. per 1,000 sq. ft.	Fl. Oz. per Acre	Application Interval/ Timing	Instructions
Take-All Patch (Gaeumannomyces graminis)	2-4	88-176	Spring and Fall	Apply Dorado to reduce the severity of take-all patch. Make 1-2 fall applications in September and October or when night temperatures drop to 55° F, and 1-2 spring applications in April and May, depending on local recommendations.
Spring Dead Spot (Leptosphaeria korrae, Leptosphaeria narmari, Ophiosphaerella herpotricha, Gaeumannomyces graminis)	4	176	30 days	Make 1-3 applications. For one application, apply in September or October. For multiple applications, begin sprays in August.
Necrotic Ring Spot (Leptosphaeria korrae)	4	176	Fall or Spring	Apply in the fall and/or the early spring depending on local recommendations.
Snowmold Gray (Typhula spp.) Pink (Microdochium nivale)	2-4	88-176	Late Fall	Apply one application in the late fall before snow cover. Do not apply on top of snow. For optimum disease control, the 2 and 3 fl. oz. Dorado rates should be tank mixed with either PCNB or chlorothalonil at label rates.

Disease	Fi. Oz. per 1,000 sq. ft.	Fl. Oz. per Acre	Application Interval/ Timing	Instructions
Fusarium Patch (Fusarium nivale)	2-4	88-176	Fall-Early Spring	Apply when conditions are favor- able for disease development.
Yellow Patch (Rhizoctonia cerealis)	3-4	130-176	Late Fall	Apply one application in the late fall before snow cover. Do not apply on top of snow. If using a 3 fl. oz./1,000 sq. ft. rate, tank mix with a registered contact fungicide at the label rate.
Zoysia Patch, large patch of zoysia (Rhizoctonia solani)	3-4	130-176	Early Fall	Make one application in the early fall (mid-September to mid-October) prior to development of disease symptoms. Consult local turfgrass extension experts to determine the optimum application timing for your area.

Dichondra - Specific Disease, Rate, and Application Timing

Disease	Fl. Oz. per 1,000 sq. ft.	Fl. Oz. per Acre	Application Interval/ Timing	Instructions
Dichondra Rust (Puccinia dichondrae)	2	88	14-21 days	Apply when conditions are favorable for disease development.

Establishment of Cool Season Turfgrass

Dorado provides control of many diseases of turf, and its primary use is as a fungicide for use against the diseases listed on this label. As an additional benefit, Dorado will improve the rate of establishment when it is applied to cool season grass seedlings or sod.

New Seedlings: Apply 1 fl. oz./1,000 sq. ft. at the 2 to 3-leaf stage of growth for faster root development and top growth.

 $\textbf{Sod:} \ Apply \ 1 \ fl. \ oz./1,000 \ sq. \ ft. \ 2-6 \ weeks \ before \ cutting \ for \ increased \ sod \ knitting \ and \ faster \ establishment \ after \ laying.$

Disease Control in Nurseries (Field) and Landscape Plantings

- 1. USE DORADO IN A PREVENTATIVE DISEASE CONTROL PROGRAM. To determine the use directions for controlling a disease on an ornamental plant species, select the plant species in Table 1. The number in parentheses following the plant species refers you to the disease(s) controlled in Table 2. Find the disease in Table 2. The letter in brackets following the disease refers you to the application regime in Table 3.
- 2. Allow spray to dry before overhead irrigation is applied.
- Optimum benefit of Dorado is obtained when used in conjunction with sound disease management practices.

General Recommendations

Dorado may be used at rates of 2-24 fl. oz./100 gals. water for control of diseases of ornamental plant species (see Tables 1, 2, and 3).

NOTE: For outdoor uses, you can apply up to 5.4 gallons of Dorado/acre/crop/calendar vear.

For general disease control in landscapes, apply 6-8 fl. oz./100 gals. water every 21 days. For best control, begin Dorado applications before disease development.

Note: Plant tolerances to Dorado have been found acceptable for the specific genera and species of plants listed under the Directions for Use. Other plant species may be sensitive to Dorado and diseases other than those listed may not be controlled. Before using Dorado on plants or for diseases that are not listed in the Directions for Use, test Dorado on a small scale basis first. Do not apply Dorado to African violets, begonias, Boston fern, or geraniums. Apply the recommended rates for a particular type of disease, i.e., rust, powdery mildew, etc., and evaluate for phytotoxicity and disease control prior to widespread use.

Table 1. Ornamentals - Plant SpeciesNumbers in parentheses refer to diseases controlled. See Table 2.

Herbaceous Ornamental	Woody Ornamental	Non-bearing Fruits and Nuts (Nurseries and Landscape Plantings)
Calendula (4a) Carnation (5f) Chrysanthemum (2a) Delphinium (4a) English Ivy (3e) Gomphrena (3a) Impatiens (3a, 3b, 4a) Iris (5d) Marigold (3a) Monarda (4c) Phlox (4c) Snapdragon (5d) Sweet William (3k) (Dianthus barbatus) Zinnia (4c)	Amelanchier (4d) Ash (4c) Azalea (2c, 4b) Bayberry (3n) Camellia (3e) Cotoneaster (3i) Crabapple (3c, 3q, 4c, 5a) Crape Myrtle (4a) Dogwood (3h,4c) Douglas Fir (5b) Elm (4c) Euonymus (3e, 4c) Hawthorn (5a) Holly (3r) Juniper (1a) Lilac (4c) Linden (3e, 3b, 4b) Magnolia (3e, 4b) Magnolia (3e, 4b) Maple (3e, 4f) Oaks (3p) Pines (1b,1c) Poplars (5b) Pyracantha (3o) Red Tip Photinia (3i) Rhaphiolepsis (3e, 3i) Rhododendron (2c, 3n) Roses (3g,4e,5c) (Outdoor Use Only) Shasta Fir (5e) Sweetgum (3b, 3c, 3n) Sycamore (3e) Tulip Tree (3e, 4a) Wax Myrtle (3n)	Apple (3q, 4d, 5a) Bartlett Pear (3q, 4c, 5a) Cherry (2b, 3d) Citrus (3m) Nectarine (2b) Peach (2b) Pecan (3b, 3c, 3f, 3l, 3n, 4e) Plum (2b) Walnut (3j)

Table 2. Diseases

Letters in brackets refer to application regimes. See Table 3.

- 1. Conifer Blights
 - a. Phomopsis juniperovora (Phomopsis Blight) [B]

 - b. Sirrococcus strobolinus (Tip Blight) [D]
 c. Sphaeropsis sapinea (Diplodia Tip Blight) [B]
- 2. Flower Blight
 - a. Ascochyta chrysanthemi (Ray Blight) [C]
 b. Monilinia spp. [A]
 c. Ovulinia spp. [B]
- 3. Leaf Blights/Spots

 - a. Alternaria spp. [B]b. Cercospora spp. (Brown Leaf Spot) [C]

 - b. Cercospora spp. (Brown Leaf Spot) [C]
 c. Cladosporium spp. (Scab) [C]
 d. Coccomyces hiemalis [A]
 e. Collectrichum spp. [B]
 f. Cristulariella spp. (Zonate Leaf Spot) [C]
 g. Diplocarpon rosae (Blackspot) [B]
 h. Discula spp. (Anthracnose) [A]
 i. Fabraea maculata (syn. Entomosporium maculata) [B]
 j. Gnomonia leptostyla (Anthracnose) [C]
 k. Heterosporium echinulatum [B]
 Mucosphaeralla carrigona (Downy Spot) [C]

 - I. Mycosphaerella caryigena (Downy Spot) [C] m. Mycosphaerella fructicola (Greasy Spot) [E] n. Septoria spp. (Leaf Scorch) [C]

 - p. Tubakia dryina [D]
 q. Venturia inaequalis (Scab) [A]
 r. Rhizoctonia Web Blight [B]
- **Powdery Mildew**

 - a. Erysiphe spp. [B]
 b. Microsphaera spp. [C]
 c. Oidium spp. [B]
 d. Podosphaera spp. [B]

 - Sphaerotheca pannosa [B]
 - Phyllactinia spp. [B]
- Rust
 - a. Gymnosporangium juniperi-virginianae [A]
 b. Melampsora occidentalis [D]

 - c. Phragmidium spp. [B]
 - d. Puccinia spp. [B]
 - e. Pucciniastrum goeppertianum [D] f. Uromyces dianthi [B]

Table 3. Application Regimes

- [A] Mix 2-4 fl. oz. of Dorado in 100 gals. of water and apply as a full coverage spray to the point of drip. Apply every 14-21 days during the period of primary infection. If disease is present, tank mix with an EPA-registered contact fungicide. For flower blight, apply Dorado when there is 5-10% bloom and again at 70-100% bloom. For dogwoods, apply the 2-4 fl. oz. rate every 14 days, or apply 8 fl. oz. of Dorado every 28 days.
- [B] Mix 5-8 fl. oz. of Dorado in 100 gals. of water and apply as a full coverage spray to the point of drip. Apply as needed, beginning when conditions are favorable for disease development. For blackspot, apply with a registered contact fungicide labeled for blackspot. For Calendula, apply every 30 days. For diplodia tip blight, make 3 applications every 14 days prior to major period of infection. For juniper phomopsis blight, make first application as soon as junipers start to grow, and repeat the applications every 14-21 days during periods of active growth.
- [C] Mix 8-12 fl. oz. of Dorado in 100 gals. of water and apply as a full coverage spray to the point of drip. Apply every 30 days, beginning when conditions are favorable for disease development. For pecans, apply the 12 fl. oz. rate beginning at bud break. Apply 3 times on 14-day intervals. For walnuts, apply 8.5 fl. oz. at 14-21 day intervals. For ray blight, apply 12 fl. oz. at 7-day intervals or 20 fl. oz. at 14-day intervals. For impatiens, bayberry, linden, magnolia, sweetgum and wax myrtle, the maximum use rate is 8 fl. oz.
- [D] Mix 16 fl. oz. of Dorado in 100 gals. of water and apply as a full coverage spray to the point of drip. Apply every 14-28 days, beginning when conditions are favorable for disease development. For Douglas fir needle rust, apply once in May. For tip blight, initial application is in mid-late winter; apply 3 times at 2-month intervals.
- [E] Mix 20-24 fl. oz. of Dorado in 100 gals. of water and apply as a full coverage spray to the point of drip. Apply during June to August time period.

Note: To avoid possible illegal residues, do not apply to apple, Bartlett pear, cherry, citrus, nectarine, peach, pecan, plum, or walnut trees that will bear harvestable fruit within 12 months.

STORAGE AND DISPOSAL

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

Pesticide Storage

Store in a cool, dry place. Store in the original container.

Pesticide Disposal

Pesticide wastes are toxic. Improper disposal of unused pesticide, spray mixture, or rinse water is a violation of Federal law. If these wastes cannot be used 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 in proper disposal methods.

Container Handling (less than 5 gallons)

Non-refillable 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 and 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.

For minor spills, leaks, etc., follow all precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during cleanup procedures and disposal of wastes.

CONTAINER IS NOT SAFE FOR FOOD, FEED OR DRINKING WATER.

Dorado™, Daconil Weather Stik®, Daconil Ultrex®, Subdue MAXX® and the Syngenta logo are trademarks of a Syngenta Group Company Chipco® trademark of Aventis

Unite® trademark of HACO, Inc.

Viton® trademark of E.I. DuPont de Nemours and Company

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For non-emergency (e.g., current product information) call Syngenta Crop Protection at 1-800-334-9481.

Manufactured for: Syngenta Crop Protection, Inc. P.O. Box 18300 Greensboro, North Carolina 27419-8300

SCP 741D-L1A 0409

Dorado™

Fungicide

Broad spectrum and systemic disease control for turf and ornamentals

Active Ingredient: Propiconazole: (CAS No. 60207-90-1) 14.3% Other Ingredients:

Dorado contains a nominal 1.3 pounds of active ingredient per gallon.

See directions for use in attached booklet.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. Refer to supplemental labeling under "Agricultural Use Requirements" in the Distriction for the programment of the Control of the Cont Directions for Use section for information about this standard.

EPA Reg. No. 100-741 EPA Est. 39578-TX-1

Product of Switzerland

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Manufactured for: Syngenta Crop Protection, Inc. P.O. Box 18300 Greensboro, North Carolina 27419-8300

SCP 741D-L1A 0409

2 gallons

Net Contents

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

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.

for 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 the poison control center or doctor. Do not give anything by mouth to an unconscious person

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 palson control center or doctor for

further treatment advice.
NOTE TO PHYSICIAN: If ingested,

NOTE TO PHYSICIAN: If Ingested, induce emesis or lavage stomach. Treat symptomatically. Have the product container or label with you when calling a poison control center or doctor, or going for

treatment. HOT LINE NUMBER: For 24-Hour Medical Emergency Assistance (Human or Animal) or Chemical Emergency Assistance (Spill, Leak, Fire, or Accident), Call 1-800-888**Precautionary Statements** Hazards to Humans and Domestic Animals

WARNING/AVISO

Causes substantial, but temporary eye injury. Do not get in eyes or on clothing. Harmful if swallowed, inhaled, or absorbed through the skin. Avoid contact with eyes, skin or clothing. Avoid breathing vapor or spray mist.

Environmental Hazards: This peschirronmental nazaras: Inis pes-ticide is toxic to fish. Do not apply directly to water, to areas where surface water is present, or to inter-tidal areas below the mean high water mark. Do not contaminate water when disposing of equipment

Physical and Chemical Hazards: Do not use or store near heat or open flame.

Chemigation: Do not apply this product through any type of irriga-

STORAGE AND DISPOSAL

Pesticide Storage: Store in a cool, dry place. Store in the original container.

ory prace. Some in the original container. Container Handling: Non-refillable 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 rinsafe into application equipment or a mix tank or store rinsate for later use and disposal. Drain for 10 seconds after the flow rinsate for later use and disposal. Drain for 10 seconds after the flow begins to drip. Repeat this proce-dure 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.

CONTAINER IS NOT SAFE FOR FOOD, FEED OR DRINKING WATER.

syngenta

BAR CODE # IS (01) 0 07 02941 26085 LAST DIGIT IS CHECK DIGIT UCC/EAN 128



DORADO®

Date:

3/16/2015

Replaces:

2/15/2012

1. PRODUCT IDENTIFICATION

Product identifier on label: DORADO®

Product No.:

A6780D

Use:

Fungicide

Manufacturer:

Syngenta Crop Protection, LLC

Post Office Box 18300 Greensboro NC 27419

Manufacturer Phone:

1-800-334-9481

Emergency Phone:

1-800-888-8372

2. HAZARDS IDENTIFICATION

Classifications:

Specific Target Organ Toxicity: Repeated Category 2

Specific Target Organ Toxicity: Respiratory Irritation Category 3

Flammable Liquid: Category 4

Eye Damage/Irritation: Category 2B

Signal Word (OSHA):

Warning

Hazard Statements:

Combustible liquid

Causes eye irritation

May cause respiratory irritation

May cause damage to organs through prolonged or repeated exposure

Hazard Symbols:





Precautionary Statements:

Keep away from heat, sparks, open flames, hot surfaces. No smoking.

Do not breathe mist, vapors, spray.

Wash hands and face thoroughly after handling. Use only outdoors or in a well-ventilated area.

Wear protective gloves, protective clothing, eye protection.

If Inhaled: Remove person to fresh air and keep comfortable for breathing.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

If eye irritation persists: Get medical advice.

Call a poison center, doctor or Syngenta if you feel unwell. In case of fire: Use dry chemical, foam or CO2 for extinction.

Store in a well-ventilated place. Keep cool.



DORADO®

Date:

3/16/2015

Replaces:

2/15/2012

Store locked up.

Dispose of contents and container in accordance with local regulations.

Other Hazard Statements:

None

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	Common Name	CAS Number	Concentration
Tetrahydrofurfuryl Alcohol (THFA)	Tetrahydrofurfuryl Alcohol (THFA)	97-99-4	Trade Secret
Other ingredients	Other ingredients	Trade Secret	<85.7%
1-[[2-(2,4-dichlorophenyl)-4-propyl-1,3-dioxolan-2-vllmethyll-1H-1,2,4-triazole	Propiconazole	60207-90-1	14.3%

Ingredients not precisely identified are proprietary or non-hazardous. Values are not product specifications.

4. FIRST AID MEASURES

Have the product container, label or Safety Data Sheet with you when calling Syngenta (800-888-8372), a poison contol center or doctor, or going for treatment.

Ingestion:

If swallowed: Call Syngenta (800-888-8372), a poison control center or doctor immediately for treatment advice. Do not give any liquid to the person. Do not induce vomiting unless told to do so after calling 800-888-

8372 or by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

Eye Contact:

If in eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after 5 minutes, then continue rinsing eye. Call Syngenta (800-888-8372), a poison control center or

doctor for treatment advice.

Skin Contact:

If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20

minutes. Call Syngenta (800-888-8372), a poison control center or doctor for treatment advice.

Inhalation:

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 Syngenta (800-888-8372), a poison control center or

doctor for further treatment advice.

Most important symptoms/effects:

Eye irritation

Respiratory irritation

Indication of immediate medical attention and special treatment needed:

There is no specific antidote if this product is ingested.

Treat symptomatically.

5. FIRE FIGHTING MEASURES

Suitable (and unsuitable) extinguishing media:

Use dry chemical, foam or CO2 extinguishing media. If water is used to fight fire, dike and collect runoff.

Specific Hazards:

Combustible liquid. Can release vapors that form explosive mixtures at temperatures at or above the flash point. Heavy vapors can flow along surfaces to distant ignition sources and flash back.

During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion.



DORADO®

Date:

3/16/2015

Replaces:

2/15/2012

Special protective equipment and precautions for firefighters:

Wear full protective clothing and self-contained breathing apparatus. Evacuate nonessential personnel from the area to prevent human exposure to fire, smoke, fumes or products of combustion.

6. ACCIDENTAL RÉLEASE MEASURES

Personal precautions, protective equipment, and emergency procedures:

Follow exposure controls/personal protection outlined in Section 8.

Methods and materials for containment and cleaning up:

Control the spill at its source. Contain the spill to prevent from spreading or contaminating soil or from entering sewage and drainage systems or any body of water. Clean up spills immediately, observing precautions outlined in Section 8. Cover entire spill with absorbing material and place into compatible disposal container. Scrub area with hard water detergent (e.g. commercial products such as Tide, Joy, Spic and Span). Pick up wash liquid with additional absorbent and place into compatible disposal container. Once all material is cleaned up and placed in a disposal container, seal container and arrange for disposition.

7. HANDLING AND STORAGE

Precautions for safe handling:

Store the material in a well-ventilated, secure area out of reach of children and domestic animals. Do not store food, beverages or tobacco products in the storage area. Prevent eating, drinking, tobacco use, and cosmetic application in areas where there is a potential for exposure to the material. Wash thoroughly with soap and water after handling.

Conditions for safe storage, including any incompatibilities:

Store locked up.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

THE FOLLOWING RECOMMENDATIONS FOR EXPOSURE CONTROLS/PERSONAL PROTECTION ARE INTENDED FOR THE MANUFACTURE, FORMULATION AND PACKAGING OF THIS PRODUCT.

FOR COMMERCIAL APPLICATIONS AND/OR ON-FARM APPLICATIONS CONSULT THE PRODUCT LABEL.

Occupational Exposure Limits:

Chemical Name	OSHA PEL	ACGIH TLV	Other	Source
Tetrahydrofurfuryl Alcohol (THFA)	Not Established	Not Established	0.5 ppm TWA	AIHA
Other ingredients	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Propiconazole	Not Established	Not Established	5 mg/m³ TWA	Syngenta

Appropriate engineering controls:

Use effective engineering controls to comply with occupational exposure limits (if applicable).

Individual protection measures:

Ingestion:

Prevent eating, drinking, tobacco usage and cosmetic application in areas where there is a potential for exposure to the material. Wash thoroughly with soap and water after handling.

Eve Contact:

Where eye contact is likely, use chemical splash goggles. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.



DORADOR

Date:

3/16/2015

Replaces:

2/15/2012

Skin Contact:

Where contact is likely, wear chemical-resistant gloves (such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, polyvinyl chloride [PVC] or Viton), coveralls, socks and chemical-resistant footwear.

Inhalation:

A combination particulate/organic vapor respirator should be used until effective engineering controls are installed to comply with occupational exposure limits, or until exposure limits are established. Use a NIOSH approved respirator with an organic vapor (OV) cartridge or canister with any R, P or HE filter.

Use a self-contained breathing apparatus in cases of emergency spills, when exposure levels are unknown, or under any circumstances where air-purifying respirators may not provide adequate protection.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Yellow to orange clear liquid

Odor: Aromatic solvent

Odor Threshold: Not Available

pH: 6 - 8 (1% solution in H2O)

Melting point/freezing point: Not Applicable

Initial boiling point and boiling range: 331°F (166°C)

Flash Point (Test Method):

181°F (Setaflash)

Flammable Limits (% in Air):

Not Available

Flammability:

Combustible liquid

Vapor Pressure: Propiconazole

4.2 x 10(-7) mmHg @ 77°F (25°C)

Vapor Density: Not Available

Relative Density: 1.09 g/cc @ 68°F (20°C); 9.09 lb/gal @ 68°F (20°C)

Solubility (ies):

Propiconazole

0.1 g/l @ 68°F (20°C)

Partition coefficient: n-octanol/water: Not Available Autoignition Temperature: Not Available

Decomposition Temperature: Not Available

Viscosity: Not Available

Other: None

10. STABILITY AND REACTIVITY

Reactivity:

Not reactive.

Chemical stability: Stable under normal use and storage conditions.

Possibility of hazardous reactions: Will not occur.

Conditions to Avoid: Flame, heat, ignition sources.

Incompatible materials: None known.

Hazardous Decomposition Products: None known.



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2/15/2012

11. TOXICOLOGICAL INFORMATION

Health effects information

Likely routes of exposure:

Dermal, Inhalation

Symptoms of exposure: Eye irritation, Respiratory irritation

Delayed, immediate and chronic effects of exposure:

Eye irritation, Respiratory irritation

Numerical measures of toxicity (acute toxicity/irritation studies (finished product))

Ingestion:

Oral (LD50 Female Rat):

4340 mg/kg body weight

Dermal:

Dermal (LD50 Rat):

> 2020 mg/kg body weight

Inhalation:

Inhalation (LC50 Rat):

> 2.6 mg/l air - 4 hours

Eye Contact:

Moderately Irritating (Rabbit)

Skin Contact:

Non-Irritating (Rabbit)

Skin Sensitization:

Not a Sensitizer (Guinea Pig)

Reproductive/Developmental Effects

Propiconazole: None observed.

Chronic/Subchronic Toxicity Studies

Propiconazole: None observed.

Carcinogenicity

Propiconazole: Increased hepatocellular adenomas, combined adenomas/carcinomas, and hepatocellular carcinomas observed in male mice in a chronic oral feeding study. However, animals in the high dose group for this study showed excessive toxicity; furthermore, the high dose exceeded the Maximum Tolerated Dose determined in the 90-day range finding study. No treatment-related tumors were seen in female mice in this mouse chronic feeding study. No tumors were noted in a chronic rat study.

Chemical Name

NTP/IARC/OSHA Carcinogen

Tetrahydrofurfuryl Alcohol (THFA)

No

Other ingredients

No

1-[[2-(2,4-dichlorophenyl)-4-propyl-1,3-

No

dioxolan-2-yl]methyl]-1H-1,2,4-triazole

Other Toxicity Information

None

Toxicity of Other Components

Other ingredients

Not Applicable

Tetrahydrofurfuryl Alcohol (THFA)

May be harmful if swallowed. Causes respiratory tract irritation. Causes skin irritation. May cause digestive tract irritation. Causes severe eye irritation. Inhalation overexposure may cause dizziness, incoordination and unconsciousness. Chronic overexposure may affect the kidney.

Target Organs



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Active Ingredients

Propiconazole:

Liver

Inert Ingredients

Other ingredients:

Not Applicable

Tetrahydrofurfuryl Alcohol (THFA): Digestive tract, respiratory tract, skin, eye, CNS, kidney

12. ECOLOGICAL INFORMATION

Eco-Acute Toxicity

Propiconazole:

Fish (Rainbow Trout) 96-hour LC50 0.83 ppm Invertebrate (Water Flea) 48-hour EC50 3.2 ppm

Green Algae 9-day EC50 0.72 ppm

Bird (Mallard Duck) 14-day LD50 2510 mg/kg

Environmental Fate

Propiconazole:

The information presented here is for the active ingredient, propiconazole.

Low bioaccumulation potential. Not persistent in soil. Stable in water. Low mobility in soil. Sinks in water (after 24 h).

13. DISPOSAL CONSIDERATIONS

Disposal:

Do not reuse product containers. Dispose of product containers, waste containers, and residues according to local, state, and federal health and environmental regulations.

Characteristic Waste: Not Applicable

Listed Waste:

Not Applicable

14. TRANSPORT INFORMATION

DOT Classification

Ground Transport - NAFTA

Not regulated

Bulk (> 119 gallons):

Proper Shipping Name: Combustible Liquid, N.O.S. (Tetrahydrofurfuryl Alcohol)

Hazard Class: Combustible Liquid Identification Number: NA 1993

Packing Group: PG III

Comments

Water Transport - International

Proper Shipping Name: Environmentally Hazardous Substance, Liquid, N.O.S. (Propiconazole), Marine Pollutant

Hazard Class: Class 9

Identification Number: UN 3082

Packing Group: PG III

Air Transport

Proper Shipping Name: Environmentally Hazardous Substance, Liquid, N.O.S. (Propiconazole)

Hazard Class: Class 9

Identification Number: UN 3082

Packing Group: PG III



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2/15/2012

15. REGULATORY INFORMATION

Pesticide Registration:

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

Warning: Causes substantial but temporary eye injury. Do not get in eyes or on clothing. Harmful if swallowed, inhaled, or absorbed through the skin. Avoid contact with eyes, skin or clothing. Avoid breathing vapor or spray mist.

EPA Registration Number(s):

100-741

EPCRA SARA Title III Classification:

Section 311/312 Hazard Classes:

Acute Health Hazard

Fire Hazard

Section 313 Toxic Chemicals:

Propiconazole 14.3% (CAS No. 60207-90-1)

CERCLA/SARA 304 Reportable Quantity (RQ):

None

RCRA Hazardous Waste Classification (40 CFR 261):

Not Applicable

TSCA Status:

Exempt from TSCA, subject to FIFRA

16. OTHER INFORMATION

NFPA Hazard Ratings		HMIS Hazard Ratings		.0	Minimal
Health:	2	Health:	2	1	Slight
Flammability:	2	Flammability:	2	2	Moderate
Instability:	0	Reactivity:	0	3	Serious
		-		4	Extreme
Syngenta Hazard Category: B,S				*	Chronic

LIMIO Harrard Dathers

For non-emergency questions about this product call:

1-800-334-9481

Original Issued Date:

4/4/2006

Revision Date:

3/16/2015

Replaces:

2/15/2012

Section(s) Revised:

1-16

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein.



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