

# 18-3-6 50% SRN with micronutrients

A total nutrient package in a clear liquid  
Guaranteed Analysis

04/14/16 10:34:40  
MV Purchasing Division

Total Nitrogen (N)	18%
Urea Nitrogen	5%
Slowly available water soluble nitrogen	13%
Available Phosphate(P2O5)	3%
Potassium(K2O)	6%
Iron (Fe)	0.1%
Manganese (Mn)	0.05%
Copper (Cu)	0.05%
Zinc (Zn)	0.05%
Boron (B)	0.05%
Derived from: Urea, Deionized Water, Water Soluble Nitrogen, Tetrapotassium Pyrophosphate, Potassium Carbonate, EDTA Iron, EDTA Manganese, EDTA Copper, Edta Zinc, Sodium Borate	

Weight per Gallon.....10.58 lbs  
Contents:.....2.5 gal  
Net Weight: .....26.45 lbs

CAUTION: Keep out of the reach of children.  
May cause eye and skin irritation. Avoid contact with eyes, skin or clothing. May be harmful if inhaled. Avoid breathing mist. In case of contact, immediately flush eyes or skin with plenty of water, discontinue use and get medical attention if irritation persists.

Manufactured by:  
The Andersons, Inc.  
23455 400E  
Logansport, IN 46947



Foliar-Pak

# Bio 12-6-6

## GUARANTEED ANALYSIS

Total Nitrogen (N).....	12.0%
9.0% Water Soluble Organic Nitrogen (N)	
3.0% Water Insoluble Nitrogen (N)	
Available Phosphate (P <sub>2</sub> O <sub>5</sub> ) .....	6.0%
Soluble Potash (K <sub>2</sub> O) .....	6.0%
Boron (B) .....	0.02%
Copper (C).....	0.05%
0.05% Water Soluble Copper (C)	
Iron (Fe).....	0.10%
0.10% Water Soluble Iron (Fe)	
Manganese (Mn).....	0.05%
0.05% Water Soluble Manganese (Mn)	
Zinc (Zn).....	0.05%
0.05% Water Soluble Zinc (Zn)	

Derived from: fish solubles, feathermeal and colloidal phosphates, borax, complex sugars and glucoheptonates of copper, manganese, zinc

## NON-PLANT FOOD INGREDIENTS

Sea Plant Extract .....	4.0%
Fulvic Acid.....	2.0%
L-Amino Acids .....	1.25%

Derived from: *Ascophyllum nodosum*, humic substances, and protein hydrolysates

## CONTENTS

2.5 gallons (9.46 liters)  
weight / gal: 10.5 lbs  
pH: 6.8

Net Weight: 26.5 lbs

# Bio 12-6-6

## GENERAL USE GUIDE

<b>Root Injection</b>	<p>Add 2.5 to 5.0 gal of 12-6-6 per 100 gal of water.</p> <p><b>Equipment:</b> Standard hydraulic sprayer with either mechanical agitation of high pressure, jet agitation such as with a venture nozzle. Use a standard root feeder probe or spray gun and soil injection needle with at least 4 lateral ports.</p> <p><b>Operating Pressure:</b> 150 to 200 PSI or 1/2 gal per 4 seconds.</p> <p><b>TREES:</b> 25 to 50 gal of liquid suspension per 1,000 sq ft of soil to be treated. Apply 1.0 to 2.0 qt of suspension per injection of spacing of 3 ft between injections in a grid under the entire tree canopy. Inject at a depth beginning at 4 in below the surface through a depth of 12 in maximum.</p> <p><b>SHRUBS, VINES, AND BERRIES:</b> Apply 1.0 to 2.0 pt of suspension per injection on a spacing of 2 ft between injections. Inject at a depth of 4 to 6 in. (For small shrubbery, drench soil using standard spray gun with disc removed. Apply 1/4 gal per 10 sq ft of root area.)</p>
<b>Soil Drench</b>	<p><b>PERENNIALS, ANNUALS, AND SHRUBS:</b> Add 1.0 to 2.0 fl oz per 1 gal of water. Apply directly to soil every 2 to 4 weeks. Never over fertilize.</p>
<b>Foliar Application</b>	<p><b>FLOWERS, PERENNIALS, AND ANNUALS:</b> Add 2.0 to 4.0 fl oz per 1 gal of water. Apply directly to leaves every 3 weeks prior to bloom and then every 2 to 4 weeks</p> <p><b>TURFGRASS:</b> Apply 6.0 to 9.0 fl oz per 1,000 sq ft. May be used as a foliar or soil applied product. Apply every 2 to 4 weeks or as needed in order to provide desired color and health.</p>

**KEEP OUT OF REACH OF CHILDREN AND STORE MATERIALS IN CLEARLY MARKED CONTAINERS**

Do not store in temperatures below 40°F.

*NOTICE: ENP Investments LLC warrants that the product conforms to its chemical description and is reasonably fit for the purposes stated on the label when used in accordance with the directions under normal conditions of use. ENP Investments, LLC will not be responsible for incidental or consequential damage resulting from the use of this product contrary to instructions or under abnormal conditions or under conditions not reasonably foreseeable to ENP Investments LLC.*



**MANUFACTURED BY**  
 ENP Investments, LLC  
 P.O. Box 618, 2001 W. Main St.  
 Mendota, IL 61342  
 800.255.4906

# Armor Tech<sup>®</sup>

## PPZ 143 MC

### FUNGICIDE

Broad-spectrum and systemic disease control  
for turf and ornamentals

#### FIRST AID

<b>IF IN EYES:</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>IF INHALED:</b>	<ul style="list-style-type: none"> <li>• Move person to fresh air.</li> <li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.</li> <li>• Call a poison control center or doctor for further treatment advice.</li> </ul>
<b>IF ON SKIN OR CLOTHING:</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>IF SWALLOWED:</b>	<ul style="list-style-type: none"> <li>• Call a poison control center or doctor immediately for treatment advice.</li> <li>• Have person sip a glass of water if able to swallow.</li> <li>• Do not induce vomiting unless told to do so by the poison control center or doctor.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>
<p>Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For medical emergencies involving this product, call Poison Control 1-800-222-1222 or National Pesticide Information Center 1-800-858-7378.</p>	
<p><b>NOTE TO PHYSICIAN</b> If ingested, induce emesis or lavage stomach. Treat symptomatically.</p>	

<b>ACTIVE INGREDIENT:</b>	<b>% BY WT.</b>
Propiconazole .....	14.3%
<b>OTHER INGREDIENTS:</b> .....	85.7%
<b>TOTAL:</b> .....	100.0%

Contains 1.3 lbs active ingredient per gallon.

EPA Reg. No. 86064-4  
EPA Est. No. 42750-MO-001

### KEEP OUT OF REACH OF CHILDREN WARNING/AVISO

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

See inside label booklet for additional  
Precautionary Statements and Directions for Use  
including Storage and Disposal instructions.

Manufactured for:  
United Turf Alliance, LLC  
8014 Cumming Highway, Suite 403-282  
Canton, GA 30115

**NET CONTENTS: 2.5 GALLONS (9.46 liters)**

**United Turf Alliance**

## 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 skin. Avoid contact with eyes, skin or clothing. Avoid breathing vapor or spray mist. Wear goggles or face shield. Wear rubber gloves and a long-sleeved shirt when mixing, handling and/or applying the product. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum or using tobacco. Remove and wash contaminated clothing before reuse.

### PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemically 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  $\geq$  14 mils, nitrile rubber  $\geq$  14 mils, neoprene rubber  $\geq$  14 mils, polyvinyl chloride (PVC)  $\geq$  14 mils, or Viton  $\geq$  14 mils
- 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 exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

### ENGINEERING CONTROLS STATEMENT

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.
- 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 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 washwater.

### PHYSICAL OR CHEMICAL HAZARDS

**Do not** use or store near heat or open flame.

### 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.

**Note: Do not** apply more than 5.4 gals. of ArmorTech PPZ 143 MC per acre per calendar year.

Failure to follow the directions for use and precautions on this label may result in plant injury or poor disease control.

### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard (WPS) 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, 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), notification to workers, and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

**DO NOT enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 24 hours.**

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

- Coveralls
- Chemical-resistant gloves such as barrier laminate, butyl rubber  $\geq$  14 mils, nitrile rubber  $\geq$  14 mils, neoprene rubber  $\geq$  14 mils, polyvinyl chloride (PVC)  $\geq$  14 mils, or Viton  $\geq$  14 mils
- 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.**

## GENERAL INFORMATION

ArmorTech PPZ 143 MC is a systemic fungicide for use on turfgrasses for the control of:

Anthraxnose (*Colletotrichum graminicola*)  
Brown patch (*Rhizoctonia solani*)  
Dollar spot (*Scierotinia homoeocarpa*)  
Fusarium patch (*Fusarium nivale*)  
Gray leafspot (*Pyricularia grisea*)  
Gray snowmold (*Typhula* spp.)  
Leafspot (*Bipolaris* spp., *Drechslera* spp.)  
Necrotic ring spot (*Leptosphaeria korrae*)  
Pink patch (*Limonomyces roseipellis*)  
Pink snowmold (*Microdochium nivale*)

Powdery mildew (*Erysiphe graminis*)  
Red thread (*Laetisaria fuciformis*)  
Rust (*Puccinia graminis*)  
Spring dead spot (*Leptosphaeria korrae*, *Leptosphaeria narmari*,  
*Ophiosphaerella herpotricha*, *Gaeumannomyces graminis*)  
Stripe smut (*Ustilago striiformis* and *Urocystis agropyri*)  
Summer patch (*Magnaporthe poae*)  
Take-all patch (*Gaeumannomyces graminis*)  
Yellow patch (*Rhizoctonia cerealis*)  
Zoysia patch (*Rhizoctonia solani*)

ArmorTech PPZ 143 MC also controls numerous diseases on ornamentals and other landscape and nursery plantings such as powdery mildews, rusts, leafspots, scabs, and blights. Refer to the appropriate section of this label for specified diseases and plants.

**DO NOT apply this product through any type of irrigation system.**

## TANK MIXES

ArmorTech PPZ 143 MC can be tank mixed with other fungicides for broader spectrum control. ArmorTech PPZ 143 MC is also compatible with numerous herbicides and insecticides. Check compatibility before tank mixing. Add Unite<sup>®</sup> (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.

## MIXING INSTRUCTIONS

Fill the spray tank 1/2 to 3/4 full with water. Add the proper amount of ArmorTech PPZ 143 MC, then add the remaining water. Provide sufficient agitation during mixing and application to maintain a uniform emulsion.

If ArmorTech PPZ 143 MC is tank mixed with other products, use the following sequence:

1. Always check the compatibility of the tank mix using a jar test with proportionate amounts of ArmorTech PPZ 143 MC, 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.
4. Add wettable powders to the tank first, allowing them to completely suspend in the tank before proceeding. Premixing the product in water before adding to the tank will hasten the process.
5. Add flowables or suspensions next.
6. Add the proper amount of ArmorTech PPZ 143 MC.
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.

## TURFGRASS AND DICHONDRA DISEASE CONTROL

1. Use ArmorTech PPZ 143 MC in a preventative disease control program.
2. Apply after mowing OR allow sprayed area to completely dry before mowing.
3. For control of soil-borne diseases, ArmorTech PPZ 143 MC can be watered-in after application.
4. For control of foliar diseases, allow sprayed area to completely dry before irrigation.
5. For optimum turf quality and disease control, use ArmorTech PPZ 143 MC in conjunction with turf management practices that promote good plant health and optimum disease control.
6. Proper diagnosis of the organism causing the disease is important prior to using any fungicide. Use of diagnostic kits or other means of identification of the disease organism is essential to determine the best control measures.
7. Apply in sufficient water to ensure thorough coverage.
8. Under conditions optimum for high disease pressure, use the higher rate and the shorter interval.
9. Evaluate spray additives prior to use. Label directions are based on data obtained with no additives.
10. **Do not** apply more than 16 fl. oz./1,000 sq. ft. per calendar year.

**Important:** Bermudagrass can be sensitive to ArmorTech PPZ 143 MC. **Do not** exceed 4 fl. oz./1,000 sq. ft. every 30 days on any variety of Bermudagrass. In Florida, **do not** apply ArmorTech PPZ 143 MC to Bermudagrass golf course greens when temperatures exceed 90°F.

**Note:** **Do not** feed clippings from treated areas to livestock or poultry. **Do not** graze animals on treated areas.

## TURFGRASS - SPECIFIC DISEASES, RATES, AND APPLICATION TIMING

DISEASE	Fl. Oz. Per 1,000 sq. ft.	Fl. Oz. Per Acre	Application Interval/Timing	Instructions
<b>Dollar Spot</b> ( <i>Sclerotinia homoeocarpa</i> )	0.5	22	7 days	Apply when conditions are favorable for disease development.
	0.5	22	14 days	Tank mix with low label rate of one of the following fungicides: ArmorTech CLT 825 ArmorTech CLT 720
	1	44	21-28 days	Tank mix with low label rate of one of the following fungicides: ArmorTech CLT 825 ArmorTech CLT 720 Iprodione-based products
	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.
<b>Anthracnose</b> ( <i>Colletotrichum graminicola</i> )	1-2	44-88	14-28 days	Apply when conditions are favorable for disease development. Use higher rates of ArmorTech PPZ 143 MC and shorter intervals when disease pressure is high. For broad-spectrum control, tank mix with a registered contact fungicide at the label rate.  If disease is present, mix 2 fl. oz. of ArmorTech PPZ 143 MC per 1,000 sq. ft. with the label rate of the above-mentioned contact fungicides.
<b>Brown patch</b> ( <i>Rhizoctonia solani</i> )	1-2	44-88	14-21 days	Tank mix with a registered contact fungicide labeled for brown patch control at the label rate. Begin applications in May or June before the disease is present.  Use the higher rates of ArmorTech PPZ 143 MC and shorter intervals under conditions of high temperatures and high humidity.
<b>Powdery Mildew</b> ( <i>Erysiphe graminis</i> ) <b>Rust</b> ( <i>Puccinia graminis</i> )	1-2	44-88	14-28 days	Make applications when conditions are favorable for disease development.  If disease is present, use 2 fl. oz. of ArmorTech PPZ 143 MC per 1,000 sq. ft.
<b>Pink Patch</b> ( <i>Limonomyces roseipellis</i> ) <b>Red Thread</b> ( <i>Laetisaria fuciformis</i> )	2	88	14-21 days	Apply when conditions are favorable for disease development.
<b>Stripe Smut</b> ( <i>Ustilago striiformis</i> ) ( <i>Urocystis agropyri</i> )	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.
<b>Gray Leafspot</b> ( <i>Pyricularia grisea</i> )	1-2	44-88	14 days	Make applications when conditions are favorable 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.
<b>Melting Out Leaf Spot</b> ( <i>Bipolaris</i> spp.) ( <i>Oreochlora</i> spp.)	1-4	44-176	14 days	Under light to moderate pressure, apply ArmorTech PPZ 143 MC to reduce the severity of leaf spot and melting out caused by Helminthosporium-type pathogens.  For broad-spectrum disease control, tank mix the 1 fl. oz. ArmorTech PPZ 143 MC rate with a registered contact fungicide at the label rate. Tank mix the 1-4 fl. oz./1,000 sq. ft. ArmorTech PPZ 143 MC rate with a registered contact fungicide at the labeled rate.
<b>Summer Patch, Poa Patch</b> ( <i>Magnaporthe poae</i> )	2	88	14 days	Apply ArmorTech PPZ 143 MC beginning in April. Use the 2 fl. oz./1,000 sq. ft. rate on a 14-day schedule and the 4 fl. oz./1,000 sq. ft. rate on a 28-day schedule.
	4	176	28 days	

(continued)

## TURFGRASS – SPECIFIC DISEASES, RATES, AND APPLICATION TIMING

DISEASE	Fl. Oz. Per 1,000 sq. ft.	Fl. Oz. Per Acre	Application Interval/Timing	Instructions
<b>Take-All Patch</b> ( <i>Gaeumannomyces graminis</i> )	2–4	88–176	Spring and Fall	ArmorTech PPZ 143 MC can be applied 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.
<b>Spring Dead Spot</b> ( <i>Leptosphaeria korrae</i> , <i>Leptosphaeria narman</i> , <i>Ophiosphaerella herpotricha</i> , <i>Gaeumannomyces graminis</i> )	4	176	30 days	Make 1–3 applications of ArmorTech PPZ 143 MC. For one application, apply in September or October. For multiple applications, begin sprays in August.
<b>Necrotic Ring Spot</b> ( <i>Leptosphaeria korrae</i> )	4	176	Fall or Spring	Apply in the fall and/or the early spring depending on local recommendations.
<b>Gray Snowmold</b> ( <i>Typhula</i> spp.) <b>Pink Snowmold</b> ( <i>Microdochium nivale</i> )	2–4	88–176	Late Fall	Make one application of ArmorTech PPZ 143 MC in the late fall before snow cover. <b>Do not</b> apply on top of snow. For optimum disease control, the 2 and 3 fl. oz. ArmorTech PPZ 143 MC rates should be tank mixed with either PCNB or chlorothalonil at label rates.
<b>Fusarium Patch</b> ( <i>Fusarium nivale</i> )	2–4	88–176	Fall-Early Spring	Apply when conditions are favorable for disease development.
<b>Yellow Patch</b> ( <i>Rhizoctonia cerealis</i> )	3–4	130–176	Late Fall	Make one application of ArmorTech PPZ 143 MC in the late fall before snow cover. <b>Do not</b> 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.
<b>Zoysia Patch</b> Large patch of zoysia ( <i>Rhizoctonia solani</i> )	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
<b>Dichondra Rust</b> ( <i>Puccinia dichondrae</i> )	2	88	14–21 days	Apply when conditions are favorable for disease development.

## ESTABLISHMENT OF COOL-SEASON TURFGRASS

The primary use of ArmorTech PPZ 143 MC is as a fungicide for use against the diseases listed on this label. As an additional benefit ArmorTech PPZ 143 MC will improve the establishment rate 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.

**Sod:** Apply 1 fl. oz./1,000 sq. ft. 2 to 6 weeks before cutting for increased sod knitting and faster establishment after laying.

## DISEASE CONTROL IN NURSERIES (FIELD) AND LANDSCAPE PLANTINGS

1. Use ArmorTech PPZ 143 MC 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 parenthesis following the plant species refers you to the disease(s) controlled in Table 2. Find the disease in Table 2. The number in brackets following the disease refers you to the application regime in Table 3.
2. Allow spray to dry before overhead irrigation is applied.
3. Optimum benefit of ArmorTech PPZ 143 MC is obtained when used in conjunction with sound disease management practices.



## GENERAL INFORMATION

ArmorTech PPZ 143 MC may be used at rates of 2 to 24 fl. oz./100 gallons of water for control of diseases of ornamental plant species (Refer to Tables 1, 2, and 3).

**Note:** For outdoor uses, up to 5.4 gallons of ArmorTech PPZ 143 MC/acre/crop/calendar year may be applied.

For general disease control in landscapes, apply 6 to 8 fl. oz./100 gallons of water every 21 days. For best control, begin ArmorTech PPZ 143 MC applications before disease development.

**Note:** Plant tolerances to ArmorTech PPZ 143 MC have been found to be acceptable for the specific genera and species of plants listed under the **Directions for Use** section of this label. Other plant species may be sensitive to ArmorTech PPZ 143 MC and diseases other than those listed may not be controlled. Before using ArmorTech PPZ 143 MC on plants or for diseases that are not listed in the **Directions for Use** section of this label, test ArmorTech PPZ 143 MC on a small-scale basis first. **Do not** apply ArmorTech PPZ 143 MC 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 Species**

Numbers in parenthesis 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 ( <i>Dianthus tartatus</i> ) (3k) 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) Maple (3e, 4f) Oaks (3p) Pines (1b, 1c) Poplars (5b) Pyracantha (3o) Red Tip Photinia (3i) Rhamphiolepis (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 (3g, 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

Numbers in brackets refer to application regimes. Refer to Table 3.

1. Conifer Blights
  - a. *Phomopsis juniperovora* (Phomopsis Blight) [2]
  - b. *Sirococcus strobolinus* (Tip Blight) [4]
  - c. *Sphaeropsis sapinea* (Diplodia Tip Blight) [2]
2. Flower Blight
  - a. *Ascochyta chrysanthemi* (Ray Blight) [3]
  - b. *Monilinia* spp. [1]
  - c. *Ovulinia* spp. [2]
3. Leaf Blights/Spots
  - a. *Alternaria* spp. [2]
  - b. *Cercospora* spp. (Brown Leaf Spot) [3]
  - c. *Cladosporium* spp. (Scab) [3]
  - d. *Coccomyces hiemalis* [1]
  - e. *Colletotrichum* spp. [2]
  - f. *Cristulariella* spp. (Zonate leafspot) [3]
  - g. *Diplocarpon rosae* (Blackspot) [2]
  - h. *Discula* spp. (Anthracnose) [1]
  - i. *Fabraea maculata* (syn. *Entomosporium maculate*) [2]
  - j. *Gnomonia leptostyla* (Anthracnose) [3]
  - k. *Heterosporium echinulatum* [2]
  - l. *Mycosphaerella caryigena* (Downy Spot) [3]
  - m. *Mycosphaerella fructicola* (Greasy Spot) [5]
  - n. *Septoria* spp. (Leaf Scorch) [3]
  - o. *Spilocaea pyracanthae* [2]
  - p. *Tubakia dryina* [4]
  - q. *Venturia inaequalis* (Scab) [1]
  - r. *Rhizoctonia* web blight [2]
4. Powdery Mildew
  - a. *Erysiphe* spp. [2]
  - b. *Microsphaera* spp. [3]
  - c. *Oidium* spp. [2]
  - d. *Podosphaera* spp. [2]
  - e. *Sphaerotheca pannosa* [2]
  - f. *Phyllactinia* spp. [2]
5. Rust
  - a. *Gymnosporangium juniperi-virginianae* [1]
  - b. *Melampsora occidentalis* [4]
  - c. *Phragmidium* spp. [2]
  - d. *Puccinia* spp. [2]
  - e. *Pucciniastrum goeppertianum* [4]
  - f. *Uromyces dianthi* [2]

## Table 3. Application Regimes

- [1] Mix 2 to 4 fl. oz. of ArmorTech PPZ 143 MC in 100 gallons of water and apply as a full-coverage spray to the point of drip. Apply every 14 to 21 days during the period of primary infection. If disease is present, tank mix with an EPA-registered contact fungicide. For flower blight, apply ArmorTech PPZ 143 MC when there is 5 to 10% bloom and again at 70 to 100% bloom. For dogwoods, apply the 2 to 4 fl. oz. rate every 14 days or apply 8 fl. oz. of ArmorTech PPZ 143 MC every 28 days.
- [2] Mix 5 to 8 fl. oz. of ArmorTech PPZ 143 MC in 100 gallons of water and apply as a full-coverage spray to the point of drip. Begin applying when conditions are favorable for disease development and apply as necessary. 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 the first application as soon as junipers start to grow, and repeat the applications every 14 to 21 days during periods of active growth.
- [3] Mix 8 to 12 fl. oz. of ArmorTech PPZ 143 MC in 100 gallons of water and apply as a full-coverage spray to the point of drip. Apply every 30 days, beginning when conditions are favorable for the disease development. For pecans, apply the 12 fl. oz. rate beginning at bud break. Apply 3 times at 14-day intervals. For walnuts, apply 8.5 fl. oz. at 14- to 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.
- [4] Mix 16 fl. oz. of ArmorTech PPZ 143 MC in 100 gallons of water and apply as a full-coverage spray to the point of drip. Apply every 14 to 28 days, beginning when conditions are favorable for disease development. For Douglas fir needle rust, apply once in May. For tip blight, start applications in mid-late winter and apply 3 times at 2-month intervals.
- [5] Mix 20 to 24 fl. oz. of ArmorTech PPZ 143 MC in 100 gallons 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, cherry, citrus, nectarine, peach, pear, pecan, plum or walnut trees that will bear harvestable fruit within 12 months. **Do not** apply to maple trees that will be used for maple syrup production within one year.

## STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** Store in original container in a cool area out of the reach of children.

**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 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:** Nonrefillable container. **Do not** reuse this container to hold materials other than pesticides or dilute pesticides (rinsate). After emptying and cleaning, it may be allowable to temporarily hold rinsate or other pesticide-related materials in the container. Contact your state regulatory agency to determine allowable practices in your state. Offer for recycling, if available.

**RESIDUE REMOVAL:** 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.

## CONDITION OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

**NOTICE:** Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather, presence of other materials or other influencing factors in the use of the product which are beyond the control of United Turf Alliance, 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 United Turf Alliance, LLC and Seller harmless for any claims relating to such factors.

United Turf Alliance, LLC warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. This warranty does not extend to the use of this product contrary to label instructions, or under conditions not reasonably foreseeable to or beyond the control of Seller or United Turf Alliance, LLC, and Buyer and User assume the risk of any such use. **UNITED TURF ALLIANCE, LLC MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.**

To the extent consistent with applicable law, neither United Turf Alliance, LLC or 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 UNITED TURF ALLIANCE, 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 UNITED TURF ALLIANCE, LLC OR SELLER, THE REPLACEMENT OF THE PRODUCT.**

United Turf Alliance, 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 United Turf Alliance, LLC.

AmmorTech is a trademark of United Turf Alliance, LLC.

EPA070709

# Armor Tech™

## PGR 113

### FOR TURF GROWTH MANAGEMENT

A microemulsion concentrate used to manage growth and improve quality and stress tolerance of turf edging and warm- and cool-season turfgrasses.

#### ACTIVE INGREDIENT:

Trinexapac-ethyl ..... 11.3%

OTHER INGREDIENTS: ..... 88.7%

TOTAL: ..... 100.0%

EPA Reg. No. 73220-12

EPA Est. No. 34729-GA-002

## KEEP OUT OF REACH OF CHILDREN CAUTION

#### FIRST AID

##### IF ON SKIN OR CLOTHING

- Take off contaminated clothing.
- Rinse skin immediately with plenty of water for 15-20 minutes.
- Call a poison control center or doctor for treatment advice.

##### IF IN EYES

- Hold eye open and rinse slowly and gently with water for 15-20 minutes.
- Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.
- Call a poison control center or doctor for treatment advice.

#### HOT LINE NUMBER

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact PROSAR (800) 308-5391 for emergency medical treatment information.

#### NOTE TO PHYSICIAN

If a large amount has been ingested, lavage stomach. An aqueous suspension of activated charcoal can be given to absorb remaining toxicant. Treat symptomatically.

See inside booklet for complete First Aid, Precautionary Statements, Directions for Use, and Conditions of Sale and Warranty.

Manufactured for UTA • 4515 Falls of Neuse Rd, Suite 300 • Raleigh, NC 27609

XXX-X-XX

Net Contents: 2.5 gallons (9.48 liters)

EPA 021607



United Turf Alliance

### 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 nitrile, butyl, neoprene, or barrier laminate)
- Shoes plus socks

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, 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

##### User 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

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 water. Do not apply when weather conditions favor drift from treated areas.

#### 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.

The restricted-entry interval (REI) for this product is 0 days.

**Do not enter treated areas without footwear until sprays have dried.**

#### 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 footwear until sprays have dried.**

Observe all precautions and limitations on this label and on the labels of each product used in tank mixture with this product.

**FAILURE TO FOLLOW THE DIRECTIONS FOR USE AND PRECAUTIONS ON THIS LABEL MAY RESULT IN UNEVEN GROWTH REDUCTION OR SEVERELY STUNTED TURF.**

#### GENERAL INFORMATION

Armor Tech PGR 113 is a plant growth regulator and is an odorless micro emulsion concentrate (MEC). Armor Tech PGR 113 mixes completely with water and may be tank mixed with many commonly used pesticides and liquid fertilizers.

Armor Tech PGR 113 is effective only by absorption through the grass foliage and not by plant uptake of the product through the soil. Within one hour after application, Armor Tech PGR 113 will not wash off the grass foliage. A number of factors affect the activity and performance of Armor Tech PGR 113 when used for growth management of turfgrasses including, but not limited to, the following:

- environmental conditions
- turfgrass management and cultural practices that affect grass growth and vigor
- level of plant fertility
- availability of moisture
- plant vigor
- state of grass growth

Watering-in is not necessary for activation of Armor Tech PGR 113.

**TURFGRASS:** Armor Tech PGR 113 reduces the growth of warm- and cool-season turfgrasses. When used according to directions for turf growth management, Armor Tech PGR 113 reduces the frequency of mowing and the amount of grass clippings generated by mowing. Armor Tech PGR 113 applications may also increase the color, quality and density of turf.

Armor Tech PGR 113 can be applied to the following sites that have well-maintained, quality turfgrass areas:

- lawns (residential and commercial)
- golf courses
- sod farms
- sports fields, cemeteries, and similar areas
- difficult-to-mow areas

Armor Tech PGR 113 minimizes the need for edging of turfgrass along sidewalks, curbs, parking lots, driveways, flower beds, fences and around posts, storage sheds, and trees.

## USE DIRECTIONS FOR APPLICATIONS TO TURFGRASS

### MOWING

For greater suppression with Armor Tech PGR 113, maintain turfgrass at lower mowing heights. Note that the rates given in the Application Rate Tables are for turf at typical mowing heights, therefore the application rates should be adjusted based on the grass height at application.

Turfgrass injury can be minimized by using one of the following options:

1. mow 4 hours after the application of Armor Tech PGR 113,  
OR
2. mow 1 hour before application of Armor Tech PGR 113

### EQUIPMENT

Armor Tech PGR 113 may be applied using one of the following types of spray equipment:

- backpack sprayers
- hand sprayers
- boom sprayers
- spraygun application devices

Use only spray equipment that have been thoroughly cleaned before use. Ensure that the sprayer will deliver an accurate and uniform spray by calibration of the equipment. After use, clean the sprayer with clean water and dispose of rinsate according to label directions.

### MIXING INSTRUCTIONS

1. Add Armor Tech PGR 113 to a sufficient amount of water (ex., 0.5 to 4.0 gallons of water per 1,000 sq. ft.).
2. Mix only the volume of spray mixture required for the square footage to be treated.
3. Ensure adequate agitation during application.
4. When Armor Tech PGR 113 is used as a tank mix with other products, agitation is required.
5. Apply Armor Tech PGR 113 in a uniform manner to ensure thorough coverage of the crop.

For tank mixtures, use only if the mixing partner is registered for this use. Do not mix Armor Tech PGR 113 with any product which prohibits such mixing. Do not exceed any label application rate and follow the most restrictive label precautions and limitations. Refer to the tank mix partner label(s) for further information.

#### Backpack and Hand Sprayers (0.5 to 4.0 gallon capacities)

**Armor Tech PGR 113 Alone:** Fill the spray tank with total amount of water required. Add the appropriate amount of Armor Tech PGR 113. Close the spray tank, and agitate to ensure a uniform solution. Make spray applications to turfgrass.

#### Boom and Hand Gun Sprayers

**Armor Tech PGR 113 Alone:** Fill the spray tank with total amount of water required. Agitate the water while adding Armor Tech PGR 113.

**Armor Tech PGR 113 Plus Tank Mixtures:** Before mixing Armor Tech PGR 113 with other components, determine the compatibility of the tank mix using the **TANK MIX COMPATIBILITY TEST** below. Once the compatibility of the mixture is assured, add the products (such as carrier or other pesticide products) to the spray tank in the order noted below:

1. Add 1/2 of the required amount of water to the spray tank.
2. Keep the tank mix agitated to ensure formation of a uniform suspension.
3. Add any products that are packaged in water-soluble pouches first.  
Keep the tank mix agitated to ensure that the water soluble bags

dissolve and the contents dispersed in the tank mix. Continue agitation and then add water-dispersible granules (WG), followed by wettable powders (WP). Before adding other products, ensure complete dispersal of the solid products.

4. Add emulsifiable concentrates (EC).
5. Add flowable liquids (FL) or suspension concentrates (SC).
6. Add Armor Tech PGR 113.
7. Add spray adjuvant and spray markers. Use surfactants approved for application to turf. Check surfactant label before use.
8. Add the remainder of the water.
9. Agitate tank mix combinations. Do not leave mixtures sitting in the spray tank without agitation. Only prepare the amount of spray mix required for use on one day and apply it all that day.

### TANK MIX COMPATIBILITY TEST

Add relative proportionate amounts of Armor Tech PGR 113, other products to be used, and the water in a clear glass quart jar with a lid. Close the lid and invert the jar several times and observe the mixture for approximately 30 minutes. **The mixture is not compatible if the following is observed:** formation of balls, flakes, sludges, gels, oily films or layers; or precipitates.

### APPLICATION NEAR AND AROUND MONUMENTS AND HARDSCAPE MATERIALS

Brass, bronze, concrete, marble, granite, or other types of stone are not stained by Armor Tech PGR 113 when applied at normal dilution rates. To ensure Armor Tech PGR 113 will not stain other materials, test Armor Tech PGR 113 on a small scale basis before using on a larger scale.

### PRE-STRESS CONDITIONING OF TURFGRASS

To delay the onset of stress, improve turf survival under stress, and enhance the turf's recovery from stress, make multiple applications of Armor Tech PGR 113. Normal turf cultural practices such as fertilization, irrigation, drainage, mowing height, etc. should be maintained.

Armor Tech PGR 113 can be applied to healthy, actively growing turf before the onset of stress and may continue to be applied throughout the growing season as long as the turf remains healthy. **Do not apply more than 7.0 fl. oz. per 1,000 sq. ft. per year.**

Application of Armor Tech PGR 113 may produce turfgrass root-mass which is often greater in treated turf than in similar, untreated turf. This increase in turfgrass root-mass is a result of the reduction in turf top growth, thereby redirecting the energy to below-ground plant parts and increasing production of the root and rhizome system.

Enhanced fungicide performance has been demonstrated in research trials when monthly applications of Armor Tech PGR 113 at the label rate, or biweekly applications at 1/2 the label rate, were shown to strengthen the turfgrass and to help it resist disease. Since mowing is less frequent and removal of leaf material is reduced, contact and systemic fungicide products remain more effective in or on the turf longer.

Multiple applications of Armor Tech PGR 113 will result in smaller, more compact turfgrass and reduced leaf area. This causes a reduction in transpiration and water use, and improves drought tolerance of the turfgrass. Loss of moisture from soil evaporation is reduced by the increased turf density allowing soil moisture to be available due to increased root depth and mass. Armor Tech PGR 113 also may increase carbohydrate levels in

turfgrass; increased carbohydrate levels have been shown to enhance heat and cold tolerance of turfgrass.

### **POA ANNUA CONVERSION/RENOVATION**

When overseeding or renovating existing turf infested with strands of *Poa annua*, Armor Tech PGR 113 use allows better germination and seedling growth of the more desirable turf, results in fewer clippings and thus reduces maintenance traffic on new seedlings. Armor Tech PGR 113 is foliarly-absorbed therefore does not affect seed germination. Armor Tech PGR 113 should be applied 1 to 5 days before seeding, and before verticutting, scalping, spiking, or other similar operations.

Temporary initial discoloration of turfgrass infested with *Poa annua* is possible with aggressive application rates of Armor Tech PGR 113. In the subsequent spring season, apply Armor Tech PGR 113 at the higher rate for the turf type and setting listed in the Application Rate Tables. As described above, the success of this treatment will also depend on other factors such as growing conditions, fertilization, rainfall, and other agronomic and environmental conditions.

### **BERMUDAGRASS OVERSEEDING**

In addition to normal turfgrass cultural practices, Armor Tech PGR 113 applications to Bermudagrass enhance the establishment of cool-season turfgrasses and help ensure new seedling vigor and growth, will result in fewer clippings, and less maintenance traffic on new seedlings. Since Armor Tech PGR 113 is foliarly-absorbed, germination and seedling growth is unaffected by Armor Tech PGR 113.

Apply Armor Tech PGR 113 1 to 5 days before seeding, and before verticutting, scalping, spiking, or other similar operations to the bermudagrass.

Aggressive application rates of Armor Tech PGR 113 may cause temporary initial discoloration of turfgrass. To avoid discoloration, use the normal seeding rates for your area and turf setting (lawn, fairway, etc.). The success of overseeding will depend on a number of factors including growing conditions, fertilization, rainfall, and other agronomic and environmental conditions. See the Application Rate Tables for maintenance application rates.

### **APPLICATIONS WITH TURF MARKING PAINT**

The duration of marking paint on turf can be extended when Armor Tech PGR 113 is applied before or with the marking agents. When used with latex-based marking agents, mix Armor Tech PGR 113 with water before adding the marking agent. For further directions, read the product label for the marking agent and the Armor Tech PGR 113 + Tank Mixtures section of this label.

#### **Use Rate:**

- 1 ounce of Armor Tech PGR 113 in 1 gallon of marking paint treats approximately 1,000 sq. ft. of line surface area.

### **PLANT TOLERANCE**

The grasses listed on this label have been shown to be tolerant of Armor Tech PGR 113. It is impossible to test every species and cultivars of grasses for tolerance to Armor Tech PGR 113. Before commercial use, the professional user should determine if Armor Tech PGR 113 can be used safely on grasses not listed in the Application Rate Table by conducting small scale tests. The lower recommended rate for turf setting (lawn, fair-

way, etc.) should be tested and evaluated for phytotoxicity and growth inhibition prior to use on a large scale.

### **PRECAUTIONS**

- Normal recommended cultural practices (such as irrigation; fertilization; and weed, disease and insect control) should continue when necessary in areas treated with Armor Tech PGR 113. to ensure quality turf.
- Because some herbicides can injure turf, tank mixes with Armor Tech PGR 113 should be tested on a small scale before widespread use. See the directions for testing in the TANK MIX COMPATIBILITY TEST section above.
- Armor Tech PGR 113 may cause temporary yellowing of turfgrass which usually disappears about one week after application. If readily available nitrogen (0.2-0.5 lb. of actual nitrogen per 1,000 sq. ft.) is applied to turfgrass, the yellowing is minimized and the green color is enhanced. Alternatively, recommended rates of iron per 1,000 sq ft. can also be used.
- Regulation of full growth by Armor Tech PGR 113 usually begins at 3-5 days after application.
- If using Armor Tech PGR 113 in a tank mixture, observe all directions for use, sites, use rate dilution ratios, precautions and limitations, which appear on the tank-mix product's label. Do not exceed any label use rate and follow the most restrictive label precautions and limitations. This product should not be applied with any product which prohibits such mixing.
- Do not apply Armor Tech PGR 113 through any type of irrigation system.
- Do not graze areas or feed turfgrass clippings to livestock.

### **APPLICATION RATES AND TIMING**

Apply Armor Tech PGR 113 to actively-growing turf. Use the lower rate of Armor Tech PGR 113 in situations when turf is going dormant due to high or low temperatures, or to lack of moisture.

A repeat application(s) of Armor Tech PGR 113 may be made as soon as the turf resumes growth or if more suppression is desired. Do not apply more than 7.0 fl. oz. per 1,000 sq. ft. per year.

The Application Rate Tables provides use rates that lead to approximately 50% growth inhibition over a 4 week period and produce little or no discoloration of turf when turf is growing under favorable conditions.

High fertilization and spring flushes may cause excessive turf growth which may require higher rates of Armor Tech PGR 113. Under these conditions, increase the Armor Tech PGR 113 rate up to 50% to ensure an adequate length of control.

A maximum of twice the recommended Armor Tech PGR 113 rate from the Application Rate Tables may be applied in order to ensure extended growth suppression of up to 8 weeks and when temporary discoloration can be tolerated.

A reduction of up to 50% of the Armor Tech PGR 113 use rates may be needed for turfgrass grown under conditions of low fertility, compaction, or other factors which leads to stress of the turf.

**Repeat applications of Armor Tech PGR 113 are permitted during the growing season, but do not exceed a total of 7.0 fl. oz. per 1,000 sq. ft. (305 fl. oz. per acre which is equivalent to 19.0 pts. per acre) per year.**

**APPLICATION RATE TABLE FOR USE OF ARMOR TECH PGR 113 ON COOL-SEASON GRASSES\***

Turf Type	Residential and Commercial Turf <sup>b</sup>	Golf Course Fairways (Cut at 0.5" or less)	Golf Course Greens	Edging/Banding <sup>c</sup>
	fl oz/A (fl oz/1,000 sq ft)	fl oz/A (fl oz/1,000 sq ft)	fl oz/A (fl oz/1,000 sq ft)	fl oz/A (fl oz/1,000 sq ft)
Bentgrass	33 (0.75)	11 (0.25)	6 (0.125)	44 (1.0)
Fescue, Red	33 (0.75)	--	--	44 (1.0)
Fescue, Tall (ky-31)	44 (1.0)	--	--	44 (1.0)
Fescue, Tall (Turf Types)	33 (0.75)	--	--	44 (1.0)
Kentucky Bluegrass	26 (0.60)	11 (0.25)	--	33 (0.75)
Mixture (Bentgrass/ <i>Poa annua</i> )	--	11 (0.25)	7 (0.125)	--
Mixture (K. Bluegrass/ Fescue/ Ryegrass)	33 (0.75)	--	--	--
Mixture (K. Bluegrass/ Ryegrass/ <i>Poa annua</i> )	--	22 <sup>d</sup> (0.50)	--	--
Ryegrass, Annual	44 (1.0)	--	--	44 (1.0)
Ryegrass, Perennial	44 (1.0)	22 (0.50)	--	44 (1.0)

**APPLICATION RATE TABLE FOR USE OF ARMOR TECH PGR 113 ON WARM-SEASON GRASSES\***

Turf Type	Residential and Commercial Turf <sup>b</sup>	Golf Course Fairways (Cut at 0.5" or less)	Golf Course Greens	Edging/Banding <sup>c</sup>
	fl oz/A (fl oz/1,000 sq ft)	fl oz/A (fl oz/1,000 sq ft)	fl oz/A (fl oz/1,000 sq ft)	fl oz/A (fl oz/1,000 sq ft)
Bahiagrass	44 (1.0)	--	--	44-88 (1-2)
Bermudagrass <sup>a</sup>	--	--	--	--
Bermudagrass, Common	33 (0.75)	11 (0.25)	--	44-88 (1-2)
Bermudagrass, Other Hybrids	11 (0.25)	9 (0.20)	--	22-33 (0.50-0.75)
Bermudagrass, Tifdwarf	9 (0.20)	9 (0.20)	3 (0.062)	22-33 (0.50-0.75)
Bermudagrass, Tifgreen (328)	11 (0.25)	9 (0.20)	6 (0.125)	33 (0.75)
Bermudagrass, Tifway (419)	16 (0.38)	11 (0.25)	--	33 (0.75)
Buffalograss	44 (1.0)	--	--	44 (1.0)
Carpetgrass	11-18 (0.25-0.40)	--	--	22 (0.50)
Centipedegrass	22 (0.50)	--	--	44 (1.0)
Kikuyugrass	13-22 (0.30-0.50)	13 (0.30)	--	44 (1.0)



**APPLICATION RATE TABLE FOR USE OF ARMOR TECH PGR 113 ON WARM-SEASON GRASSES\* (CONT.)**

Turf Type	Residential and Commercial Turf <sup>b</sup>	Golf Course Fairways (Cut at 0.5" or less)	Golf Course Greens	Edging/Banding <sup>c</sup>
	fl oz/A (fl oz/1,000 sq ft)	fl oz/A (fl oz/1,000 sq ft)	fl oz/A (fl oz/1,000 sq ft)	fl oz/A (fl oz/1,000 sq ft)
Kikuyugrass	13-22 (0.30-0.50)	13 (0.30)	--	44 (1.0)
St. Augustinegrass	4.50-6.50 (0.10-0.15)	--	--	18-36 (0.40-0.80)
St. Augustinegrass, Texas Common	4.5 (0.10)	--	--	9 (0.20)
Zoysiagrass	11 (0.25)	6 (0.125)	--	33 (0.33)

**Footnotes for APPLICATION RATE TABLES**

- <sup>a</sup> Seedheads: Armor Tech PGR 113 suppresses seedhead formation in hybrid bermudagrass, and partially suppresses seedhead formation in annual bluegrass, bahiagrass, buffalograss, carpetgrass, common bermudagrass, Kentucky bluegrass, and tall fescue at rates equal to or higher than the rates in these tables and only if Armor Tech PGR 113 is applied prior to seedhead formation. Do not apply more than 7.0 fl. oz. per 1,000 sq. ft. per year.
- <sup>b</sup> Residential and Commercial Turf includes sites such as, but not limited to, business sites, cemeteries, golf course roughs, home lawns, parks, recreation areas, sod farms, and sports fields.
- <sup>c</sup> Apply Armor Tech PGR 113 along the perimeter of curbs, driveways, fences, lawns, parking lots, pet pens, posts, sidewalks, storage buildings, or other areas. When Armor Tech PGR 113 is applied around flower beds, shrubs, trees, and other border plants or similar areas, these ornamental plantings will not be injured. Apply Armor Tech PGR 113 in an 8 to 12-inch band using a single nozzle sprayer. The higher concentrations listed reduce the growth of the turfgrass into adjacent areas.
- <sup>d</sup> To prevent yellowing of *Poa annua*, use half this rate and apply more frequently. If temporary discoloration of *Poa annua* in conversion/renovation programs can be tolerated, use twice this application rate.
- <sup>e</sup> To prepare bermudagrass for overseeding: use 0.50 oz. per 1,000 sq. ft. on golf fairways and tees and 0.25 oz. per 1,000 sq. ft. on golf greens.

**RESTRICTIONS: Do not graze livestock on treated areas before 60 days after harvest.**

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

**STORAGE AND DISPOSAL**

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

**PESTICIDE STORAGE:** Do not store below 0°F. If crystals do form, store above 70°F, shaking periodically until crystals are dissolved.

**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 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). 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.

**CONDITIONS OF SALE AND WARRANTY**

Upon purchase or use of this product, purchaser and user agree to the following terms:

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

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

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

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

EPA 021607

# Magnus™

HYDRATION

## NONPLANT FOOD INGREDIENT

### PRINCIPAL FUNCTIONING AGENTS:

Proprietary Blend of Polymeric Surfactants . . . . .100%  
(Contains less than 1% water)

### CAUTION: KEEP OUT OF REACH OF CHILDREN

### PRECAUTIONARY STATEMENTS

Before using this product, read the entire label, including conditions of sale. When mixing or applying, wear appropriate personal protective equipment including splash goggles or face shield and impervious gloves. May cause irritation to skin and eyes. Ingestion of large amounts of product may cause mucosal irritation, dizziness, nausea and possible vomiting.

### STATEMENT OF PRACTICAL TREATMENT

**If Swallowed:** Give large amounts of water to drink. Do not induce vomiting. Seek medical attention immediately.  
**If Inhaled:** Move user to fresh air and seek medical attention.  
**If In Eyes:** Flush with water for 15 minutes. Seek medical attention.  
**If On Skin:** Remove contaminated clothing. Wash skin contact area with plenty of soap and water.

### GENERAL INFORMATION

MAGNUS is a unique blend of nonionic soil surfactants that produces uniform hydration in the root zone and optimized growing conditions for new seedlings and turf under stress. Tank mixing MAGNUS with DUPLEX™ or DUPLEX ULTRA™, aids the movement of MAGNUS through thatch and into tight soils, resulting in improved soil hydration. Applying MAGNUS to soils previously treated with CASCADE PLUS, increases soil moisture content during periods of drought. MAGNUS may be included in pest control programs, with plant protectants such as fungicides, to enhance the control of diseases such as fairy ring.

MAGNUS IS DESIGNED FOR USE ON GOLF COURSES, ATHLETIC FIELDS AND RESIDENTIAL OR COMMERCIAL TURF, UNDER THE SUPERVISION OF GOLF COURSE SUPERINTENDENTS, SPORTS TURF MANAGERS OR PROFESSIONAL LANDSCAPE CONTRACTORS.

### DIRECTIONS FOR USE

For best results follow application rates and mixing instructions below. Always mix and apply MAGNUS in accordance with the instructions found on the pesticide label regarding adjuvants. In the absence of specific instructions, follow the application and mixing guidelines below.

### APPLICATION TECHNIQUES

Apply MAGNUS prior to the onset of turf stress or conditions that promote soil hydrophobicity. MAGNUS does not require irrigation after application. Watering after the application will improve results by moving the product through any thatch/mat layer into the root zone. If irrigation is not planned prior to mowing, remove mower baskets to avoid product loss. In situations where tank mix partners achieve maximum efficacy by remaining on the leaf blade, irrigation should be delayed as specified on the tank mix partner's label. During periods of high temperature, all soil surfactants should be watered in to increase performance and safety.

### APPLICATION RATES

Apply MAGNUS at the rate of 4 ounces (118 ml) in a minimum of 1 gallon (3.79 L) of water per 1000 square feet (92.9 m<sup>2</sup>) of turfgrass.  
Apply MAGNUS at the rate of 174 ounces (5.15 L) in a minimum of 44 gallons (167 L) of water per acre (.40 ha) of turfgrass.

### APPLICATION INTERVAL

MAGNUS should be applied every 30 days or when localized dry spot or water-repellent soils become evident.

### MIXING INSTRUCTIONS

In the absence of specific mixing instructions found on the pesticide label, fill the spray tank with at least 50% of the desired finished carrier volume. When premixing in a mixing vessel or inductor, fill with at least 20% of the desired finished carrier volume. While the carrier is agitating, add tank mix ingredients in the following order:

1. Compatibility agent, if needed.
2. Dry formulations (WP, DF, WDG, SP) and dry drift retardants.
3. Liquid drift retardants and flowable formulations (F and FL).
4. Microencapsulated and suspension concentrates (ME and SC).
5. Emulsifiable concentrates (E, EL or EC).
6. Solutions (S, L and LC), micronutrients, liquid or suspension fertilizers.
7. Adjuvants (COC, HSOC, MSO, NIS) and/or water conditioning agents.
8. Finish filling to desired spray volume level and continue agitation.

### STORAGE AND DISPOSAL

Protect product from freezing. If product freezes, warm to room temperature before use. Store in original container only and do not reuse empty container. Rinse container thoroughly, disposing of rinsate and the container in accordance with federal, state and local regulations. Do not store near heat or open flame.

### CONDITIONS OF SALE

Read the information contained herein before buying or using this product. If the stated terms are unacceptable, return the product at once, unopened. It is critical that this product be used and mixed only as specified on this label. Neither the manufacturer nor the seller makes any representation or warranty, expressed or implied, with respect to the results from the use of this material. Buyer and user assume all risks of use and/or handling. Precision Laboratories, Inc. warrants that this material is reasonably fit for use as specified on this label. No agent or representative is authorized to make any other representations concerning this material. Unforeseen factors beyond Precision's control prevent elimination of risks in connection with the use of its chemicals. Such risks include, but are not limited to, damage to plants and/or crops to which the material is applied, or lack of complete control and damage caused by drift to other plants or crops. Such risks may occur even though the product is reasonably fit for use as stated herein and even though label directions are followed. Follow directions carefully. Timing, mixture, method of application, weather and other conditions are influencing factors in the use of this product and are beyond the control of the seller. Except to the extent prohibited by applicable law, the exclusive remedy of the user or buyer and the limit of liability of the Company or any other seller for any and all losses, personal injuries or damages resulting from the use of this product shall be the purchase price paid by the user or buyer for the product involved.

S P E C I M E N L A B E L

# SIGNAL™ BLUE EZ SOLUPAK™

BLUE SPRAY PATTERN INDICATOR IN WATER-SOLUBLE PACKETS

PRECISION  
LABORATORIES

## KEEP OUT OF REACH OF CHILDREN

### PRECAUTIONARY STATEMENTS

If medical advice is needed, have product container or label at hand. Read label before use. Avoid breathing dust. Do not get in eyes, on skin, or on clothing. Wash protective equipment and work clothes thoroughly after handling. Do not eat, drink or smoke when using this product. Use personal protective equipment as required. Dispose of contents/container to an approved waste disposal plant.

### FIRST AID

- If Swallowed:** Rinse mouth. Have person sip a glass of water if able to swallow. **Do NOT induce vomiting**, unless told to by a poison control center or doctor. Do not give anything to an unconscious person. Treat symptomatically.
- 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 or attention.
- If On Skin:** Wash affected area with plenty of soap and water. Use tepid water if available. If skin irritation occurs: Get medical advice or attention.
- If Inhaled:** Move person to fresh air. If person is having difficulty breathing, give oxygen. If not breathing, give artificial respiration.

### GENERAL INFORMATION

SIGNAL EZ SoluPak(s) are protected by a unique, waterproof, foil-lined over pack to prevent accidental staining while handling. SIGNAL EZ SoluPak(s) contains a concentrated, temporary blue spray pattern indicator formulated to provide visual evidence of where a spray application has been made.

SIGNAL eliminates waste due to overlapping and skipping, while it indicates drift and mechanical malfunction.

SIGNAL EZ SoluPak(s) dissolve quickly in spray solution and leave no residue in the spray tank.

### DIRECTIONS FOR USE

FOR USE WITH PESTICIDES REGISTERED FOR AGRICULTURAL, AQUATICS, FORESTRY, INDUSTRIAL, MUNICIPAL, NONCROPLAND, RIGHTS-OF-WAY, TURFGRASS AND OTHER APPROPRIATE USES

Open foil-lined over pack to dispense water-soluble packet(s). Holding onto the foil-lined over pack, empty the SoluPak(s) into the spray tank. Do not add over pack to the spray solution.

### USE RATE

Each SIGNAL EZ SoluPak will effectively treat approximately 50 gallons of water. Application rate, nozzle type, turf color, turf height and individual water conditions may influence variations from the above rate.

### MIXING

In the absence of specific mixing recommendations by the basic pesticide manufacturer, use the following mixing procedure:

1. Fill spray tank 1/2 full of desired water volume.
2. While agitating, add the appropriate number of SIGNAL EZ SoluPak(s) for the entire desired finished spray volume.
3. Continue filling the spray tank to ¾ of desired level.
4. Begin adding pesticides once the SoluPak(s) are dissolved, in the following order:
  - a. Dry flowables and dispersible granule pesticides.
  - b. Flowables.
  - c. Water-soluble pesticides.
  - d. Emulsifiable concentrate pesticides.
5. Add additional adjuvants, if required.
6. Continue agitation and finish filling spray tank to desired level.

Water temperature and degree of agitation will influence dissolution and dispersion of SIGNAL EZ SoluPak(s).

### STORAGE AND DISPOSAL

**IMPORTANT: DO NOT OPEN THE PROTECTIVE OVERPACK UNTIL YOU ARE READY TO DISPENSE THE SOLUPAK(S). MOISTURE WILL DISSOLVE SOLUPAK(S). DO NOT ALLOW SOLUPAK(S) TO BECOME WET UNTIL THEY ARE ADDED TO THE SPRAY TANK.** Always dispose of rinsate, and foil-lined over pack, in compliance with local, state and federal regulations.

### CONDITIONS OF SALE

Note: Read the information contained herein before buying or using this product. If the stated terms are not acceptable, return the product at once, unopened. It is critical that this product be used and mixed only as specified on this label. Neither the manufacturer nor the seller makes any representation or warranty, expressed or implied, with respect to the results from the use of this material. Buyer and user assume all risks of use and/or handling. Precision Laboratories, LLC warrants that this material is reasonably fit for use as specified on this label. No agent or representative is authorized to make any other representations concerning this material. Unforeseen factors beyond Precision's control prevent elimination of risks in connection with the use of its chemicals. Such risks include, but are not limited to, damage to plants and/or crops to which the material is applied, or lack of complete control and damage caused by drift to other plants or crops. Such risks may occur even though the product is reasonably fit for use as stated herein and even though label directions are followed. Follow directions carefully. Timing, mixture, method of application, weather and other conditions are influencing factors in the use of this product and are beyond the control of the seller. Except to the extent prohibited by applicable law, the exclusive remedy of the user or buyer and the limit of liability of the company or any other seller for any and all losses, personal injuries or damages resulting from the use of this product, shall be the purchase price paid by the user or buyer for the quantity of product involved.

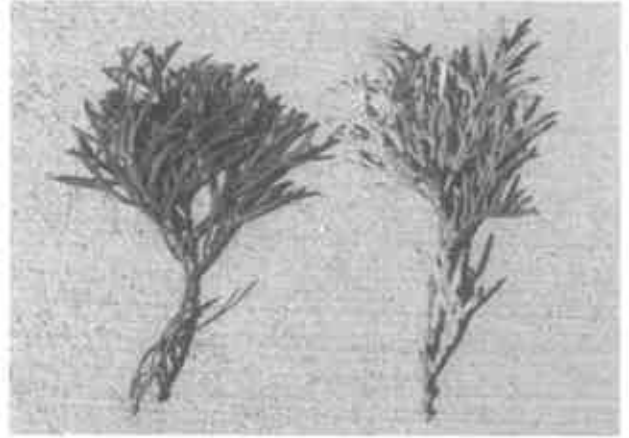
# S P E C I M E N L A B E L

# AQUALOCK™

## TURF AND ORNAMENTAL ANTI-TRANSPIRANT

Dealing with environmental stress is a constant battle. Preventing damage brought on by freezing winter temperatures, exposure to salt and summer heat can now be addressed easily.

Introducing AquaLock™ - a new, unique wax dispersion that forms a thin, flexible, water-repellent layer on plant surfaces. AquaLock protects plants against drought, extreme temperatures, wind and sunscald. AquaLock may also extend watering intervals for turf and ornamental crops during periods of stress.



Safe for Environment - AquaLock is safe for plants, animals and humans.

### **AQUALOCK AS AN ANTI-TRANSPIRANT:**

Dries to a thin, waxy layer on plant surface, reduces moisture stress and protects against desiccation.

### **AQUALOCK AS A TANK-MIX ADJUVANT:**

Enhances efficacy of snow mold fungicides and repellents by promoting adhesion to foliage.

### **AQUALOCK AS A COLORANT ADDITIVE:**

AquaLock also improves adhesion and wash-off resistance of crop protection products, paints and pigments.



Regreen™ applied with AquaLock.

### **USE RATES:**

Anti-transpirant (Turfgrass):

- Apply 2-8oz/1000ft<sup>2</sup> in up to 2 gallons of water.

Anti-transpirant (Ornamentals):

- Apply 4-8oz in sufficient spray volume to cover plant foliage to runoff.

Tank mix adjuvant:

- Apply up to 2oz/1000ft<sup>2</sup> in combination with pesticides and repellents (jar test first).

Colorant additive:

- Blend 3-4% AquaLock (by weight) into the colorant formulation prior to spray tank dilution.

### **PACKAGE SIZE:**

- 2 x 2.5 gal containers
- 20 gal drum

This is a specimen label, intended for use only as a guide in providing general information regarding use of this product. As labels are subject to revision, always carefully read and follow the label on the product container.

# Armor Tech

## IP 233 Fungicide

### A BROAD-SPECTRUM FUNGICIDE FOR NON-RESIDENTIAL USE ON TURF AND ORNAMENTALS

**ACTIVE INGREDIENT:**

Iprodione 3-(3,5-dichlorophenyl)-N-(1-methylethyl)-2,4-dioxo-1-imidazolidinecarboxamide\* ..... 23.3%

**OTHER INGREDIENTS:** ..... 76.7%

**TOTAL:** ..... 100.0%

This product contains petroleum distillate.

\*Contains 2 lbs. Iprodione per gallon.

### KEEP OUT OF REACH OF CHILDREN CAUTION

FIRST AID	
<b>If swallowed:</b>	<ul style="list-style-type: none"> <li>• Call a poison control center or doctor immediately for treatment advice.</li> <li>• Have person sip a glass of water if able to swallow.</li> <li>• Do not induce vomiting unless told to do so by a poison control center or doctor.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>
<b>If in eyes:</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
HOT LINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-424-9300 for emergency medical treatment information.	
NOTE TO PHYSICIAN	
Contains petroleum distillate – vomiting may cause aspiration pneumonia.	

See attached label booklet for additional PRECAUTIONARY STATEMENTS

Manufactured for: Etigra, LLC • 2214 Hwy 44 West • Inverness, FL 34453

EPA Reg. No. 81959-4

EPA Est. No. indicated by the 8th digit of the batch number on this package.

(A) = 4-NY-001; (C) = 5905-GA-001;

(G) = 67545-AZ-001; (M) = 51036-GA-001

Product of France or China.  
Formulated in the U.S.A. with  
U.S. and imported ingredients.

REV 0306-450064



**United Turf Alliance**

**PRECAUTIONARY STATEMENTS  
HAZARDS TO HUMANS AND DOMESTIC ANIMALS  
CAUTION**

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

**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-sleeved shirt and long pants
- Chemical-resistant gloves made of barrier laminate, nitrile rubber, neoprene rubber, or viton
- Chemical-resistant apron
- Chemical-resistant footwear plus socks

**Applicators using hand-held equipment must wear:**

- Coveralls over long-sleeved shirt and long pants
- Chemical-resistant gloves made of barrier laminate, nitrile rubber, neoprene rubber, or viton
- Chemical-resistant footwear plus socks
- Chemical-resistant headgear for overhead exposure
- Dust/mist filtering respirator (NIOSH-approved respirator with any R, P or HE filter)

**Applicators using aircraft or mechanical ground equipment (groundboom, air-blast, etc.) and flaggers for aerial applications must wear:**

- Long-sleeved shirt and long pants
- 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-sleeved shirt and long pants
- Chemical-resistant gloves made of barrier laminate, nitrile rubber, neoprene rubber, or viton
- Shoes plus socks

Follow manufacturer's instructions for cleaning/maintaining PPE. If no instructions for washables, 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 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.
- 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 overlying extremely shallow groundwater, 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 overlying tile drainage systems that drain to surface water.

This pesticide is toxic to invertebrates. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Drift or runoff from treated areas is hazardous to aquatic invertebrates in neighboring areas. Do not contaminate water when disposing of equipment washwater or rinsate.

**DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Read the 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 (REI) of 48 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  $\geq$  14 mils, neoprene rubber  $\geq$  14 mils, or viton  $\geq$  14 mils
- Shoes and 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.

**GENERAL INFORMATION**

ArmorTech IP 233 Fungicide is a broad-spectrum fungicide that may be applied as either a foliar spray, drench or dip and controls turfgrass diseases in non-residential sites such as golf courses, sod farms, and institutional areas where fine turf is grown, as well as a wide range of ornamental flowering and foliage plants in field, landscape and conifer nursery sites. ArmorTech IP 233 Fungicide is effective in controlling the following diseases:

**Spring, Summer and Fall Turf Diseases:**

- Brown Patch
- Corticum Red Thread
- Dollar Spot
- Leaf Spots like Helminthosporium Leaf Spot caused by *Drechslera* spp. Pathogens
- Fusarium Blight
- Large Patch
- Necrotic Ring Spot

**Winter Turf Diseases:**

- Fusarium Patch (Pink Snow Mold)
- Gray Snow Mold

**Ornamental and Nursery Diseases:**

- Aerial Web Blight
- Alternaria Leaf Spot
- Fusarium Leaf Spot
- Rhizoctonia stem and root rot
- Tulip Fire
- Ray Blight
- Daffodil Leaf Scorch
- Botrytis Storage Rot
- Alternaria Leaf Blight
- Botrytis Blight
- Helminthosporium Leaf Spot
- Ink Spot
- Alternaria Leaf Blight
- Fusarium Corm rot
- Blossom Blight
- Cylindrocladium Blight and Wilt

**ARMORTECH IP 233 FUNGICIDE USE PRECAUTIONS AND RESTRICTIONS**

- For best results, be sure to follow all the precautions, limitations and recommendations in this label.
- Use of this product at residential sites is prohibited.
- 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.
- For golf courses only, do not apply to turf cut higher than 1" on golf holes where water bodies are present.
- Do not apply this product when the wind direction is toward aquatic areas.

**GENERAL APPLICATION GUIDELINES**

- Apply the recommended rates as indicated in the following sections of the label in 0.5 - 10 gallons of water per 1000 square feet.
- Do not drench the foliage to the point of runoff.
- Product breakdown may occur if the spray mixture is allowed to stand for more than 12 hours.
- Maintain agitation during spray operations.
- Always apply using a properly calibrated sprayer.

**TURF**

**GENERAL INSTRUCTIONS FOR TURF:**

Unless otherwise noted, make applications when the disease first appears or when conditions favor disease development.

Under severe conditions, the higher rate and/or shorter interval of applications are recommended for all diseases. When disease pressure is light to moderate, the lower rates and longer intervals are recommended.

**USE PRECAUTIONS:**

- DO NOT apply more than 35 fl. oz. of ArmorTech IP 233 Fungicide per 1000 square feet per year (24 lbs. a.i. per acre).
- DO NOT make more than 6 applications to a single site per year.
- DO NOT mix with any sticker, extender, or wetting agent.
- DO NOT mow or irrigate treated areas until the foliage is completely dry. A 24-hour waiting period following treatment is recommended.
- DO NOT graze animals on treated turf, and do not feed clippings from treated turf to livestock or poultry.

TARGET PEST	RATE (fl. oz. / 1000 sq. ft.)	APPLICATION INTERVAL
<b>Dollar Spot</b> ( <i>Lanzia</i> spp. and <i>Moellerodiscus</i> spp.) <b>Brown Patch</b> ( <i>Rhizoctonia solanii</i> ) <b>Leaf Spot</b> ( <i>Drechslera</i> spp.)	3 – 4 For Dollar Spot control on fairways use 2 – 4	<b>Greens and Tees:</b> Repeat at 30-day intervals as long as required. <b>Fairways and Other Turf Areas:</b> Repeat at 30-day intervals as long as required.
<b>Large Patch †</b> ( <i>Rhizoctonia solanii</i> )	4	Make first application in fall when conditions are favorable for disease development but no symptoms are visible. Repeat applications every 30 days in spring as needed.
<b>Fusarium Blight</b> ( <i>Fusarium</i> spp.) <b>Necrotic Ring Spot †</b> ( <i>Leptosphaeria korrae</i> )	8	Use only preventative foliar applications when conditions first become favorable for disease development. Make additional applications at 30-day intervals as necessary.
<b>Fusarium Patch</b> ( <i>Microdochium nivale</i> ) [Pacific Northwest Only – West of the Cascade Mountains]	4 – 8	Repeat at 30-day intervals as long as required.
<b>Gray Snow Mold</b> ( <i>Typhula</i> spp.) <b>Pink Snow Mold</b> ( <i>Fusarium nivale</i> )	4 – 8 (See Tank Mixes for additional information)	Make one application before first permanent snow cover and a second during a mid-winter thaw.
<b>Corticium Red Thread</b> ( <i>Laetisaria fuciformis</i> )	4	Apply every 30 days as required for prevention.
<b>Curvularia</b> ( <i>Curvularia</i> spp.) on Bermudagrass only	4	Apply every 30 days as required for prevention.
<b>Anthracoese</b> ( <i>Colletotrichum</i> ) NOTE: suppression only	4 – 8	Combine ArmorTech IP 233 Fungicide with appropriately labeled and registered trifloxystrobin or fosetyl-al products or other anthracnose control fungicides.
<b>Pythium Blight</b>	See Tank Mixes below	

† Not registered for use in California

**TANK MIXTURES FOR TURF APPLICATIONS**

To expand the spectrum of pests controlled, ArmorTech IP 233 Fungicide may be tank mixed with most commonly used fungicides containing flutolanil, trifloxystrobin, and azoxystrobin. When tank mixing products, be sure to follow the most restrictive instructions.

**Broad Spectrum Disease Control and Resistance Management:**

Tank mixing ArmorTech IP 233 Fungicide with an appropriately labeled and registered thiophanate-methyl product provides effective, broad spectrum turf disease control and also serves as a useful tank mixture in the resistance management program required for other resistance sensitive fungicides.

Disease Pressure	ArmorTech IP 233 Fungicide	Thiophanate-methyl
Low to Medium	3 fl. oz./1000 ft. <sup>2</sup>	1.0 fl. oz./1000 ft. <sup>2</sup>
High	3 fl. oz./1000 ft. <sup>2</sup>	2.0 fl. oz./1000 ft. <sup>2</sup>

**Summer Stress Complex/Summer Decline:**

Mix 2 – 4 oz. of ArmorTech IP 233 Fungicide with 4 – 8 oz. of an appropriately labeled and registered fosetyl-al containing product per 1000 square feet.

**Pythium Blight:**

Pythium blight will be controlled by the tank mixing of fosetyl-al, or propamocarb hydrochloride with ArmorTech IP 233 Fungicide. If using a tank mixture, follow label directions for the use of that product and apply at the rate recommended for control of the target disease organism.

**Gray Snow Mold:**

In areas where continuous snow cover occurs, use 4 – 8 fl. oz. ArmorTech IP 233 Fungicide per 1000 sq. ft. tank mixed with an appropriately labeled and registered chlorothalonil or pentachloronitrobenzene (PCNB) product at the labeled rate.

Make applications in the fall before snow cover occurs and use the higher rates listed if the turf remains frozen prior to snow cover. Apply with 1 – 5 gallons of spray solution per 1000 square feet. For best results, reapply if loss of snow cover occurs during a winter thaw.

**ORNAMENTALS**

FOR USE BY COMMERCIAL NURSERY AND LANDSCAPE PERSONNEL ONLY. NOT FOR RESIDENTIAL AREAS.

The ornamentals listed below have been tested and found to be tolerant to ArmorTech IP 233 Fungicide. As it is not possible to test every species or variety of ornamental plant for tolerance, the user should test for phytotoxic responses in plants not listed in this label prior to widespread application.

ArmorTech IP 233 Fungicide has been tested on the following ornamentals:

Ageratum	Ajuga	Almond (ornamental)
Alyssum	Andromeda	Aphelandra
Artemisia	Aster	Azalea
Boxwood	Cactus	Calendula
Carnation	Cherry (ornamental)	Chrysanthemum
Cineraria	Cistena Plum	Coleus
Columbine	Coral Bells (Heuchera)	Crape Myrtle
Crassula	Croton	Cyclamen
Daffodils	Dahlia	Delphinium
Deutzia	Dianthus	Dieffenbachia
Dizygotheca	Dogwood	Dracena
English Ivy	Episcia	Euonymous
Ficus	Forsythia	Gazania
Geranium	Gladiolus	Gloxinia
Gypsophila	Hawthorn	Holly
Hoya	Hydrangea	Impatiens
Iris	Juniper	Kalanchoe
Lilies	Lipstick vine	Marigold
Monarda (Bee Balm)	Pachysandra	Palm
Pansy	Peach (ornamental)	Peperomia
Periwinkle	Philodendron	Phlox
Pilea	Pine	Pittosporum
Plum (ornamental)	Poinsettia	Poppy
Pothos	Primrose	Privet
Protea	Pyracantha	Rhododendron
Rose	Rose Tree of China	Salvia
Schefflera	Snapdragon	Statice
Tree Ivy	Tulip	Viburnum
Violet	Zinnia	

**NOTE: DO NOT** apply ArmorTech IP 233 Fungicide to Peace Lily or White Anthurium (*Spathiphyllum*).

Use the following table to determine the diseases controlled and the application method to use:

Disease	Can Be Applied To	Foliar Spray	Drench	Dip
Aerial Web Blight	All	✓		
Alternaria Leaf Blight	All	✓		
Alternaria Leaf Spot	All	✓		
Botrytis Blight	All	✓		
Fusarium Leaf Spot	All	✓		
Helminthosporium Leaf Spot	All	✓		
Rhizoctonia Stem and Root Rot	All except Impatiens and Pothos		✓	
Ink Spot	Iris	✓		
Tulip Fire	Tulip	✓		
Alternaria Leaf Blight	Zinnia	✓		
Ray Blight	Chrysanthemum	✓		
Fusarium Corn Rot	Gladiolus			✓
Daffodil Leaf Scorch	Daffodils	✓		
Blossom Blight	Cistena Plum / Ornamental Plum	✓		
Botrytis Storage Rot	Rose			✓
Cylindrocladium Blight and Wilt	Azalea and Rhododendron			✓

## FOLIAR SPRAY APPLICATIONS

Apply when conditions are favorable for disease development using the following instructions:

- Application Rate: 1.0 – 2.5 quarts of product per acre  
For severe pest pressure, use the highest recommended rates.  
For light to moderate pest pressure, use the lower rates listed.
- Application Interval: 7 – 14 days  
For severe pest pressure, use the shortest application intervals.  
For light to moderate pest pressure, use the longer application intervals.
- Application Instructions: Spray plants ensuring complete coverage.
- Use Precautions: DO NOT make more than 4 applications per crop per year.

## DRENCH APPLICATIONS

To control *Rhizoctonia*, ArmorTech IP 233 Fungicide may be applied as a drench at the seeding and/or transplanting stage using the following instructions:

- Application Rate: 13 fl. oz. per 100 gallons.
- Application Interval: 14 days
- Application Instructions: Apply using 1 – 2 pints of solution per square foot.  
For severe disease pressure use the higher rates.  
For light to moderate disease pressure use the lower rates.
- Use Precautions: DO NOT apply more than 35 fl. oz. / 1000 sq. ft. per year (24 lbs. a.i. per acre).  
DO NOT make more than 6 applications per year.  
DO NOT use ArmorTech IP 233 Fungicide as a drench on Impatiens and Pothos.

## DIP APPLICATIONS

Refer to the following table for use of ArmorTech IP 233 Fungicide as a dip to control Botrytis Storage Rot, Cylindrocladium Blight and Fusarium Corm Rot in the following plants:

Plant Species	Application Rate (Quarts / 100 Gal)	Dip Duration	Instructions
Rose	1.0	5 minutes	Dip bare root roses prior to cold storage.
Azalea and Rhododendron			Dip cuttings prior to planting.
Gladiolus	2.0		Dip corms prior to storage.

## TANK MIXTURES

In order to broaden the spectrum of control, ArmorTech IP 233 Fungicide may be used with most commonly used fungicides. For control of diseases caused by *Pythium* and *Phytophthora* spp., a tank mix of ArmorTech IP 233 Fungicide with fosetyl-al may be used.

Read the labels of all tank mix partners for recommended application rates for the target disease organism and be sure to follow the most restrictive instructions.

## DIRECTIONS FOR USE THROUGH SPRINKLER IRRIGATION SYSTEMS

ArmorTech IP 233 Fungicide may be applied using a center pivot irrigation system using the following instructions:

- System Preparation: Be sure all pesticide residues, scale and other foreign materials are cleaned from the chemical tank and injector system. Flush with clean water prior to use.  
Prepare a tank mix of ArmorTech IP 233 Fungicide by filling the tank to 1/2 – 3/4 of the final volume with water and begin agitation. Add the recommended amount of ArmorTech IP 233 Fungicide and the remaining water until the desired volume is reached.
- Application Rate: Use the recommended dosage per acre per 1 – 4 gallons of water.
- Application Instructions: Set the sprinkler system to deliver 0.1 – 0.3 inches of water per acre.  
Using a positive displacement pump, the ArmorTech IP 233 Fungicide mixture should be injected into the main line ahead of a right angle turn to ensure adequate mixing.
- Use Precautions: **Application of this product using a sprinkler system is prohibited in the state of California.**  
This product may only be applied using a center pivot irrigation system. Do not apply this product through any other type of irrigation system.  
To prevent the ArmorTech IP 233 Fungicide from being washed off the crop, do not irrigate the treated area for 24 hours after making the ArmorTech IP 233 Fungicide application.

## GENERAL PRECAUTIONS FOR APPLICATIONS THROUGH SPRINKLER IRRIGATION SYSTEMS

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 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.

## SPRAY DRIFT

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 to applications using dry formulations.

1. The distance of the outer most nozzles on the boom must not exceed 3/4 the length of the wingspan or rotor.
2. Nozzles must always point backwards parallel with the air stream and never be pointed downwards more than 45 degrees.

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** section below.

### 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 environmental conditions (See Wind, Temperature and Humidity, and Temperature Inversions).

#### Controlling Droplet Size

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

#### Boom Length

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

#### Application Height

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



### Swath Adjustment

When applications are made with a 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 should be avoided below 2 mph due to variable wind direction and high inversion potential. **Note:** Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

### Temperature and Humidity

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

### Temperature Inversions

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

### Sensitive Areas

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, 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.

**PESTICIDE STORAGE:** Store in original container only.

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

**CONTAINER DISPOSAL:** Triple rinse (or equivalent). 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.

#### CONDITION 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 should 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 Etigra, LLC or Seller. To the extent allowed by law, all such risks shall be assumed by Buyer and User, and Buyer and User agree to hold Etigra, LLC and Seller harmless for any claims relating to such factors.

Etigra, 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. ETIGRA, LLC MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

To the extent allowed by state law, neither Etigra, LLC or 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 ETIGRA, 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 ETIGRA, LLC OR SELLER, THE REPLACEMENT OF THE PRODUCT.**

Etigra, 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 Etigra, LLC.

# KNOCKDOWN™



## Foam Suppressant

### PRINCIPAL FUNCTIONING AGENTS

Proprietary emulsifiers and formulation aids..... 10%  
Proprietary blend of polydimethylsiloxane and other  
antifoaming agents..... 90%  
TOTAL..... 100%  
All ingredients are approved for use under CFR 40, 180.1001 (c)

### KEEP OUT OF REACH OF CHILDREN CAUTION

### PRECAUTIONARY STATEMENTS

**Before using this product, read the entire label, including the conditions of sale.** Direct contact with eyes may cause mild, transitory irritation with local redness. Ingestion may cause irritation of mouth, throat and stomach with possible nausea and vomiting.

### PERSONAL PROTECTIVE EQUIPMENT (PPE)

Wear splash-proof chemical safety goggles, chemically impervious gloves, long-sleeved shirt, pants, socks and shoes to minimize skin contact.

### STATEMENT OF PRACTICAL TREATMENT

- If Swallowed:** If individual is fully conscious, give a large amount of water to drink and induce vomiting. Never give fluids or force vomiting if the individual is unconscious, is having convulsions or has no gag reflex. If large quantities are swallowed, seek immediate medical attention.
- If In Eyes:** Check for and remove contact lenses. Holding lids apart, flush eyes with water for at least 15 minutes. Cold water may be used. Seek medical attention if irritation occurs.
- If On Skin:** Remove contaminated clothing. Wash affected area with plenty of soap and water for 15 minutes. Cold water may be used. Seek medical attention if irritation develops.
- If Inhaled:** Remove to fresh air. If breathing is difficult, give oxygen, or if not breathing, give artificial respiration, and seek immediate medical attention.

### GENERAL INFORMATION

KNOCKDOWN is formulated to quickly defoam spray solutions containing silicone surfactants, nonionic surfactants or crop oil concentrates.

### DIRECTIONS FOR USE

FOR USE WITH PESTICIDES REGISTERED FOR AGRICULTURAL, AQUATIC, FORESTRY, INDUSTRIAL, MUNICIPAL, NON-CROPLAND, ORNAMENTAL, RIGHT- OF-WAY, TURF AND OTHER APPROPRIATE USES.

### SHAKE WELL BEFORE USE.

KNOCKDOWN can be used as an antifoam or general defoamer.

**Antifoam**—Use KNOCKDOWN to prevent foam formation by adding it to the spray solution first, while agitating, and before adding pesticides.

**General Defoamer**—Use KNOCKDOWN as a general defoamer by adding it to the spray solution during agitation while foam formation is active.

### USE RATES AND MIXING

Method	Use Rate per	Recommendations
	100 gal. Solution	
Antifoam	1–4 ounces	Add entire volume of KNOCKDOWN needed for load when tank is 1/4 full
General Defoamer	2–4 ounces	Add to spray solution at point of greatest agitation

### STORAGE AND DISPOSAL

**Protect product from freezing.** If product freezes, warm to room temperature and agitate before use. Keep containers sealed when not in use. Store in original container only. Do not reuse empty container. Rinse container thoroughly prior to disposal. Dispose of rinsate and container in accordance with local, state and federal regulations.

### CONDITIONS OF SALE

Note: Read the information contained herein before buying or using this product. If the stated terms are not acceptable, return the product at once, unopened. It is critical that this product be used and mixed only as specified on this label. Neither the manufacturer nor the seller makes any representation or warranty, expressed or implied, with respect to the results from the use of this material. Buyer and user assume all risks of use and/or handling. Precision Laboratories, Inc. warrants that this material is reasonably fit for use as specified on this label. No agent or representative is authorized to make any other representations concerning this material. Unforeseen factors beyond Precision's control prevent elimination of risks in connection with the use of its chemicals. Such risks include, but are not limited to, damage to plants and/or crops to which the material is applied, or lack of complete control and damage caused by drift to other plants or crops. Such risks may occur even though the product is reasonably fit for use as stated herein and even though label directions are followed. Follow directions carefully. Timing, mixture, method of application, weather and other conditions are influencing factors in the use of this product and are beyond the control of the seller. Except to the extent prohibited by applicable law, the exclusive remedy of the user or buyer and the limit of liability of the company or any other seller for any and all losses, personal injuries or damages resulting from the use of this product, shall be the purchase price paid by the user or buyer for the quantity of product involved.

# S P E C I M E N L A B E L

**RESTRICTED USE PESTICIDE****Toxic to fish and aquatic organisms.**

For retail sale to and use only by certified applicators, or persons under their direct supervision and only for the uses covered by the certified applicator's certification.

# Talstar®

## SELECT INSECTICIDE

**For Commercial Non-Food Use on Indoor and Outdoor Ornamentals, Greenhouses, Nurseries, Turf on Golf Courses and Sod Farms.**

EPA Reg. No. 279-3155

EPA Est. 279-NY-1

Active Ingredient:	By Wt.
Bifenthrin:*	7.9%
Other Ingredients:	92.1%
	100.0%

\*Cis isomers 97% minimum, trans isomers 3% maximum.

Talstar® Select Insecticide contains 2/3 pound active ingredient per gallon.

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

See other panels for additional precautionary information.

**DO NOT USE THIS PRODUCT ON GOLF COURSES AND SOD FARMS IN NASSAU COUNTY OR SUFFOLK COUNTY, NEW YORK.**

# FMC

**FMC Corporation**  
**Agricultural Products Group**  
**1735 Market Street**  
**Philadelphia PA 19103**

**Net Contents: One Gallon**

05-09-14

**FIRST AID**

<b>If swallowed</b>	<ul style="list-style-type: none"> <li>• Call poison control center or doctor immediately for treatment advice.</li> <li>• Have person sip a glass of water if able to swallow.</li> <li>• Do not induce vomiting unless told to do so by the poison control center or doctor.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>
<b>If in eyes</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If on skin or clothing</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If inhaled</b>	<ul style="list-style-type: none"> <li>• Move person to fresh air.</li> <li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.</li> <li>• Call a poison control center or doctor for further treatment advice.</li> </ul>

**HOTLINE NUMBER**

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-(800)-331-3148 for Emergency Assistance.

**NOTE TO PHYSICIAN**

This product is a pyrethroid. If large amounts have been ingested, the stomach and intestine should be evacuated. Treatment is symptomatic and supportive. Digestible fats, oils, or alcohol may increase absorption and so should be avoided.

**For Information Regarding the Use of this Product Call 1-800-321-1FMC (1362).**

## PRECAUTIONARY STATEMENTS

### Hazards to Humans (and Domestic Animals)

#### CAUTION

Harmful if swallowed, inhaled or absorbed through skin. 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.

#### Personal Protective Equipment:

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category C on an EPA chemical resistance category selection chart.

#### Applicators and other handlers (other than mixers and loaders) must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, polyvinyl chloride or viton.
- Shoes plus socks

#### Mixers and Loaders must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, polyvinyl chloride or viton.
- Shoes plus socks
- Protective eyewear

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.

#### Additional Personal Protective Equipment and Extended Reapplication Intervals Requirements for Greenhouse Use in California:

California specific requirements for greenhouse applicators and harvesters:

In addition to following all applicable precautionary statements on the label on the product container, the following is required for greenhouse applicators and harvesters:

**Greenhouse Applicator:** Greenhouse applicators must wear a full body chemical-resistant protective suit (such as barrier laminate, butyl rubber, nitrile rubber, polyvinyl chloride, or equivalent).

**Reapplication Interval:** Reapplications to greenhouses must be at intervals of 30 days or longer.

**Greenhouse Harvesters:** Greenhouse harvesters must wear either regular-length gloves plus a long sleeved shirt or elbow-length (gauntlet type) gloves during the 30 days following application.

#### 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.
- Remove PPE immediately after handling this product. Wash outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

#### Environmental Hazards

This pesticide is extremely toxic to fish and aquatic invertebrates. Drift and run-off from treated areas may be hazardous to aquatic organisms in neighboring areas.

To protect the environment, do not allow pesticide to enter or run off into storm drains, drainage ditches, gutters or surface waters. Applying this product in calm weather when rain is not predicted for the next 24 hours will help to ensure that wind or rain does not blow or wash pesticide off the treatment area. Rinsing application equipment over the treated area will help to avoid run off to water bodies or drainage systems.

This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow to drift to blooming crops if bees are visiting the treatment area.

## DIRECTIONS FOR USE RESTRICTED USE PESTICIDE

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

Do not water treated area to the point of run-off.

Do not make applications during rain.

Do not apply this product through any kind of irrigation system.

#### Use Directions for Container

1. Remove the measuring chamber cap and induction seal. Replace the cap and securely tighten. Tip container until liquid fills measuring chamber.

2. Return container to level position. No adjustment is needed.

3. Remove measuring chamber cap and dispense into proper application equipment.

For multiple dose measuring: Remove fill chamber cap and dispense according to markings on side of bottle.

#### AGRICULTURE USE REQUIREMENTS

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

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

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

- Coveralls
- Chemical-resistant gloves, such as barrier laminate or butyl rubber or nitrile rubber or neoprene rubber or polyvinyl chloride or viton.
- 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 Standards 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 allow people or pets on treated surfaces until the spray has dried.

## STORAGE AND DISPOSAL

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

**Pesticide Storage:** Keep out of reach of children and animals. Store in original containers only. Store in a cool, dry place and avoid excess heat. Carefully open containers. After partial use replace lids and close tightly. Do not put concentrate or dilute material into food or drink container.

**In case of spill, avoid contact, isolate area and keep out animals and unprotected persons. Confine spills. Call FMC: (800) 331-3148.**

**To Confine Spill:** If liquid, dike surrounding area or absorb with sand, cat litter or commercial clay. If dry material, cover to prevent dispersal. Place damaged package in a holding container. Identify contents.

**Pesticide Disposal:** Pesticide wastes are toxic. Do not contaminate water, food or feed by storage or disposal. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. Dispose of excess or waste pesticide by use according to label directions, or contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

**Container Disposal Metal or Plastic Container:** Non-refillable container. Do not reuse or refill this container. **Triple rinse as follows:** Empty the contents into application equipment or a mix tank and drain for 10 seconds after flow begins to drip. Fill container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or mix tank or store rinsate for later use or disposal. Drain for 10 seconds after flow begins to drip. Repeat this procedure two more times. **Then offer for recycling, if available or reconditioning, if appropriate, or puncture and dispose of in a sanitary landfill.**

## General Applications Instructions

Talstar® Select Insecticide formulation mixes readily with water and other aqueous carriers, and controls r.ites on trees, shrubs, foliage plants, non-bearing fruit and nut trees, and flowers in greenhouses and outdoor nurseries, and turf on golf courses and sod farms. Non-bearing crops are perennial crops that will not produce a harvestable raw agricultural commodity during the season of application.

Talstar Select Insecticide may be tank-mixed with other products, including insect growth regulators. When tank mixing Talstar Select Insecticide with other products, observe all precautions and limitations on each separate product label. The addition of spreader stickers is not necessary. The physical compatibility of Talstar Select Insecticide may vary with different sources of pesticide products, and local cultural practices. Any tank mixture which has not been previously tested should be prepared on a small scale (pint or quart jar), using the proper proportions of chemicals and water to ensure the physical compatibility of the mixture.

The following procedure is recommended for preparation of a new tank mix, unless specified otherwise in label directions: (1) Add wettable powders to tank water, (2) Agitate, (3) Add liquids and flowables, (4) Agitate, (5) Add emulsifiable concentrates, and (6) Agitate. If a mixture is found to be incompatible following this order of addition, try reversing the order of addition, or increase the volume of water. **Note:** If the tank-mixture is found to be compatible after increasing the amount of water, then the sprayer will need to be recalibrated for a higher volume application. Do not allow tank mix to stand overnight.

**Maximum rates:** Do not apply more than 0.2 lb ai/acre (40 fl oz of Talstar Select Insecticide) in a single application or per year for outdoor applications.

**Resistance:** Some insects are known to develop resistance to products used repeatedly for control. Because the development of resistance cannot be predicted, the use of this product should conform to resistance management strategies established for the use area. Consult your local or state pest management authorities for details.

If resistance to this product develops in your area, this product, or other products with a similar mode of action, may not provide adequate control. If poor performance cannot be attributed to improper application or extreme weather conditions, a resistant strain of insect may be present. If you experience difficulty with control and suspect that resistance is a reasonable cause, immediately consult your local company representative or pest management advisor for the best alternative method of control for your area.

## Talstar Select Insecticide Dilution Chart

Applic. Volume: Gallons Per Acre	Applic. Rate: Lb ai per Acre	Fluid Ounces* of Talstar Select Insecticide Diluted to these Volumes of Finished Spray			
		1 Gallon	25 Gallons	50 Gallons	100 Gallons
50	0.025	0.1	2.5	5.0	10.0
50	0.05	0.2	5.0	10.0	20.0
50	0.1	0.4	10.0	20.0	40.0
50	0.2	0.8	20.0	40.0	80.0
<hr/>					
100	0.025	0.05	1.25	2.5	5.0
100	0.05	0.1	2.5	5.0	10.0
100	0.1	0.2	5.0	10.0	20.0
100	0.2	0.4	10.0	20.0	40.0
<hr/>					
150	0.025	0.03	0.83	1.67	3.3
150	0.05	0.07	1.67	3.33	6.7
150	0.1	0.133	3.33	6.67	13.3
150	0.2	0.266	6.67	13.33	26.7
<hr/>					
200	0.025	0.025	0.63	1.25	2.5
200	0.05	0.05	1.25	2.5	5.0
200	0.1	0.1	2.5	5.0	10.0
200	0.2	0.2	5.0	10.0	20.0
<hr/>					
250	0.025	—	0.5	1.0	2.0
250	0.05	—	1.0	2.0	4.0
250	0.1	—	2.0	4.0	8.0
250	0.2	—	4.0	8.0	16.0
<hr/>					
300	0.025	—	0.42	0.83	1.7
300	0.05	—	0.83	1.67	3.3
300	0.1	—	1.67	3.33	6.7
300	0.2	—	3.33	6.67	13.3

\*To convert to milliliters, multiply by 29.57

1 fl. oz. = 29.57 ml = 2 tablespoons = 6 teaspoons

Do not use household utensils to measure Talstar Select Insecticide.

**Formula for Determining the Active Ingredient Content of the Finished Spray Mixture:** Use the following formula to determine the percent active ingredient that is in the spray tank after mixing Talstar Select Insecticide:

$$\frac{(7.9)(\text{Fl. Oz. of Talstar added to tank})}{(\text{Gallons of finished spray mix})(128)} = \text{Percent Active Ingredient of spray mix}$$

## APPLICATION INSTRUCTIONS

**Ornamentals in Greenhouses, Lath Houses, Shade Houses and Outdoor Nurseries, including Non-Bearing Fruit and Nut Trees**

Apply 0.025 to 0.2 lb ai/A (5 to 40 fl oz) of Talstar Select Insecticide. Talstar Select Insecticide may be diluted and applied in various volumes of water providing that the maximum label rate (0.2 lb ai/A or 40 fl oz) is not exceeded (refer to Dilution Chart for specific instructions). Talstar Select Insecticide may be applied through low volume application equipment by dilution with water or other carriers and providing that the maximum label rate (0.2 lb ai/A or 40 fl oz) is not exceeded.

## ORNAMENTAL APPLICATION RATES

The application rates listed in the following table will provide control of the respective pests under typical conditions. However, at the discretion of the applicator, Talstar Select Insecticide may be applied at up to 0.2 lb ai/A (40 fl oz) to control each of the pest listed in this Table.

Pest	Application Rate Talstar Select Insecticide	
	lb ai/A	Fluid Ounces per Acre
Aphids Bagworms <sup>1</sup> Cutworms Elm Leaf Beetles Fall Webworms Lace Bugs Leaf Feeding Caterpillars Plant Bugs (Including <i>Lygus spp.</i> ) Tent Caterpillars	0.025 - 0.05	5 - 10
Beet Armyworm Black Vine Weevil (Adults) Brown Soft Scales Broad Mites Budworms California Red Scale (Crawlers) <sup>2</sup> Centipedes Citrus Thrips Clover Mites Crickets Diaprepes (Adults) Earwigs European Red Mite Flea Beetles Fungus Gnats (Adults) Grasshoppers Gypsy Moth Caterpillars Leafhoppers Leafrollers Mealybugs Millipedes Mites Orchid Weevil Pillbugs Pine Needle Scales (Crawlers) <sup>2</sup> San Jose Scales (Crawlers) <sup>2</sup> Sowbugs Spider Mites Spiders Thrips Tip Moths Twig Borers <sup>2</sup> Weevils Whiteflies	0.05 - 0.1	10 - 20
Ants Imported Fire Ants** Japanese Beetle (Adult) Leafminers Pecan Leaf Scorch Mite Pine Shoot Beetle (Adults) Stink Bugs	0.1 - 0.2	20 - 40

<sup>1</sup>Bagworms: Apply when larvae begin to hatch and spray larvae directly. Applications when larvae are young will be most effective.

<sup>2</sup>Scale Crawlers and Twig Borers: Treat trunks, stems and twigs in addition to plant foliage.

\*\*For foraging ants.

Certain cultivars may be sensitive to the final spray solution. A small number of plants should be treated and observed for one week prior to application to the entire planting.

Apply with ground equipment only.

Do not apply when wind direction favors downwind drift towards nearby water bodies.

Do not apply when wind velocity exceeds 10 mph.

Avoid application when wind gusts approach 10 mph.

Do not apply when a temperature inversion exists.

Apply using the largest nozzle size compatible with adequate coverage.

Do not apply if rain is expected within 24 hours (or whatever time is necessary for the spray to dry).

Do not apply by ground equipment within 25 feet of lakes, reservoirs, rivers, permanent streams, marshes or natural ponds, estuaries, and commercial fish farm ponds. When treating tall trees (>15 feet) from the ground with high pressure sprays or during any application with air assisted equipment (mist blower) do not apply within 150 feet of aquatic areas.

## APPLICATION INSTRUCTIONS Turf (Golf Courses and Sod Farms)

### NOT FOR USE ON SOD FARMS IN THE STATE OF NEW YORK.

Apply Talstar® Select insecticide as a surface or sub-surface treatment. Use application volumes of up to 10 gallons per 1000 square feet to get uniform coverage when treating dense and or long turf foliage.

For low volume applications, less than 2 gallons/1000 square feet, immediately irrigate treated area with at least 0.25 inches of water following application to ensure efficacy of sub-surface pests i.e. Mole Crickets.

## TURF (Golf Courses and Sod Farms) APPLICATION RATES

The application rates listed in the following table will provide control of the respective pests under typical conditions. However, at the discretion of the applicator <sup>a</sup>, Talstar Select Insecticide may be applied at up to 0.1 lb ai/A (20 fl oz) to control each of the pests listed in this Table. (0.2 lb ai/A or 40 fl oz of Talstar Select Insecticide for ants, imported fire ants and mole crickets).

<sup>a</sup>During periods of high pest pressure or for maximum residual control.

Pest	Active Ingredient lbs. per acre	Application Rate Talstar Select Insecticide	
		10 fl. oz per acre	0.25 fl. oz. per 1000 sq.ft.
Armyworms <sup>3</sup> Cutworms <sup>3</sup> Sod Webworm <sup>3</sup>	0.05 lb ai per acre	10 fl. oz per acre	0.25 fl. oz. per 1000 sq.ft.
Annual Bluegrass Weevil (Hyperodes) (Adult) <sup>4</sup> Ants Billbugs (Adult) <sup>5</sup> Black Turfgrass Ataenius (Adult) <sup>6</sup> Centipedes Chinch Bugs <sup>7</sup> Crickets Earwigs Fleas (Adult) Grasshoppers Leafhoppers Mealybugs Millipedes Mites <sup>8</sup> Mole Cricket (Adult) <sup>9</sup> Mole Cricket (Nymph) <sup>10</sup> Pillbugs Sowbugs	0.05 - 0.1 lb ai per acre	10 - 20 fl oz per acre	0.25 - 0.5 fl oz per 1000 sq.ft.
Crane Flies (Larvae) <sup>11</sup> Fleas (Larvae) <sup>12</sup> Imported Fire Ants Japanese Beetle (Adult) Ticks <sup>13</sup>	0.1 lb ai per acre	20 fl oz per acre	0.5 fl oz per 1000 sq.ft.
Ants Imported Fire Ants <sup>15</sup> Mole Crickets Stink Bugs	0.2 <sup>14</sup> lb ai per acre	40 <sup>14</sup> fl oz per acre	1 fl oz <sup>14</sup> per 1000 sq.ft.

In New York State, this product may NOT be applied to any grass or turf area within 100 feet of a water body (lake, pond, river, stream, wetland, or drainage ditch).

In New York State, do make a single repeat application of Talstar Select Insecticide if there are signs of renewed insect activity, but not sooner than two weeks after the first application.

### Comments

<sup>3</sup>Armyworms, Cutworms and Sod Webworms: To ensure optimum control, delay watering (irrigation) or mowing for 24 hours after application. If the turf area is being maintained at a mowing height of greater than 1 inch, then higher application rates (Up to 0.1 lb ai/A or 20 fl oz of Talstar Select Insecticide) may be required during periods of high pest pressure.

<sup>4</sup>Annual Bluegrass Weevil (*Hyperodes*) adults: Applications should be timed to control adult weevils as they leave their overwintering sites and move into turf areas. This movement generally begins when *Forsythia* is in full bloom and concludes when flowering dogwood (*Cornus florida*) is in full bloom. Consult your State Cooperative Extension Service for more specific information regarding application timing.

<sup>5</sup>Billbug adults: Applications should be made when adult billbugs are first observed during April and May. Degree day models have been developed to optimize application timing. Consult your State Cooperative Extension Service for information specific to your region. In temperate regions, spring applications targeting billbug adults will also provide control of over-wintered chinch bugs.

<sup>6</sup>**Black Turfgrass Ataenius adults:** Applications should be made during May and July to control the first and second generation of black turfgrass atenauius adults, respectively. The May application should be timed to coincide with the full bloom stage of Vanhoutte spiraea (*Spiraea vanhouttei*) and horse chestnut (*Aesculus hippocastanum*). The July application should be timed to coincide with the blooming of Rose of Sharon (*Hibiscus syriacus*).

<sup>7</sup>**Chinch Bugs:** Chinch Bugs infest the base of turf plants and are often found in the thatch layer. Irrigation of the turf area before treatment will optimize the penetration of the insecticide to the area where the chinch bugs are located. Use higher volume applications if the thatch layer is excessive or if a relatively long mowing height is being maintained. Chinch Bugs can be one of the most difficult pests to control in grasses and the higher application rates (Up to 0.1 lb ai/A or 20 fl oz of Talstar Select Insecticide) may be required to control populations that contain both nymphs and adults during the middle of the summer.

<sup>8</sup>**Mites:** To ensure optimal control of eriophyid mites, apply in combination with the labeled application rate of a surfactant. A second application, five to seven days after the first, may be necessary to achieve control.

<sup>9</sup>**Mole Cricket adults:** Achieving control of adult mole crickets is difficult because preferred turf areas are subject to continuous invasion during the early spring by this extremely active stage. Applications should be made as late in the day as possible and should be watered in with up to 0.5 inches of water immediately after treatment. If the soil is not moist, then it is important to irrigate before application to bring the mole crickets closer to the soil surface where contact with the insecticide will be maximized. Turf areas that receive pressure from adult mole crickets should be treated at peak egg hatch to ensure optimum control of subsequent nymph populations (see below).

<sup>10</sup>**Mole Cricket nymphs:** Turf areas that received intense adult mole cricket pressure in the spring should be treated immediately prior to peak egg hatch. Optimal control is achieved at this time because young nymphs are more susceptible to insecticides and they are located near the soil surface where the insecticide is most concentrated. Control of larger, more damaging, nymphs later in the year may require both higher application rates and more frequent applications to maintain acceptable control. Applications should be made as late in the day as possible and should be watered in with up to 0.5 inches of water immediately after treatment. If the soil is not moist, then it is important to irrigate before application to bring the mole crickets closer to the soil surface where contact with the insecticide will be maximized.

<sup>11</sup>**Crane Flies:** Treatments can be made to control early to mid-season larvae (approximately August – February) as they feed on plant crowns. Treatments made to late-season larvae (approximately March, April) may only provide suppression.

<sup>12</sup>**Flea larvae:** Flea larvae develop in the soil of shaded areas that are accessible to pets or other animals. Use a higher volume application when treating these areas to ensure penetration of the insecticide into the soil. Note: if the lawn area is being treated with Talstar Select Insecticide at 0.05 lb. ai/A (10 fl oz) for adult flea control, then the larval application rate may be achieved by doubling the application volume.

<sup>13</sup>**Ticks:** Do not make spot applications. Treat the entire area where exposure to ticks may occur. Use higher spray volumes when treating areas with dense ground cover or heavy leaf litter. Ticks may be reintroduced from surrounding areas on host animals. A repeat application, seven days after the first, may be necessary to achieve control. Do not allow public use of treated areas during application or until sprays have dried.

**Deer ticks (*Ixodes sp.*)** have a complicated life cycle that ranges over a two year period and involves four life stages. Applications should be made in the late fall and/or early spring to control adult ticks that are usually located on brush or turf above the soil surface and in mid to late spring to control larvae and nymphs that reside in the soil and leaf litter.

**American dog ticks** may be a considerable nuisance in suburban settings, particularly where homes are built on land that was previously field or forest. These ticks commonly congregate along paths or roadways where humans are likely to be encountered.

<sup>14</sup>**Note:** For large infestations of ants, imported fire ants, and mole crickets, a single application of 0.2 lb ai/A (40 fl oz of Talstar Select Insecticide) may be applied once per year.

<sup>15</sup>**Imported Fire Ants:** Control will be optimized by combining broadcast applications that will control foraging workers and newly mated fly-in queens with mound drenches that will control existing colonies. If the soil is not moist, then it is important to irrigate before application or use a high volume application. Broadcast treatments should apply 0.2 lb ai/A (40 fl oz of Talstar Select Insecticide). Mounds should be treated by diluting 1 teaspoon of Talstar Select Insecticide per gallon of water and applying 1 to 2 gallons of finished spray per mound. The mounds should be treated with sufficient force to break their apex and allow the insecticide solution to flow into the ant tunnels. A four foot diameter circle around the mound should also be treated. For best results, apply in cool weather (65 - 80°F) or in early morning or late evening hours. Note: a spray rig that is calibrated to apply 0.2 lb ai/A (40 fl oz) of Talstar Select Insecticide in 5 gallons per 1,000 square feet contains the approximate dilution (1 teaspoon per gallon) that is required for fire ant mound drenches in the spray tank.

Apply with ground application equipment in the spray tank (and apply with nozzles not more than two feet above the turf).

Do not apply when wind conditions favor downwind drift to nearby water bodies.

Do not apply when wind velocity exceeds 10 mph

Avoid application when wind gusts approach 10 mph.

Do not apply when a temperature inversion exists.

Apply using nozzles that provide the largest droplet size compatible with adequate coverage.

Do not apply for surface feeding pests if rain is expected within 24 hours (or whatever time is necessary for the spray to dry).

Do not apply by ground equipment within 25 feet of lakes, reservoirs, rivers, permanent streams, marshes or natural ponds, estuaries, and commercial fish farm ponds.

Do not apply when turf areas are water-logged or soil is saturated with water (i.e. will not accept irrigation).

## Imported Fire Ant Quarantine Treatment

Against Imported Fire Ants (IFA) in Potting Media (including balled and containerized nursery grown ornamental trees, shrubs, plants, flowers, conifers, bushes, Christmas trees, and non-bearing fruit and nut-trees). Talstar Select Insecticide is approved and can be used in accordance with the USDA Imported Fire Ant Quarantine Program. Talstar Select Insecticide may be applied either soil incorporated, as a topical application, or as a high volume drench treatment.

**Soil Incorporation:** Incorporate the appropriate volume of Talstar Select Insecticide (see table below) per cubic yard of potting media by diluting it in water (typically 1 quart to 1 gallon per cubic yard of media) and sprinkling or spraying it onto the media. The applications are based on the dry bulk density of the potting media. When used in accordance with USDA guidelines, this application will provide a 6 month certification period.

## Soil Incorporation Rate of Talstar Select Insecticide for Control of IFA in Potting Media.

Potting Media Bulk Density (lb cubic yard)	Fluid ounces of Talstar Select Insecticide in one cubic yard
200	1.9
400	3.8
600	5.7
800	7.6
1000	9.5
1200	11.4
1400	13.3

Use proportional amounts of Talstar Select Insecticide for potting media with bulk densities not listed.

**Topical Application:** Mix Talstar Select Insecticide in 1,000 ounces of water based on container size and bulk density of the potting media (see table below). Apply one (1) ounce of the mix to each container evenly distributed over the surface of the potting media. Irrigate all treated containers with 1.5 inches of water following application. When used in accordance with USDA guidelines, this application will provide a 6 month certification period.

## Topical Drench Application Rate of Talstar Select Insecticide for Control of IFA in Potting Media.

Potting Media Bulk Density (lb cubic yard)	Fluid ounces of Talstar Select Insecticide per 1,000 ounces of water	
	3 Qt. Container	4 Qt. Container
200	3.6	5.2
400	7.2	10.4
600	10.8	15.6
800	14.4	20.8
1000	18.0	26.0
1200	21.6	31.2
1400	25.2	36.4

Use proportional amounts of Talstar Select Insecticide for potting media with bulk densities not listed.

**High Volume Drench:** Apply Talstar Select Insecticide as a high volume drench by mixing the appropriate amount of product based on the bulk density in 100 gallons of water (see table below). Apply mix to individual containers to the point of saturation. The amount of mix used for each plant is generally 1/5 volume of the container. When used in accordance with USDA guidelines, this application will provide a 6 month certification period.

## High Drench Application Rate of Talstar Select Insecticide for Control of IFA in Potting Media.

Potting Media Bulk Density (lb cubic yard)	Fluid ounces of Talstar Select Insecticide in 100 Gallons
200	2.4
400	4.8
600	7.2
800	9.6
1000	12.0
1200	14.4
1400	16.8

Use proportional amounts of Talstar Select Insecticide for potting media with bulk densities not listed.

## For treatment of grass sod

Apply Talstar Select Insecticide as a broadcast treatment. Use higher volumes up to 10 gallons of carrier per 1000 square feet to get uniform coverage when treating dense grass foliage. Make two applications of 1.0 fl oz per 1000 sq ft (0.2 lb ai/A) seven days apart. This application will provide control within four weeks followed by 16 weeks of certification.

## Imported Fire Ant and Japanese Beetle Quarantine Treatment for Ornamentals (Soil Dip Treatment of Containerized or Balled and Burlapped Nursery Stock)

Use Talstar Select Insecticide to treat containerized (potted) or balled and burlapped nursery stock to control soil insects.

### Ornamentals (Soil Treatment of Containerized or Balled and Burlapped Nursery Stock)

Pest	Amount of Talstar Nursery Flowable Insecticide/ Miticide per 100 gallons
Fire ants <sup>1</sup>	22 fl oz
Japanese beetle grubs <sup>2</sup>	22 to 65 fl oz

<sup>1</sup> For Federal Imported Fire Ant Quarantine, plants must be retreated if not sold within 180 days.

<sup>2</sup> Refer to U.S. Domestic Japanese Beetle Harmonization Plan (Dip Treatment - B&B and Container Plants) (<http://www.nationalplantboard.org/policy/beetle.html>) for the appropriate treatment rate as well as additional dip treatment restrictions on plant size, immersion duration, soil temperature, soil type, and soil moisture. Treatment should be applied between September 15 and May 1.

### General Use Directions

Completely submerge the container with drain holes or root ball stabilized by burlap in a tank containing diluted Talstar Select Insecticide. Do not remove burlap wrap or containers with drain holes prior to submerging. Keep the container or root ball submerged until complete soil saturation has occurred, normally about 30 seconds.

**Precautions:** During all operations (submerging, drenching, injecting), wear chemical resistant apron in addition to other PPE listed for applicators and other handlers. Application should be made in a well-ventilated area. Environmental factors significantly affect phytotoxicity. Talstar Select Insecticide has been tested on numerous ornamental plants without causing serious phytotoxicity. However, because of the numerous varieties grown, it is recommended that a small group of plants be treated at the recommended rate under the anticipated growing conditions and observed for phytotoxic symptoms for at least 7 days, before a large number of plants are treated.

**Note:** The professional user assumes responsibility for determining if Talstar Select Insecticide is safe to treat plants under commercial growing conditions.

### Larval Control in Potting Media of Containerized Plants.

**Black Vine Weevil Larval Control - Preventative Treatment - Topical Drench:** For preventative control of black vine weevil larvae in containerized plants, dilute Talstar Select Insecticide at the rate of 10 to 40 fl oz (0.05 to 0.2 lb AI) per 100 gallons and apply as a drench at the rate of 4 to 8 fluid ounces of finished spray per 6 inch (diameter) container. Use a proportional volume of finished spray for containers less than or greater than 6 inches in diameter. Ideally, the media should be treated to the point of saturation, which generally requires 1/5 the volume of the container. Diluting 10 fluid ounces of Talstar Select Insecticide per 100 gallons and applying 8 fluid ounces of finished spray per 6 inch (diameter) container will provide black vine weevil larval control for one growing season when the application is made in the spring. Diluting 20 to 40 fluid ounces of Talstar Select Insecticide per 100 gallons and applying 8 fluid ounces of finished spray per 6 inch (diameter) container will provide black vine weevil larval control for two growing seasons when the application is made in the spring.

**White Grub Control - Preventative Treatment - Topical Drench:** For preventative control of white grubs (Japanese beetle, oriental beetle and European chafer) in containerized plants, dilute Talstar Select Insecticide at the rate of 40 to 80 fluid ounces (0.2 to 0.4 lb AI) per 100 gallons and apply as a drench at the rate of 4 to 8 fluid ounces of finished spray per 6 inch (diameter) container. Use a proportional volume of finished spray for containers less than or greater than 6 inches in diameter. Ideally, the media should be treated to the point of saturation, which generally requires 1/5 the volume of the container. Use the higher application rate for a longer period of control.

**Black Vine Weevil and White Grub Larval Control - Preventative Treatment - Media Incorporation:** For preventative control of black vine weevil and white grub larvae in containerized plants, incorporate the appropriate volume of Talstar Select Insecticide (see table below) per cubic yard of potting media by diluting it in water (typically 1 quart to 1 gallon per cubic yard of media) and sprinkling or spraying it onto the media. Use the higher application rates for longer periods of control.

Potting Media Bulk Density (lbs. per cubic yard)	Fluid ounces of Talstar Select Insecticide in one cubic yard			
	10 PPM	15 PPM	20 PPM	25 PPM
200	0.4	0.6	0.8	1.0
300	0.6	0.9	1.2	1.5
400	0.8	1.2	1.6	2.0
500	1.0	1.5	2.0	2.5
600	1.2	1.8	2.4	3.0
700	1.4	2.1	2.8	3.5
800	1.6	2.4	3.2	4.0
900	1.8	2.7	3.6	4.5
1000	2.0	3.0	4.0	5.0

The application rates listed above are based on the dry bulk density of the potting media. Use proportional volumes of Talstar Select Insecticide for potting media with dry bulk densities that are not listed above.

**Black Vine Weevil Larval Control - Curative Treatment - Topical Drench:** To control black vine weevil larvae infesting containerized plants, dilute Talstar Select Insecticide at the rate of 10 to 40 fl oz (0.05 to 0.2 lb AI) per 100 gallons and apply as a drench at the rate of 8 to 16 fluid ounces of finished spray per 6 inch (diameter) container. Use a proportional volume of finished spray for containers less than or greater than 6 inches in diameter. Ideally, the media should be treated to the point of saturation, which generally requires 1/5 the volume of the container.

**Bare-root Treatment for Preventative Root Weevil Larval Control:** To protect treated roots of field grown nursery stock from feeding by root weevil larvae, dilute one gallon of Talstar Select Insecticide in 100 gallons of water and treat the bare roots of plants that are being transplanted into the field either by dipping the roots into the insecticide solution for ten seconds or by spraying the insecticide solution onto the roots.

**Diaprepes Weevil Larval Control - Curative Treatment - Topical Drench:** To control *Diaprepes* weevil larvae infesting containerized plants, dilute Talstar Select Insecticide at the rate of 10 to 40 fl oz (0.05 to 0.2 lb AI) per 100 gallons and apply as a drench at the rate of 8 to 16 fluid ounces of finished spray per 6 inch (diameter) container. Use a proportional volume of finished spray for containers less than or greater than 6 inches in diameter. Ideally, the media should be treated to the point of saturation, which generally requires 1/5 the volume of the container.

**Fungus Gnat Larval Control - Preventative Treatment - Topical Drench:** For preventative control of fungus gnat larvae in containerized plants, dilute Talstar Select Insecticide at the rate of 20 to 40 fl oz (0.1 to 0.2 lb AI) per 100 gallons and apply as a drench at the rate of 4 to 8 fl oz of finished spray per 6 inch (diameter) container. Use a proportional volume of finished spray for containers less than or greater than 6 inches in diameter. Ideally, the media should be treated to the point of saturation, which generally requires 1/5 the volume of the container. Use the higher application rate for a longer period of control.

**Fungus Gnat Larval Control - Curative Treatment - Topical Drench:** To control fungus gnat larvae infesting containerized plants, dilute Talstar Select Insecticide at the rate of 10 to 40 fl oz (0.05 to 0.2 lb AI) per 100 gallons and apply as a drench at the rate of 8 to 16 fluid ounces of finished spray per 6 inch (diameter) container. Use a proportional volume of finished spray for containers less than or greater than 6 inches in diameter. Ideally, the media should be treated to the point of saturation, which generally requires 1/5 the volume of the container.



## 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 beyond the control of FMC or Seller. All such risks shall be assumed by Buyer and User, and Buyer and User agree to hold FMC and Seller harmless for any claims relating to such factors.

**Seller warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the Directions for Use when used in accordance with the directions under normal conditions of use. EXCEPT AS WARRANTED BY THIS LABEL, FMC MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE, NOR ANY OTHER EXPRESS OR IMPLIED WARRANTIES WITH RESPECT TO THE SELECTION, PURCHASE, OR USE OF THIS PRODUCT. Any warranties, express or implied, having been made are inapplicable if this product has been used contrary to label instructions, or under abnormal conditions, or under conditions not reasonably foreseeable to (or beyond the control of) seller or FMC, and buyer assumes the risk of any such use.**

To the extent consistent with applicable law FMC or seller shall not 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 FMC 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 FMC OR SELLER, THE REPLACEMENT OF THE PRODUCT.

This Conditions of Sale and Limitation of Warranty and Liability may not be amended by any oral or written agreement.

Talstar and FMC—Trademarks of FMC Corporation  
©2013 FMC Corporation All rights reserved.

# QUALI-PRO

# Mefenoxam 2 AQ

## Specimen Label

**An aqueous flowable fungicide for the control of certain diseases in various turf, nursery, and ornamental crops caused by the Oomycete class of fungi.**

**Active Ingredient:**

Mefenoxam\*: (R)-2-[(2,6-dimethylphenyl) methoxyacetyl]amino propionic acid methyl ester ..... 22.5%

**Other Ingredients:** ..... 77.5%

**Total:** ..... 100.0%

\*Contains 2 lbs. active ingredient per gallon.

EPA Reg. No. 70252-11-73220

EPA Est. No. 37429-GA-2

### KEEP OUT OF REACH OF CHILDREN CAUTION

FIRST AID	
<b>If in eyes</b>	<ul style="list-style-type: none"> <li>Hold eye open and rinse slowly and gently with water for 15 – 20 minutes.</li> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If on skin or clothing</b>	<ul style="list-style-type: none"> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of soap and water for 15-20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If swallowed</b>	<ul style="list-style-type: none"> <li>Call a poison control center or doctor.</li> <li>Drink 1 or 2 glasses of water and induce vomiting by touching back of throat with finger.</li> <li>Do not induce vomiting or give anything by mouth to an unconscious person.</li> </ul>
<p>HAVE THE PRODUCT CONTAINER OR LABEL WITH YOU WHEN CALLING A POISON CONTROL CENTER OR DOCTOR OR GOING FOR TREATMENT. For medical emergencies involving this product, call 1-800-308-5391.</p>	
<p><b>NOTE TO PHYSICIAN:</b> If ingested, induce emesis or lavage stomach. Treat symptomatically.</p>	

See additional Precautionary Statements and Directions for Use inside booklet.

Manufactured for FarmSaver.com, LLC • P.O. Box 21365 • Seattle, WA 98111

### Net Contents: 2.5 Gallons (9.48 liters)

#### PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

#### CAUTION

Harmful if absorbed through the skin. Harmful if swallowed. Causes moderate eye irritation. Avoid contact with skin, eyes, or clothing. Remove and wash contaminated clothing before reuse.

#### PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- Long sleeved shirt and long pants
- Chemical resistant gloves made of any waterproof material
- Shoes plus socks

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

#### 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)(4-5)], 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

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 apply when weather conditions favor drift from treated areas. Do not contaminate water when disposing of equipment wash waters or rinsate.

#### Groundwater Advisory

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

#### Physical or Chemical Hazards

Do not use, pour, spill or store near heat or open flame.

#### 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. **Exception:** If the product is soil incorporated, or 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. The REI for chemigation via microsprinklers, floor drip, and drip line irrigation is zero hours. The REI for soil surface applications is zero hours after sufficient rainfall occurs or overhead or hand held irrigation is used to thoroughly wash the product into the soil and off any foliage.

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

- Coveralls
- Chemical-resistant gloves made of any waterproof material
- Shoes plus socks

#### Non-Agricultural Use Requirements

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

**Do not enter treated areas without footwear until sprays have dried.**

**FAILURE TO FOLLOW THE DIRECTIONS FOR USE AND PRECAUTIONS ON THIS LABEL MAY RESULT IN POOR DISEASE CONTROL OR CROP INJURY.**

#### GENERAL INFORMATION

Quali-Pro Mefenoxam 2 AQ is an aqueous flowable systemic fungicide for use on selected turf, nursery, and ornamental crops to control certain diseases caused by members of the Oomycete class of fungi. Other fungicides must be used to control diseases incited by other classes of fungi.

# Mefenoxam 2 AQ

# Specimen Label

**Note:** Quali-Pro Mefenoxam 2 AQ is a systemic fungicide having a specific mode of action and its use could be subject to development of insensitive strains of fungi. Development of insensitivity cannot be predicted. Therefore, FarmSaver.com LLC cannot assume liability for crop damage resulting from insensitive strains of fungi. If treatment is not effective following the use of Quali-Pro Mefenoxam 2 AQ as recommended, an insensitive strain of fungi may be present. If the treatment is ineffective due to the presence of an insensitive strain of fungi, neither Quali-Pro Mefenoxam 2 AQ nor any other fungicide with similar action will effectively control that disease. Consideration should then be given to the prompt use of other types of suitable fungicides. Do not make foliar applications to field grown tobacco, or other crops, unless specified since this practice may encourage more rapid development of insensitivity. Consult with your State Agricultural Experiment Station or Extension Service Specialist for guidance on your particular crop and disease control situation.

Do not make foliar applications unless specified since this practice may encourage more rapid development of insensitivity.

Where rate ranges are specified on this label, use the higher rate when heavy disease pressure is expected and the lower rate when disease pressure is expected to be light, unless otherwise noted.

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

## MIXING INSTRUCTIONS

Prepare only the amount of spray mixture that is immediately required. Agitate the spray solution continuously during mixing and application. Thoroughly rinse the mix tank and spray tank with clean water after each day's use and dispose of rinse by application to area(s) already treated.

**Quali-Pro Mefenoxam 2 AQ Alone:** Add 1/4 - 1/2 of the required amount of water to the spray tank. With the agitator running, add the proper amount of Quali-Pro Mefenoxam 2 AQ, then add the rest of the water. Begin application of the spray solution after this product has completely dispersed into the mix water. Maintain agitation until all of the mixture has been sprayed.

**Tank Mixtures:** When tank mixing other products with Quali-Pro Mefenoxam 2 AQ, follow the proper sequence of adding products to the spray tank. Wettable powders or water dispersible granules should be added to the water in the tank first, followed by liquid flowable products such as Quali-Pro Mefenoxam 2 AQ, with emulsifiable concentrates added last. Provide continuous agitation during mixing and application.

**Note:** When tank mixing with products packaged in water-soluble packaging, those products should be added to the mix tank first and the water-soluble packaging must be allowed to completely dissolve and the product(s) allowed to completely disperse before adding any other tank-mix partner to the tank.

**Note:** Compatibility with tank-mix partners must be determined. To determine the compatibility of Quali-Pro Mefenoxam 2 AQ with other products, pour the products into a small container of water in the correct proportions. After thorough mixing, let stand for 5 minutes. If the combination remains mixed, or can be re-mixed readily, the mixture should be considered compatible.

BEFORE TANK MIXING QUALI-PRO MEFENOXAM 2 AQ WITH OTHER REGISTERED PRODUCTS FOR ANY USE ON THIS LABEL, READ THE LABEL OF THE TANK MIX PARTNER TO BE CERTAIN IT IS LABELED FOR USE ON THE PARTICULAR CROP AND THAT USE PATTERNS ARE COMPATIBLE WITH THOSE OF QUALI-PRO MEFENOXAM 2 AQ. OBSERVE ALL DIRECTIONS, PRECAUTIONS AND LIMITATIONS OF TANK MIX PARTNER LABELS, OBSERVING THE MOST RESTRICTIVE REQUIREMENT(S).

## APPLICATION INSTRUCTIONS (GENERAL)

Apply Quali-Pro Mefenoxam 2 AQ by ground in sufficient water or liquid fertilizer to provide uniform coverage of the soil surface. Apply in a minimum of 20 gals/ac for ground applications, 5 gals/ac by air. Refer to the specific crop use directions for application recommendations.

For banded applications, the treated area is actually the area covered by the band, not the total cropland area planted. Some row-crop recommendations are based on treating in the row and these rates generally are specified as amounts (fl. oz.) of product per certain row length (often 1,000 ft.). Others express rates as amount per treated acre, which means the total area treated with the pesticide. If rates are expressed as amount per treated acre and banded applications are used, the amount of pesticide used per acre will be proportionately less. The following formula can be used to calculate the amount of Quali-Pro Mefenoxam 2 AQ needed per acre of crop when banded applications are made:

$$\frac{\text{band width in inches}}{\text{row spacing in inches}} \times \text{broadcast rate per acre} = \text{amount needed per acre of field}$$

## APPLICATION THROUGH IRRIGATION SYSTEMS

Quali-Pro Mefenoxam 2 AQ, alone or in combination with other pesticides which are registered for application through irrigation systems, may be applied through irrigation systems. Apply this product only through center pivot, solid set, hand move, moving wheel, micro-sprinkler, pressurized drench (flood) or drip (trickle), micro-irrigation such as spaghetti tube or individual tube irrigation, calibrated hand-held irrigation equipment such as the hand-held wand with injector, calibrated overhead watering booms, ebb and flow or bench flooding sub or drip 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. Quali-Pro Mefenoxam 2 AQ should be diluted with water on a 1/10 basis prior to injection into an irrigation system. Proper tank-mix agitation is required during this mixing procedure.

If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers, or other experts. Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system, unless the pesticide label-prescribed safety devices for public water systems are in place. A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

## Safety Devices for Chemigation Systems Connected to Public Water Systems

If the source of water for your irrigation system is a public water supply, follow the instructions below.

1. A "public water system" is a system used to provide to the public piped water for human consumption if such system has a minimum of 15 service connections or regularly serves an average of a minimum of 25 individuals per day at least 60 days of the year.
2. A chemigation system that is connected to a public water system must contain a functional, reduced pressure zone, backflow preventer (RPZ) (or the functional equivalent) in the water supply line upstream from where the pesticide is introduced. An option to the RPZ: Discharge the water from the public water system into a reservoir tank before pesticide introduction. There must be a complete physical break (air gap) between the fill pipe's outlet end and the top (or overflow) rim of the reservoir tank of at least twice the fill pipe's inside diameter.
3. The pesticide injection pipeline must contain a functional, automatic quick closing check valve that will prevent the flow or fluid from flowing back toward the injection pump.
4. The pesticide injection pipeline must also contain a functional, normally closed, solenoid operated valve that is located on the injection pump's intake side and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either manually or automatically shut down.
5. The system must contain functional interlocking controls that will automatically shut off the pesticide injection pump when the water pump motor stops, or if there is no water pump, when water pressure decreases to the point when pesticide distribution is adversely affected.
6. Systems must use a metering pump, as a positive displacement injection pump (e.g. diaphragm pump) that is effectively designed and constructed of materials compatible with pesticides and that is capable of being fitted with a system interlock.
7. Do not apply this product when wind speed favors drift beyond the area that is intended for treatment.

## Safety Devices for Chemigation Systems Not Connected to a Public Water Supply

1. 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.
2. The pesticide injection pipeline must contain a functional, automatic, quick-closing check-valve to prevent the flow of fluid back toward the injection pump.
3. 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.
4. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
5. 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.
6. 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.
7. Do not apply when wind speed favors drift beyond the area intended.

## Application Instructions—Irrigation Systems

Quali-Pro Mefenoxam 2 AQ must be applied on the schedule specified in the specific crop use recommendations, not according to the irrigation schedule.

Quali-Pro Mefenoxam 2 AQ has not been sufficiently tested when applied through irrigation systems to assure consistent product performance for all labeled uses. The following calibration and application techniques are provided for user reference, but do not constitute a warranty of fitness for application through sprinkler or drip irrigation equipment. Users must check with state and local regulatory agencies for potential use restrictions before applying any agricultural chemical through sprinkler or drip irrigation equipment.

**Note:** Do not inject at full strength; always dilute with at least 10 parts water to 1 part Quali-Pro Mefenoxam 2 AQ.

## Center Pivot Irrigation Equipment

Use only with drive systems that provide uniform distribution.

1. Determine the size of the area to be treated.
2. Determine the time required to apply 1/2 to 1 inch of water over the area to be treated when the system and injection equipment are operated at normal pressures as recommended by the equipment manufacturer. Run the system at 80 - 95% of the manufacturer's rated capacity.
3. Using water, determine the injection pump output when operated at normal line pressure.
4. Determine the amount of Quali-Pro Mefenoxam 2 AQ required to treat the area covered by the irrigation system.

# Mefenoxam 2 AQ

# Specimen Label

5. Add the required amount of Quali-Pro Mefenoxam 2 AQ and sufficient water to the solution (mix) tank to meet the injection time requirements to the solution tank.
6. Make sure the system is fully charged with water before starting injection of the Quali-Pro Mefenoxam 2 AQ solution. Time the injection to last at least as long as it takes to bring the system to full pressure.
7. Maintain constant solution tank agitation during the injection period.
8. Continue to operate the system until the Quali-Pro Mefenoxam 2 AQ solution has cleared the last sprinkler head.

### Solid Set, Hand Move, and Moving Wheel Irrigation Equipment

1. Determine the acreage covered by the sprinklers.
2. Fill injector solution tank with plain water and calibrate the flow rate of the system to deliver the contents of the tank over a 20 to 30 minute time interval.
3. Determine the amount of Quali-Pro Mefenoxam 2 AQ required to treat the area covered by the irrigation system.
4. Add the required amount of Quali-Pro Mefenoxam 2 AQ into the same quantity of water used to calibrate the injection period.
5. Operate the system at the same pressure and time interval established during the calibration.
6. Inject Quali-Pro Mefenoxam 2 AQ at the end of the irrigation cycle in 1/2 - 1 inch of water or as a separate application to maximize the effectiveness of the fungicide. Do not apply in excess of 1 inch of water.
7. Stop injection equipment after treatment is completed. Continue to operate the system until the Quali-Pro Mefenoxam 2 AQ solution has cleared the last sprinkler head.

### Micro Sprinkler, Overhead Watering Booms, or Drip Irrigation Systems

#### General Instructions

1. Each run of the irrigation system must be calibrated separately to determine the time it takes water to move through the system and to make sure all emitters in the system are putting out the same amount of water.
2. Only pressure injection or venturi equipment is recommended.
3. Determine the area to be treated in each irrigation run.
4. Measure the output of each of the emitters or drip tubes closest to and farthest from the injector site.
5. For calibration, substitute a concentrated detergent (such as Wisk) or a soluble fertilizer for the Quali-Pro Mefenoxam 2 AQ in the injector tank. The detergent will bubble as it leaves the emitters. The time period over which bubbles occur should be checked for both the closest and farthest emitters. If these times are not within 2 minutes of each other, adjust the dilution ratio and/or the injection rate.
6. If a soluble fertilizer is used, measure the time intervals with a salt bridge. If a drip system is being calibrated, substitute soluble fertilizer for the Quali-Pro Mefenoxam 2 AQ in the injector and measure the time intervals with a salt bridge.

#### Step-by-Step Instructions

1. Before starting to calibrate, operate the system until all the emitters are putting out at equal flow rates or until the system is operating at full pressure.
2. Make up an indicator solution of detergent or fertilizer, using the same ratio to be used when mixing the Quali-Pro Mefenoxam 2 AQ.
3. Set the injector to apply the indicator solution at the injection rate to be used in the actual Quali-Pro Mefenoxam 2 AQ application.
4. Attach a 5-inch length of flexible tubing over the emitter closest to the injection point, another length over the emitter farthest away. Both emitters should be monitored to determine the time intervals that the indicator solutions are observed.
5. Begin injecting the indicator solution. Direct the flow from the tubes at the emitters into a small container. Begin timing when the indicator solution is first detected; stop timing when the indicator solutions are no longer detected.
6. If the period of detection of the indicator solution between the 2 emitters is within 2 minutes of each other, comparable coverage will be obtained. If they are not, make adjustments by increasing the dilution ratio, using more water per part of Quali-Pro Mefenoxam 2 AQ, or adjust the injector to a slower flow rate.
7. Once the system is calibrated, dilute the needed amount of Quali-Pro Mefenoxam 2 AQ with water in the mix tank using a minimum of 10 parts water to 1 part Quali-Pro Mefenoxam 2 AQ in the solution tank.
8. Do not begin to inject Quali-Pro Mefenoxam 2 AQ into the system until all emitters are producing equal flow rates, or until the system is at full pressure.

Inject the Quali-Pro Mefenoxam 2 AQ into the system at the end of the irrigation set in 1/2 - 1 inch of irrigation water.

### NON-CROP USES

#### ORNAMENTALS

Use Quali-Pro Mefenoxam 2 AQ on container, bench, or bed-grown ornamentals in greenhouses or outdoor nurseries, and for use on ornamentals grown for indoor and outdoor landscaping, for control of damping-off, and root and stem rot diseases caused by *Fythyium* and *Phytophthora*. Quali-Pro Mefenoxam 2 AQ may be applied through irrigation systems, as a soil drench or as a soil surface spray, or incorporated into a soil mix for subsequent seeding or transplanting of ornamentals. **Within a rate range given for a specific group of ornamentals, use the lower rate for the shortest interval listed and the higher rate for the longest interval. Under severe disease conditions, use the highest rate and the shortest interval.**

For drench applications, use enough of the specified Quali-Pro Mefenoxam 2 AQ water solution to wet the root zone of plants. In general, 1 pt./sq. ft. of this solution is sufficient for ornamentals growing in containers with 4 inches of growth media. Containers with growth media depth greater than 4 inches generally require 1 1/2 - 2 pts./sq ft of the solution. If soil surface applications are made, irrigate with at least 1/2 inch of water if rainfall does not occur within 7 days.

**NOTICE TO USER:** Due to the large number of species and varieties of ornamentals and nursery plants, it is impossible to test every one for tolerance to Quali-Pro Mefenoxam 2 AQ. Neither the manufacturer nor the seller has determined whether or not Quali-Pro Mefenoxam 2 AQ can be used safely on ornamental and nursery plants not specified on this label. The professional user should determine if Quali-Pro Mefenoxam 2 AQ can be used safely prior to commercial use. In a small area, test the recommended rates for a particular group of unlabeled plants, i.e., bedding plants, foliage, etc., for phytotoxicity prior to widespread use.

**Foliage Plants**  
*Aglanema*,  
*Aphelandra*,  
*Dieffenbachia*,  
*Peperomia*,  
*Philodendron\**,  
*Pothos*,  
*Scheffera*,  
*Sedum*,  
*Sempervivum*,  
*Zygocactus*

**DRENCH:** Mix 0.12 - 0.6 fl oz. with 100 gals of water. Apply 1 pt solution per sq ft. For growth media depth greater than 4 inches, apply 1 1/2 - 2 pts solution per sq ft. Repeat applications at 2 to 3-month intervals, if necessary.

\*On *Philodendron*, use 0.2 - 1.0 fl oz/100 gals.

**Precaution:** To minimize the potential for injury to *Pothos*, do not use more than 0.38 fl oz/100 gals and do not apply more frequently than once every 3 months.

**SOIL MIX:** Thoroughly mix 0.06 - 0.26 fl oz with each cu yd of soil mixture.

**SOIL SURFACE SPRAY:** Apply 0.2 - 1.0 fl oz/1,000 sq ft to the soil surface in a broadcast or banded spray in sufficient water to obtain thorough coverage of the plant root zone. After application, irrigate with a minimum of 1/2 inch of water if rainfall does not occur within 7 days.

**Bedding Plants**  
*Ageratum*,  
*Algerian ivy*,  
*Artemisia*,  
*Aster*,  
*Begonia*,  
*Caladium*,  
*Carnation*,  
*Chrysanthemum*,  
*Colous*,  
*Daisy*,  
*English ivy*,  
*Foxglove*,  
*Gaillardia*,  
*Geranium*,  
*Impatiens*,  
*Marigold*,  
*Pansy*,  
*Petunia*,  
*Phlox*,  
*Pinks*,  
*Primrose*,  
*Prostrate Rosemary*,  
*Salvia*,  
*Snapdragon*,  
*Verbena*,  
*Vinca*,  
*Zinnia*

**DRENCH At Seeding (Soil 2 - 3 inches deep):** Mix 0.06 - 0.26 fl oz with 100 gals of water and apply 1 pt solution per sq ft.

**DRENCH At Transplanting (Soil 2 - 3 inches deep):** Mix 0.2 - 1.0 fl oz with 100 gals of water and apply 1 pt solution per sq ft. For growth media depth greater than 4 inches, apply 1 1/2 - 2 pts solution per sq ft. Repeat applications at 1 to 2-month intervals, if necessary. Do not apply rates of 0.75 - 1.0 fl oz/100 gals more often than once every 6 weeks.

**SOIL MIX At Seeding and At Transplanting:** Thoroughly mix 0.02 - 0.12 fl oz with each cu yd of soil mixture.

**SOIL SURFACE SPRAY:** Apply 0.2 - 1.0 fl oz/1,000 sq ft to the soil surface in a broadcast or banded spray in sufficient water to obtain thorough coverage of the plant root zone. After application, irrigate with a minimum of 1/2 inch of water if rainfall does not occur within 7 days.

**Flowers**  
*African violet*,  
*Anthurium*,  
*Baby's breath*,  
*Carnation*,  
*Chrysanthemum*,  
*Columbine*,  
*Delphinium*,  
*Easter lily*,  
*Geranium*,  
*Gloxinia*,  
*Poinsettia*,  
*Rose*

**DRENCH:** Mix 0.2 - 1.0 fl oz with 100 gals of water and apply 1 pt solution per sq ft. For growth media depth greater than 4 inches, apply 1 1/2 - 2 pts solution per sq ft. Repeat applications at 1 to 2-month intervals, if necessary. Do not apply rates of 0.76 - 1.0 fl oz/100 gals more often than every 6 weeks.

**Precaution:** Do not apply more than 0.5 fl oz./100 gal water to *Easter lily* and only make one at-planting application.

**SOIL SURFACE SPRAY:** apply 0.2 - 1.0 fl oz/1,000 sq ft to the soil surface in a broadcast or banded spray in sufficient water to obtain thorough coverage of the plant root zone. After application, irrigate with a minimum of 1/2 inch of water if rainfall does not occur within 7 days.

# Mefenoxam 2 AQ

# Specimen Label

<b>Azaleas</b>	<p><b>DRENCH:</b> Phytophthora root and crown rot – Mix 0.26 – 1.2 fl oz with 100 gals of water and apply 1 pt solution per sq ft. For growth media depth greater than 4 inches, apply 1 1/2 – 2 pts solution per sq ft. Repeat applications at 2 to 4-month intervals, if necessary.</p> <p><b>SOIL SURFACE SPRAY:</b> Apply 0.5 – 2.5 fl oz/1,000 sq ft to the soil surface in a broadcast or banded spray in sufficient water to obtain thorough coverage of the plant root zone. After application, irrigate with a minimum of 1/2 inch of water if rainfall does not occur within 7 days.</p> <p><i>Precautions: (1) To minimize the potential for injury to azaleas, do not apply repeat soil applications of 1.2 fl. oz./100 gal closer than every 3 months, and do not exceed a total of 2 fl. oz. in 6 months. (2) Use the lower rate for "Coral Bell" variety.</i></p>
----------------	--

<b>Woody Ornamentals Other Than Azaleas</b>  <i>Aucuba japonica,</i> Arborvitae, Boxwood, Ceanothus, Cotoneaster, Dogwood, Ficus, "Halls" Honeysuckle, Ilex, Juniperus spp., Photinia, Pieris japonica, Pinus spp., Pittosporum, Rhododendron, White cedar, White pine, Yew	<p><b>Drench:</b> Mix 0.4 – 2 fl oz with 100 gals of water and apply 1 pt solution per sq ft. For growth media depth greater than 4 inches, apply 1 1/2 – 2 pts solution per sq ft. Repeat applications at 2 to 3-month intervals, if necessary. Do not apply rates of 1.0 fl oz/100 gals more often than every 10 weeks.</p> <p><b>SOIL SURFACE SPRAY:</b> Apply 0.5 – 2.5 fl oz/1,000 sq ft to the soil surface in a broadcast or banded spray in sufficient water to obtain thorough coverage of the plant root zone. After application, irrigate with a minimum of 1/2 inch of water if rainfall does not occur within 7 days.</p>
---	--

## INTERIORESCAPE AND INDIVIDUAL PLANT USE

In situations where water volumes used are much less than 100 gals and the area treated is small, the following table provides the Quali-Pro Mefenoxam 2 AQ rates to make small quantities of solution. Refer to the plant type for the correct fl. oz. of product to use when utilizing this table.

Rate of Quali-Pro Mefenoxam 2 AQ (fl. oz.) /100 gals.	Amount of Quali-Pro Mefenoxam 2 AQ to Add to Water to Make the Following Quantities			
	1 gal.	5 gals.	10 gals.	25 gals.
0.5	2 drops	10 drops	20 drops	50 drops / 1.0 ml
1.0	4 drops	20 drops	40 drops	100 drops / 2 ml
2.0	8 drops	40 drops	80 drops / 1.5 ml	200 drops / 4 ml / 2/3 tsp.
4.0	16 drops	80 drops / 1.5 ml	3 ml / 0.5 tsp.	8 ml / 1 1/3 tsp.

Apply enough solution to wet the root area of the plants.

## CITRUS IN NURSERIES (AZ, CA, FL, and PR Only)

Make the first application of Quali-Pro Mefenoxam 2 AQ at the time of planting. Make repeat applications at 3-month intervals during the period when trees are actively growing. For banded applications, use a band wide enough to cover the root systems of the plants. Do not apply Quali-Pro Mefenoxam 2 AQ solutions to bare roots.

**Soil Drench:** Apply 2 – 3 fl oz/100 gals of water as a drench over the row at a rate of 100 – 250 gals/1,000 ft. of row. The width of the drench treatment should be wide enough to cover the root systems of the plants. Follow with a 1/2 – 1-inch irrigation over the treated area.

**Soil Surface Spray:** Apply 2 – 4 qts per treated acre in a broadcast or banded surface spray to seedbeds, liners, or bedded stock in sufficient water to obtain thorough coverage. If applications are banded, the treated area should be wide enough to cover the root systems of the plants. Follow the applications with a 1/2 – 1-inch irrigation over the treated area.

**Note:** Do not use Quali-Pro Mefenoxam 2 AQ for disease control in greenhouse nurseries.

## CITRUS IN NURSERIES AND LANDSCAPE PLANTINGS (NONBEARING)

Use Quali-Pro Mefenoxam 2 AQ on nonbearing citrus for control of citrus foot rot, root rot, and trunk canker caused by Phytophthora spp. Apply to the soil as a drench or as a spray in a banded application.

Make the first application of Quali-Pro Mefenoxam 2 AQ at the time of planting. Make repeat applications at 3-month intervals during the period when trees are actively growing.

**Soil Drench:** Mix 0.6 – 3.0 fl. oz/100 gals of water and apply as a drench over the row at the rate of 100 – 250 gals/1,000 ft. of row. The width of the drench treatment should be wide enough to cover the root systems of the plants.

**Soil Surface Spray:** Apply 0.2 – 1.0 gal/A of treated soil in a broadcast or banded surface spray to seedbeds, liners, or bedded stock in sufficient water to obtain uniform coverage. If applications are banded, the treated area should be wide enough to cover the root systems of the plants. Follow with 1/2 inch irrigation.

Calculate the amount of Quali-Pro Mefenoxam 2 AQ needed for a banded treatment by using the formula at the end of the APPLICATION INSTRUCTIONS section of this label.

**Note:** Do not use in greenhouse citrus nursery stock intended for commercial fruit production.

## CONIFERS IN NURSERIES AND PLANTATIONS (INCLUDING CHRISTMAS TREES)

Quali-Pro Mefenoxam 2 AQ provides control of Phytophthora root rot of conifers.

### Conifers in Nurseries

<b>Seedbeds and Plug-Plantings</b>	Apply 0.25 – 1.25 pt Quali-Pro Mefenoxam 2 AQ in at least 50 gals of water per acre in the spring and again in the fall.
<b>2-0 Transplants</b>	Apply 0.5 – 2.5 pts Quali-Pro Mefenoxam 2 AQ in at least 50 gals of water per acre in the spring and again in the fall.

### Conifers in Plantations

Use of Quali-Pro Mefenoxam 2 AQ will aid in the control of Phytophthora root rot when used in conjunction with good cultural practices. The use of Quali-Pro Mefenoxam 2 AQ will not overcome poor management practices such as planting on sites that are prone to flooding or are poorly drained. Quali-Pro Mefenoxam 2 AQ fungicide will not revitalize trees showing moderate to severe disease symptoms.

Apply 0.25 – 1.25 gal of Quali-Pro Mefenoxam 2 AQ per acre in a minimum of 50 gals of water as a directed soil spray. Do not apply as a foliar spray. Applications should be made in early spring before growth starts and in the fall before the ground freezes. Calculate the amount of Quali-Pro Mefenoxam 2 AQ needed for a banded treatment by using the formula in the APPLICATION INSTRUCTIONS section of the label.

For best results, apply 1/2 – 1 inch of water after application if rain is not expected within 3 days.

## DECIDUOUS FRUITS AND NUTS IN NURSERIES (NONBEARING)

Quali-Pro Mefenoxam 2 AQ provides control of Pythium root rot and Phytophthora root, crown, and collar rot of nonbearing deciduous fruits and nuts.

Apply 0.6 – 3.0 fl oz/1,000 sq ft in sufficient water to obtain thorough coverage of the soil under the canopy of the trees. Treat sufficient surface area in nurseries to cover the root zone of the plants. Additional applications may be made as necessary at 3-month intervals during the growing season.

**Notes:** (1) Do not apply to trees that will bear harvestable fruit within 12 months of the last application, or possible illegal residues may result. (2) Do not apply more than 8.8 oz/1,000 sq. ft. (3.0 gals/A) of Quali-Pro Mefenoxam 2 AQ per year.

### TURF

Quali-Pro Mefenoxam 2 AQ controls Pythium blight and Pythium damping-off in turf, yellow tuft (downy mildew) in bluegrass, and downy mildew in St. Augustine grass. **Within the rate range given for turf, use the lower rate for the shortest interval listed and the higher rate for the longest interval. Under severe disease conditions, use the highest rate and shortest interval.**

<b>Established Turf</b> Pythium Blight, Yellow Tuft, Downy mildew	Apply as a preventative treatment at 0.2 – 1.0 fl oz in 1-5 gals of water per 1,000 sq. ft. Retreat at 10 to 21-day intervals. During periods of prolonged conditions favorable for disease development, use 0.5 – 1.0 fl oz on a 14-day schedule.
<b>Newly Seeded Areas</b> Pythium Damping-off, Pythium blight, Yellow Tuft, Downy Mildew	Apply 0.2 – 1.0 fl oz in 1-5 gals of water per 1,000 sq ft immediately after seeding. Irrigate with 1/4 – 1/2 inch water. Re-treat at 7 to 14-day intervals if conditions remain favorable for disease.  <b>Note:</b> For long-term control of Pythium in areas when using seed treated with the active ingredient contained in Quali-Pro Mefenoxam 2 AQ, make an application of Quali-Pro Mefenoxam 2 AQ at 7 – 10 days after seeding.

**Note:** For control of other diseases of turf, use Banner alone or in a tank mix combination with Quali-Pro Mefenoxam 2 AQ. Refer to the Banner label for rates, precautions, restrictions, etc.

*Precautions: To minimize the potential for insensitivity, (1) Make no more than 3 applications per season of any product in which the Quali-Pro Mefenoxam 2 AQ active ingredient is applied alone, and (2) Apply an alternate EPA-registered fungicide for Pythium control at least once during the season.*

# Mefenoxam 2 AQ

# Specimen Label

### REPLANTING

If replanting is necessary, additional applications of Quali-Pro Mefenoxam 2 AQ may be made, provided that the total amount of active ingredient applied does not exceed the maximum allowed for the specific crop.

### ROTATION (PLANTBACK) RESTRICTION

Do not plant any crop which is not registered for use with products containing the active ingredient mefenoxam in soil treated with Quali-Pro Mefenoxam 2 AQ for a period of 12 months unless a shorter interval is specified on the following list.

Rotation Crop	Planting Time From Last Quali-Pro Mefenoxam 2 AQ Application
Alfalfa (including birdsfoot trefoil) Almonds Apples Asparagus Avocados Blueberries	0 days
Deciduous Fruits and Nuts*	0 days
Eggplant	
Garlic	
Ginseng	
Grapes	
Grasses**	
Hops	
Leafy Vegetables (Excluding Brassica)	
Legume Vegetables (beans and peas—succulent and dried)	
Onions (dry bulb, green, and seed)	
Papaya Peanuts Peppers Pineapples Potatoes	0 days

Rotation Crop	Planting Time From Last Quali-Pro Mefenoxam 2 AQ Application
Raspberries Root and Tuber Vegetables	0 days
Soybeans	
Spinach	
Stone Fruits	
Strawberries	
Sugar Beets	
Tobacco	
Tomatoes	
Walnuts	
Cereal Grains (other than corn)	
Corn	9 months
Crops Not Intended for Food or Feed	0 days
All Other Crops Intended for Food or Feed	12 months

\* These crops and other perennial crops may be planted immediately following last application of Quali-Pro Mefenoxam 2 AQ, provided they will not bear harvestable fruit within 12 months.

\*\* Any grass, Gramineae family (either green or cured), except do not rotate to any of the following for 12 months after application: sugar-cane; any cereal grains that will be fed to or grazed by livestock; any enclosed pasture grass; and grass grown for hay or silage such as bermudagrass, bluegrass, brome grass or fescue.

### STORAGE AND DISPOSAL

#### PESTICIDE STORAGE

Do not use, pour, spill or store near heat or open flame.

#### PESTICIDE DISPOSAL

Do not contaminate water, food, or feed by storage or disposal. Open dumping is prohibited. Wastes resulting from the use of this product are acutely toxic. Improper disposal of unused pesticide, spray mixture, or rinsate is a violation of federal law. Pesticide, spray mixture, or rinsate that cannot be used according to label instructions must be disposed of according to federal, state, or local procedures. For guidance in proper disposal methods, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office.

#### CONTAINER DISPOSAL

Do not reuse empty container. Triple rinse (or equivalent) and offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by incineration, or by open burning, if allowed by state and local authorities. If burned, keep 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 and disposal of wastes.

In the event of a major spill, fire, or other emergency, call Chemtrec at 1-800-424-9300, day or night.

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

### CONDITIONS OF SALE AND WARRANTY

The DIRECTIONS FOR USE of this product are believed to be reliable and should be followed carefully. However, it is impossible to eliminate all risks inherently associated with use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or use of the product in a manner inconsistent with its labeling, all of which are beyond the control of FarmSaver.com, LLC or the seller. All such risks shall be assumed by the buyer.

FarmSaver.com, LLC warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes set forth in the DIRECTIONS FOR USE when it is used in accordance with such directions, subject to the inherent risks mentioned above.

**FARMSAVER.COM, LLC NEITHER MAKES NOR INTENDS, NOR DOES IT AUTHORIZE ANY AGENT OR REPRESENTATIVE TO MAKE ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, AND IT EXPRESSLY EXCLUDES AND DISCLAIMS ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.**

**THIS WARRANTY EXTENDS TO, AND THE BUYER SHALL BE SOLELY RESPONSIBLE FOR ANY AND ALL LOSS OR DAMAGE WHICH RESULTS FROM THE USE OF THIS PRODUCT IN ANY MANNER WHICH IS INCONSISTENT WITH THE LABEL DIRECTIONS, WARNINGS, OR CAUTIONS. BUYER'S EXCLUSIVE REMEDY AND MANUFACTURER'S OR SELLER'S EXCLUSIVE LIABILITY FOR ANY AND ALL CLAIMS, LOSSES, DAMAGES, OR INJURIES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, WHETHER OR NOT BASED IN CONTRACT, NEGLIGENCE, STRICT LIABILITY IN TORT OR OTHERWISE, SHALL BE LIMITED, AT THE MANUFACTURER'S OPTION TO REPLACEMENT OF, OR THE REPAYMENT OF THE PURCHASE PRICE FOR, THE QUANTITY OF PRODUCT WITH RESPECT TO WHICH DAMAGES ARE CLAIMED. IN NO EVENT SHALL MANUFACTURER OR SELLER BE LIABLE FOR SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT.**

FARMSAVER.COM, LLC and the seller offer this product, and the Buyer and User accept it, subject to the foregoing CONDITIONS OF SALE AND WARRANTY.

**Questions? Call 1-800-979-8994.**

Quali-Pro is a trademark of FarmSaver.com  
Banner is a trademark of the Syngenta Group Company

FarmSaver.com LLC  
PO Box 21365  
Seattle, WA 98111

Mef 2L TNO EPA 100504

ADDENDUM ACKNOWLEDGEMENT FORM

SOLICITATION NO.: CRFQ 0310 DNR 1600000032

**Instructions:** Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.

**Acknowledgment:** I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

**Addendum Numbers Received:**

(Check the box next to each addendum received)

- |  |  |
|--|--|
| <input checked="" type="checkbox"/> Addendum No. 1 | <input type="checkbox"/> Addendum No. 6  |
| <input type="checkbox"/> Addendum No. 2            | <input type="checkbox"/> Addendum No. 7  |
| <input type="checkbox"/> Addendum No. 3            | <input type="checkbox"/> Addendum No. 8  |
| <input type="checkbox"/> Addendum No. 4            | <input type="checkbox"/> Addendum No. 9  |
| <input type="checkbox"/> Addendum No. 5            | <input type="checkbox"/> Addendum No. 10 |

I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.

Advanced Turf Solutions, Inc.  
Company

Paul Selaf  
Authorized Signature

4/11/16  
Date



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

State of West Virginia  
 Request for Quotation  
 07 - Chemicals

Proc Folder: 197406

Doc Description: Addendum No.01 Pipestem State Park - Golf Course Chemicals

Proc Type: Central Purchase Order

Date Issued	Solicitation Closes	Solicitation No	Version
2016-04-11	2016-04-14 13:30:00	CRFQ 0310 DNR1600000032	2

**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:

Home Office → *Advanced Turf Solutions, Inc.*  
*12955 Ford Dr.*  
*Fishers, In. 46038*  
 Phone *317-842-1088*

**FOR INFORMATION CONTACT THE BUYER**

Guy Nisbet  
 (304) 558-2596  
 guy.l.nisbet@wv.gov

Signature X *Paul Indorf* FEIN # *35-2152001* DATE *4/13/16*

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



**ADDITIONAL INFORMATION:**

Addendum

Addendum No.01 issued to publish and distribute the attached information to the vendor community.

\*\*\*\*\*

Central 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 for Pipestem State Park per the bid requirements, specifications, and terms and conditions that are apart of this solicitation and attached hereto.

INVOICE TO		SHIP TO	
SUPERINTENDENT DIVISION OF NATURAL RESOURCES PIPESTEM STATE PARK RR 20 BOX 150		SUPERINTENDENT DIVISION OF NATURAL RESOURCES PIPESTEM STATE PARK 3405 PIPESTEM DR	
PIPESTEM	WV25979-0150	PIPESTEM	WV 25979-0150
US		US	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
1	Bensumec or Equal	15.00000	GL	127.58	1913.70

Comm Code	Manufacturer	Specification	Model #
10171600			

**Extended Description :**  
Per the mandatory requirements in Section 3.1.1

INVOICE TO		SHIP TO	
SUPERINTENDENT DIVISION OF NATURAL RESOURCES PIPESTEM STATE PARK RR 20 BOX 150		SUPERINTENDENT DIVISION OF NATURAL RESOURCES PIPESTEM STATE PARK 3405 PIPESTEM DR	
PIPESTEM	WV25979-0150	PIPESTEM	WV 25979-0150
US		US	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
2	18-3-6 50% SRN + micros with UMAXX Harrell's or Equal	150.00000	GL	12.20	1830.00

Comm Code	Manufacturer	Specification	Model #
10171600	ENP		

**Extended Description :**  
Per the mandatory requirements in Section 3.1.2

Foliar Pak 18-3-6 w/ micros by THE ANDERSONS, INC / 50% SRN

INVOICE TO		SHIP TO	
SUPERINTENDENT DIVISION OF NATURAL RESOURCES PIPESTEM STATE PARK RR 20 BOX 150 PIPESTEM WV25979-0150 US		SUPERINTENDENT DIVISION OF NATURAL RESOURCES PIPESTEM STATE PARK 3405 PIPESTEM DR PIPESTEM WV 25979-0150 US	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
3	Roots 1-2-3 Pre Mix or Equal	20.00000	GL	23.00	476.00

Comm Code	Manufacturer	Specification	Model #
10171600	ENP	FOLIAR PAK ROOT GUARD 1-2-1	

**Extended Description :**  
Per the mandatory requirements in Section 3.1.3

INVOICE TO		SHIP TO	
SUPERINTENDENT DIVISION OF NATURAL RESOURCES PIPESTEM STATE PARK RR 20 BOX 150 PIPESTEM WV25979-0150 US		SUPERINTENDENT DIVISION OF NATURAL RESOURCES PIPESTEM STATE PARK 3405 PIPESTEM DR PIPESTEM WV 25979-0150 US	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
4	Roots Stand Up 0-2-12 Foliar Fertilizer or Equal	20.00000	GL	No Bid	

Comm Code	Manufacturer	Specification	Model #
10171600			

**Extended Description :**  
Per the mandatory requirements in Section 3.1.4

INVOICE TO		SHIP TO	
SUPERINTENDENT DIVISION OF NATURAL RESOURCES PIPESTEM STATE PARK RR 20 BOX 150 PIPESTEM WV25979-0150 US		SUPERINTENDENT DIVISION OF NATURAL RESOURCES PIPESTEM STATE PARK 3405 PIPESTEM DR PIPESTEM WV 25979-0150 US	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
5	Bio Sea Foliar Fertilizer or Equal	30.00000	GL	55.32	1659.60

\$ 55.32
\$ 55.32
\$ 1659.60
\$ 1659.60

Comm Code	Manufacturer	Specification	Model #
10171600			

**Extended Description :**

Per the mandatory requirements in Section 3.1.5

INVOICE TO	SHIP TO
SUPERINTENDENT DIVISION OF NATURAL RESOURCES PIPESTEM STATE PARK RR 20 BOX 150 PIPESTEM WV25979-0150 US	SUPERINTENDENT DIVISION OF NATURAL RESOURCES PIPESTEM STATE PARK 3405 PIPESTEM DR PIPESTEM WV 25979-0150 US

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
6	12-4-12 with Minors Harrell's Max or Equal	50.00000	GL	24.12	1206.00

Comm Code	Manufacturer	Specification	Model #
10171600	ENP	FOLIAR PAK 12-6-6 BIO w/MICROS	

**Extended Description :**

Per the mandatory requirements in Section 3.1.6

CONTAINS 4% SEA PLANT EXTRACT 2% FULVIC ACID  
& 1.25% L-AMINO ACIDS

INVOICE TO	SHIP TO
SUPERINTENDENT DIVISION OF NATURAL RESOURCES PIPESTEM STATE PARK RR 20 BOX 150 PIPESTEM WV25979-0150 US	SUPERINTENDENT DIVISION OF NATURAL RESOURCES PIPESTEM STATE PARK 3405 PIPESTEM DR PIPESTEM WV 25979-0150 US

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
7	Proxy Phosphonic Acid or Equal	30.00000	GL	35.66	1069.80

Comm Code	Manufacturer	Specification	Model #
10171600	FARM SAVER	Quat-1-PO ETHERPHOS 2SL	

**Extended Description :**

Per the mandatory requirements in Section 3.1.7

INVOICE TO		SHIP TO	
SUPERINTENDENT DIVISION OF NATURAL RESOURCES PIPESTEM STATE PARK RR 20 BOX 150 PIPESTEM WV25979-0150 US		SUPERINTENDENT DIVISION OF NATURAL RESOURCES PIPESTEM STATE PARK 3405 PIPESTEM DR PIPESTEM WV 25979-0150 US	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
8	Banner Maxx Fungicide or Equal	5.00000	GL	<i>€ 78.36</i>	<i>€ 391.80</i>

Comm Code	Manufacturer	Specification	Model #
10171600	<i>ARMOR TECH</i>	<i>PP2 143</i>	

**Extended Description :**  
Per the mandatory requirements in Section 3.1.8

INVOICE TO		SHIP TO	
SUPERINTENDENT DIVISION OF NATURAL RESOURCES PIPESTEM STATE PARK RR 20 BOX 150 PIPESTEM WV25979-0150 US		SUPERINTENDENT DIVISION OF NATURAL RESOURCES PIPESTEM STATE PARK 3405 PIPESTEM DR PIPESTEM WV 25979-0150 US	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
9	Primo Maxx Fungicide or Equal	5.00000	GL	<i>€ 158.20</i>	<i>€ 791.00</i>

Comm Code	Manufacturer	Specification	Model #
10171600	<i>ARMOR TECH</i>	<i>PCR 113</i>	

**Extended Description :**  
Per the mandatory requirements in Section 3.1.9

INVOICE TO		SHIP TO	
SUPERINTENDENT DIVISION OF NATURAL RESOURCES PIPESTEM STATE PARK RR 20 BOX 150 PIPESTEM WV25979-0150 US		SUPERINTENDENT DIVISION OF NATURAL RESOURCES PIPESTEM STATE PARK 3405 PIPESTEM DR PIPESTEM WV 25979-0150 US	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
10	Primer Select or Equal	40.00000	GL	<i>€ 62.00</i>	<i>€ 2480.00</i>

*MAGNUS by PRECISION LABS*

Comm Code	Manufacturer	Specification	Model #
10171600			

**Extended Description :**

Per the mandatory requirements in Section 3.1.10

INVOICE TO	SHIP TO
SUPERINTENDENT DIVISION OF NATURAL RESOURCES PIPESTEM STATE PARK RR 20 BOX 150 PIPESTEM WV25979-0150 US	SUPERINTENDENT DIVISION OF NATURAL RESOURCES PIPESTEM STATE PARK 3405 PIPESTEM DR PIPESTEM WV 25979-0150 US

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
11	Turf Track Blue or Equal	480.00000	PKG	* 4.52/pkt.	* 2169. <sup>60</sup>

Comm Code	Manufacturer	Specification	Model #
10171600		SIGNAL BLUE EZ SOLUPAKS (40x20 CASE)	

**Extended Description :**

Per the mandatory requirements in Section 3.1.11

INVOICE TO	SHIP TO
SUPERINTENDENT DIVISION OF NATURAL RESOURCES PIPESTEM STATE PARK RR 20 BOX 150 PIPESTEM WV25979-0150 US	SUPERINTENDENT DIVISION OF NATURAL RESOURCES PIPESTEM STATE PARK 3405 PIPESTEM DR PIPESTEM WV 25979-0150 US

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
12	Ipro 2SE Fungicide or Equal	50.00000	GL	' 62. <sup>16</sup>	' 3108. <sup>00</sup>

Comm Code	Manufacturer	Specification	Model #
10171600		ARMOR TECH IP233	

**Extended Description :**

Per the mandatory requirements in Section 3.1.12

INVOICE TO		SHIP TO	
SUPERINTENDENT DIVISION OF NATURAL RESOURCES PIPESTEM STATE PARK RR 20 BOX 150 PIPESTEM WV25979-0150 US		SUPERINTENDENT DIVISION OF NATURAL RESOURCES PIPESTEM STATE PARK 3405 PIPESTEM DR PIPESTEM WV 25979-0150 US	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
13	Lontrel Turf & Ornamental Herbicide or Equal	3.00000	GL	677.60	2032.80

Comm Code	Manufacturer	Specification	Model #
10171600		(4 QTS / GAL)	

**Extended Description :**  
Per the mandatory requirements in Section 3.1.13

SIZE OF CONTAINER  
is QTS.

INVOICE TO		SHIP TO	
SUPERINTENDENT DIVISION OF NATURAL RESOURCES PIPESTEM STATE PARK RR 20 BOX 150 PIPESTEM WV25979-0150 US		SUPERINTENDENT DIVISION OF NATURAL RESOURCES PIPESTEM STATE PARK 3405 PIPESTEM DR PIPESTEM WV 25979-0150 US	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
14	Solu-cal Enhanced High Calcium Lime or Equal	5.00000	TON	NO B.I.D	

Comm Code	Manufacturer	Specification	Model #
10171600			

**Extended Description :**  
Per the mandatory requirements in Section 3.1.14

INVOICE TO		SHIP TO	
SUPERINTENDENT DIVISION OF NATURAL RESOURCES PIPESTEM STATE PARK RR 20 BOX 150 PIPESTEM WV25979-0150 US		SUPERINTENDENT DIVISION OF NATURAL RESOURCES PIPESTEM STATE PARK 3405 PIPESTEM DR PIPESTEM WV 25979-0150 US	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
15	Clery's Tank Defoamer or Equal	9.00000	GL	64.60	581.40

KnockDown by Precision LABS  
QT. BOTTLES  
12 / CASE

Comm Code	Manufacturer	Specification	Model #
10171600			

**Extended Description :**

Per the mandatory requirements in Section 3.1.15

INVOICE TO	SHIP TO
SUPERINTENDENT DIVISION OF NATURAL RESOURCES PIPESTEM STATE PARK RR 20 BOX 150 PIPESTEM WV25979-0150 US	SUPERINTENDENT DIVISION OF NATURAL RESOURCES PIPESTEM STATE PARK 3405 PIPESTEM DR PIPESTEM WV 25979-0150 US

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
16	Gordon's TransFilm Anti Transpirant or Equal	15.00000	GL	30.36	455.40

Comm Code	Manufacturer	Specification	Model #
10171600	<i>AQUA LOCK by Precision LABS</i>		

**Extended Description :**

Per the mandatory requirements in Section 3.1.16

INVOICE TO	SHIP TO
SUPERINTENDENT DIVISION OF NATURAL RESOURCES PIPESTEM STATE PARK RR 20 BOX 150 PIPESTEM WV25979-0150 US	SUPERINTENDENT DIVISION OF NATURAL RESOURCES PIPESTEM STATE PARK 3405 PIPESTEM DR PIPESTEM WV 25979-0150 US

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
17	Bifenthrin 7.9 or Equal	3.00000	GL	62.40	187.20

Comm Code	Manufacturer	Specification	Model #
10171600	<i>TALSTAR SELECT by FMC</i>		

**Extended Description :**

Per the mandatory requirements in Section 3.1.17

INVOICE TO		SHIP TO	
SUPERINTENDENT DIVISION OF NATURAL RESOURCES PIPESTEM STATE PARK RR 20 BOX 150		SUPERINTENDENT DIVISION OF NATURAL RESOURCES PIPESTEM STATE PARK 3405 PIPESTEM DR	
PIPESTEM	WV25979-0150	PIPESTEM	WV 25979-0150
US		US	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
18	Subdue Maxx or Equal	5.00000	GL	<i>380.40</i>	<i>1902.00</i>

Comm Code	Manufacturer	Specification	Model #
10171600	<i>FARM SAVER</i>	<i>QUAL-PRO MEFENDUKAM AQ</i>	

**Extended Description :**

Per the mandatory requirements in Section 3.1.18

INVOICE TO		SHIP TO	
SUPERINTENDENT DIVISION OF NATURAL RESOURCES PIPESTEM STATE PARK RR 20 BOX 150		SUPERINTENDENT DIVISION OF NATURAL RESOURCES PIPESTEM STATE PARK 3405 PIPESTEM DR	
PIPESTEM	WV25979-0150	PIPESTEM	WV 25979-0150
US		US	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
19	Fore 80WP or Equal	3.00000	CASE	<i>507.20</i>	<i>1521.60</i>

Comm Code	Manufacturer	Specification	Model #
10171600			

**Extended Description :**

Per the mandatory requirements in Section 3.1.19

INVOICE TO		SHIP TO	
SUPERINTENDENT DIVISION OF NATURAL RESOURCES PIPESTEM STATE PARK RR 20 BOX 150		SUPERINTENDENT DIVISION OF NATURAL RESOURCES PIPESTEM STATE PARK 3405 PIPESTEM DR	
PIPESTEM	WV25979-0150	PIPESTEM	WV 25979-0150
US		US	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
20	Banner Maxx A.I or Equal	15.00000	GL	<i>78.36</i>	<i>1175.40</i>

*ARMOR TECH PPZ 143*



Comm Code	Manufacturer	Specification	Model #
10171600			

**Extended Description :**

Per the mandatory requirements in Section 3.1.20

INVOICE TO	SHIP TO
SUPERINTENDENT DIVISION OF NATURAL RESOURCES PIPESTEM STATE PARK RR 20 BOX 150 PIPESTEM WV25979-0150 US	SUPERINTENDENT DIVISION OF NATURAL RESOURCES PIPESTEM STATE PARK 3405 PIPESTEM DR PIPESTEM WV 25979-0150 US

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
21	Fertilizer, Contec DG18-3-18 or Equal	60.00000	BAG	'53.40	'4005.00

Comm Code	Manufacturer	Specification	Model #
10171600		40 LB BAG (NOT SOLB)	

**Extended Description :**

Per the mandatory requirements in Section 3.1.21

INVOICE TO	SHIP TO
SUPERINTENDENT DIVISION OF NATURAL RESOURCES PIPESTEM STATE PARK RR 20 BOX 150 PIPESTEM WV25979-0150 US	SUPERINTENDENT DIVISION OF NATURAL RESOURCES PIPESTEM STATE PARK 3405 PIPESTEM DR PIPESTEM WV 25979-0150 US

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
22	Insecticide DuPont LLC Acelepryn or Equal	14.00000	GL	No Bid	

Comm Code	Manufacturer	Specification	Model #
10171600			

**Extended Description :**

Per the mandatory requirements in Section 3.1.22

<b>DNR1600000032</b>	<b>Document Phase</b> Final	<b>Document Description</b> Addendum No.01 Pipestem State Park - Golf Course Chemicals	<b>Page</b> <b>11 of</b> <b>11</b>
----------------------	--------------------------------	--	--

**ADDITIONAL TERMS AND CONDITIONS**

See attached document(s) for additional Terms and Conditions

Exhibit A - Pricing Page  
West Virginia Division of Natural Resources-  
Pipestem State Park Golf Course Chemicals

Item No.	Description	Vendors submitted Manufacturer for Equal Consideration	Unit of Measure	Unit Cost	Qty	Extended Price
3.1.1	Herbicide - Bensumec 4 LF Preemergent grass and weed herbicide 46% ai Benzenesulfonamide, or Equal.		Gallon	\$ 127. <sup>58</sup>	15	\$ 1913. <sup>70</sup>
3.1.2	Fertilizer - 18-3-6 50% SRN + micros with UMAXX Harrell's, or Equal.	FOLIAR PAK 18-3-6 50% SRN by THE ANDERSONS, INC	Gallon	12. <sup>20</sup>	150	1830. <sup>00</sup>
3.1.3	Fertilizer - Roots 1-2-3 Pre Mix or Equal.	FOLIAR PAK ROOT GUARD 1-2-1 by ENP w/mg, Fe, Mn, Zn, & Humic Acid & SEA PLANT EXTRACT	Gallon	23. <sup>80</sup>	20	476. <sup>00</sup>
3.1.4	Fertilizer - Roots Stand Up 0-2-12 foliar fertilizer or Equal		Gallon	NO BID	20	
3.1.5	Fertilizer - Bio Sea, foliar fertilizer; Sea weed/kelp extract. Guaranteed analysis 1-0-0, .05% magnesium, 0.2% boron, 0.1% iron, 12% cold processed sea weed extract, or Equal.		Gallon	55. <sup>32</sup>	30	1659. <sup>60</sup>
3.1.6	Fertilizer - 12-4-12 with Minors Harrell's Max; foliar fertilizer guaranteed analysis Total Nitrogen (N) 12.0%, with 1.40% ammonical nitrogen and 10.6% urea nitrogen, available phosphoric acid (P2O5) 4.0%, Soluble potash (K2O) 12.00%, Sulfur (S) 5.50%, Boron (B) 0.02% , Copper (Cu) 0.05%, with 0.05% chelated copper, Iron (Fe) 0.10%, Manganese (Mn) 0.05%, 0.05% chelated manganese (Mn), Zinc (Zn) 0.05%; 0.05% chelated Zinc (Zn) or Equal.	FOLIAR PAK BIO 12-6-6 w/ B, Cu, Fe, Mn, & Zn. ALSO CONTAINS 4% SEA PLANT EXTRACT 2% FULVIC ACID, & 1.25% L-AMINO ACIDS	Gallon	24. <sup>12</sup>	50	1206. <sup>00</sup>
3.1.7	Plant Growth Regulator - Proxy (Ethephon (2-chloroethyl) phosphonic acid 21.7% or Equal.	QUALI-PRO ETHEPHON 2 SL by FARM Saver	Gallon	35. <sup>66</sup>	30	1069. <sup>80</sup>
3.1.8	Fungicide - Banner Maxx (a.i. Propiconazole 14.3%) or Equal.	ARMOR TECH PP2 143	Gallon	78. <sup>36</sup>	5	391. <sup>80</sup>

Exhibit A - Pricing Page  
West Virginia Division of Natural Resources-  
Pipestem State Park Golf Course Chemicals

Item No.	Description	Vendors submitted Manufacturer for Equal Consideration	Unit of Measure	Unit Cost	Qty	Extended Price
3.1.9	Turf Growth Regulator - Primo Maxx fungicide, (11.3% trinexepac-ethyl, or Equal	ARMOR TREAT PGR 113	Gallon	\$158.20	5	\$791.00
3.1.10	Soil Surfactant - Primer Select, enhanced matrix flow soil surfactant. A.I.= alcoxyated polyols-	MAGNUS by PRECISION LABS	Gallon	\$62.00	40	\$2480.00
3.1.11	Spray Indicator - Turf Track Blue, packaged in individual water disburseable packets. Each packet treats up to 150 gallons of liquid, or Equal.	SIGNAL BLUE R2-SOLUPAKS (48X2g CASE)	Packet	\$4.52	480	\$2169.60
3.1.12	Fungicide - 26GT or Equal. Pro 2SE fungicide, a.i. (iprodione) 23.8% or Equal	ARMOR TREAT IP 233	Gallon	\$62.16	50	\$3108.00
3.1.13	Herbicide - Lontrel Turf and Ornamental Herbicide (a.i. clopyralid:3,6-dichloro-2-pyridine carboxylic acid 40.9%) or Equal.	<u>QTS</u> 4QTS/GAL	Gallon	\$677.60	3	\$2032.80
3.1.14	Lime - Solu-cal Enhanced high calcium lime or Equal ; 38% calcium, micro-greens grade 70SGN. Impregnated with 2% PJCA Organic humic/fulvic acid OMRI listed for organic use	*Limited Supply of Solu-cal Lime & may not be enough to supply bid amount when needed.	Ton	No Bid	5	
3.1.15	Anti Foaming Agent - Cleary's Tank Defoamer (a.i. Dimethylpolysiloxane Suspension 1.25%) or Equal.	Knock Down by <u>QTS</u> PRECISION LABS (12X1QT CASE)	Gallon	\$64.60	9	\$581.40
3.1.16	Plant anti-transpirant - Gordon's TransFilm anti transpirant or Equal . Primary active ingredients minimum: polymeric terpenes 8.18%, oxidized polyethylene 9.12%, inert 82.70% .	AQUALOCK ANTI-TRANSPIRANT by PRECISION LABS	Gallon	\$30.36	15	\$455.40
3.1.17	Insecticide - Bifenthrin 7.9 (minimum a.i. Bifenthrin 7.9%) or Equal	TALSTAR SELECT	Gallon	\$62.40	3	\$187.20

Exhibit A - Pricing Page  
 West Virginia Division of Natural Resources-  
 Pipestem State Park Golf Course Chemicals

Item No.	Description	Vendors submitted Manufacturer for Equal Consideration	Unit of Measure	Unit Cost	Qty	Extended Price
3.1.18	Fungicide - Subdue Maxx fungicide or Equal for control of Pythium. A.I. Mefenoxam: (R)-2-[(2,6-dimethylphenyl) methoxyacetyl amino] propionic acid methyl ester 22.5%. Other ingredients: 77.5% Total: 100% or post patent Equal.	QUALI-PRO MEFENOXAM A.G. by FARM SAVER	Gallon	\$ 380. <sup>40</sup>	5	\$ 1,902. <sup>00</sup>
3.1.19	Fungicide - Fore 80WP with Rainshield A.I Mancozeb 80% or Equal		Case	\$ 507. <sup>20</sup>	3	\$ 1,521. <sup>60</sup>
3.1.20	Fungicide - Banner Maxx A.I. (Propiconazole 14.3%) or Equal.	ARMOR TECH PP2143	Gallon	\$ 78. <sup>36</sup>	15	\$ 1,175. <sup>40</sup>
3.1.21	Fertilizer - Contec DG 18-3-18 or Equal. (50 Lb. Bag)	Agency Priced Nothing below this price!	50 Lb. bag <del>40 Lb. bag</del>	\$ 53. <sup>40</sup>	<del>60</del> 75	\$ 4,005. <sup>00</sup>
3.1.22	Insecticide - DuPont LLC Acelepryn or Equal.		Gallon	NO BID	14	
<b>Total Bid Amount:</b>						<b>\$ 29,045.<sup>90</sup></b>

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

Items 3.1.18 No BID  
 Items 3.1.19 No BID