

## A Fungicide for the Prevention and Control of Certain Diseases of Turfgrass and Ornamentals

## ACTIVE INGREDIENT: % B Iprodione:

% BY WT.

iprodione:	
3-(3,5-dichlorophenyl)-N-	
(1-methylethyl)-2,4-dioxo-	
1-imidazolidinecarboxamide)*	23.8%
OTHER INGREDIENTS:	76.2%
TOTAL:	100.0%
*Equivalent to 2 pounds Iprodione pe	r gallon

\*Equivalent to 2 pounds Iprodione per gallon. This product contains petroleum distillate.

# KEEP OUT OF REACH OF CHILDREN

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

EPA Reg. No: 53883-375-86064 EPA Est. No: 37429-GA-001<sup>BT</sup>, 37429-GA-002<sup>BO</sup>

Letter(s) in lot number correspond(s) to superscript in EPA Est. No.

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

	FIRST AID
IF SWAL- LOWED:	<ul> <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>
IF IN EYES:	<ul> <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>
IF ON SKIN OR CLOTH- ING:	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- HALED:	<ul> <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>
	HOT LINE NUMBER
poison contr	oduct container or label with you when calling a rol center or doctor, or going for treatment. You may SafetyCall <sup>®</sup> (866) 897-8050 for emergency medical formation.

#### NOTE TO PHYSICIAN

This product may pose an aspiration pneumonia hazard. Contains petroleum distillates.

## Net Contents: 2.5 Gallons

## **United Turf Alliance**

## PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

## CAUTION

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

## PERSONAL PROTECTIVE EQUIPMENT (PPE)

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

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

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

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

Follow manufacturer's instructions for cleaning/maintaining personal protective equipment (PPE). If no such 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 overlaying extremely shallow ground water, areas with in-field canals or ditches that drain to surface water, areas not separated from adjacent surface waters with vegetated filter strips, and areas overlaying tile drainage systems that drain to surface water.

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

## DIRECTIONS FOR USE

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

Read entire label before using this product.

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

## AGRICULTURAL USE REQUIREMENTS

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

Do not enter or allow worker entry into treated areas during the restricted entry interval of 12 hours for ornamental uses. The restricted entry interval for all other WPS uses is 24 hours.

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

- Coveralls
- Chemical-resistant gloves such as barrier laminate, nitrile rubber (≥ 14 mils), neoprene rubber (≥ 14 mils), or viton (≥ 14 mils)
- Shoes plus socks

## NON-AGRICULTURAL USE REQUIREMENTS

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

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

## **GENERAL USE DIRECTIONS**

ArmorTech IP 238 is a fungicide recommended for control of spring, summer, fall and winter diseases on non-residential turf located on golf courses, sod farms and institutional areas where fine turf is grown, and on non-residential ornamental flowers and foliage plants grown in field and landscape nurseries or greenhouses, and in conifer nurseries.

Follow all directions, recommendations and precautions and limitations on this label to obtain optimum disease control and to prevent crop injury.

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

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

## TURF

Applied according to good turf management practices, ArmorTech IP 238 is an effective tool in controlling spring, summer and fall diseases and in controlling certain winter diseases.

**Mixing and Application Instructions:** Use the following tables to determine the recommended rates depending on the disease. Prepare only the amount of spray mixture required for a single day's (12 hours) application to avoid decomposition of the product. Add the required amount of ArmorTech IP 238 to 0.5 to 10 gal water per 1,000 sq. ft. Agitate the spray mixture during mixing and application in a properly calibrated sprayer. Apply when disease first appears or when disease development can be expected. Apply to ensure uniform coverage of the turf but do not drench.

Use the higher rate and/or shorter spray interval between applications for severe disease conditions. The lower rates and longer intervals between applications are recommended for light to moderate disease pressure.

#### **Restrictions:**

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

## TURF DIRECTIONS FOR USE – Spring, Summer and Fall Diseases

DISEASE	APPLICATION RATE (FL. OZ. PER 1,000 SQ.FT.)	APPLICATION INSTRUCTIONS	RESTRICTIONS AND COMMENTS
Anthracnose ( <i>Colletotrichum</i> )	4 to 8	Apply ArmorTech IP 238 as a tank mix with registered triflox- ystrobin or fosetyl-al products, or other fungicides which control anthracnose.	For suppression only.
Corticium Red Thread ( <i>Laetisaria fuciformis</i> )	4	Apply as a preventative every 14 days as long as required.	
Curvularia ( <i>Curvularia</i> sp.)	4 to 8	Apply as a preventative every 14 days as long as required.	For use on Bermuda Grass only
Dollar Spot ( <i>Lanzia</i> spp. and <i>Moellerodiscus</i> spp.) Brown Patch ( <i>Rhizoctonia solani</i> ) Leaf Spot such as <i>Helminthosporium</i> Leaf Spot caused by ( <i>Drechslera</i> spp.)	3 to 4 [Dollar Spot control on Fairways: 2 to 4]	Greens and Tees: Make repeat applications at 14 to 21 day intervals as long as required. Fairways and Other Turf Ar- eas: Make repeat applications at 14 to 28 day intervals as long as required.	
Fusarium Blight ( <i>Fusarium</i> spp.) Necrotic Ring Spot # ( <i>Leptosphaeria</i> <i>korrae</i> )	8	Apply as a preventative foliar spray when conditions first favor disease development. Apply repeat applications as needed at 28-day intervals.	# Not registered for use in California.
Fusarium Patch ( <i>Microdochium</i> <i>nivalis</i> )	4 to 8	Make additional applications at 14 to 21 day intervals as long as required.	For application in the Pacific Northwest Only – West of the Cascade Mountains
Large Patch ( <i>Rhizoctonia solani</i> )	4	Make first application in fall when conditions are favorable for disease development but no symptoms are visible. Apply in the spring as needed on 14-21 day spray intervals.	Not registered for use in California.

## TURF DIRECTIONS FOR USE – Winter Diseases

DISEASE	APPLICATION RATE (FL. OZ. PER 1,000 SQ.FT.)		RESTRICTIONS AND COMMENTS
Gray Snow Mold ( <i>Typhula</i> spp.) Pink Snow Mold ( <i>Fusarium nivale</i> )	4 to 8	Make an application prior to the first permanent snow cover. A second applica- tion may be made during a mid-winter thaw.	See additional directions below for use of tank mixes of ArmorTech IP 238 plus other fungicides for control of this disease.

## TANK MIXES

Additional Disease Control: ArmorTech IP 238 is compatible with most commonly used registered fungicides containing flutolanil, azoxystrobin and trifloxystrobin. These tank-mixes are useful for control of additional diseases in turf. Follow the label directions and use precautions for all tank-mix partners and ensure that the use of that fungicide is registered for use on turf. Verify the compatibility of the tank mix partner with ArmorTech IP 238 before making an application.

When applied as a tank-mix, follow all restrictions noted above for use of ArmorTech IP 238 alone.

**Broad Spectrum Disease Control and Resistance Management:** Apply ArmorTech IP 238 with the registered thiophanate-methyl fungicide product, Quali-Pro® TM 4.5 Flowable, for broad spectrum turf disease control. This tank mixture aids in resistance management practices required for other fungicides susceptible to resistance. Apply 3 fl. oz. per 1,000 sq. ft. of ArmorTech IP 238 with Quali-Pro® TM 4.5 Flowable according to the following table:

Disease Pressure	Low	Medium (for more dollar spot and brown patch)	High
Amount of thiophan- ate-methyl in tank mix	1.0 fl. oz./1000 sq. ft.	1.0 fl. oz./1000 sq. ft	2.0 fl. oz./1000 sq. ft.

Summer Stress Complex/Summer Decline: Tank-mix applications of 4 to 8 fl. oz. per 1,000 sq. ft. of Chipco<sup>®</sup> Signature™ Fungicide with 3 to 4 fl. oz. per 1,000 sq. ft. ArmorTech IP 238 to help manage these diseases.

**Pythium Blight:** Pythium blight will be controlled by a tank-mix of ArmorTech IP 238 with one of the following: fosetyl-al or propamocarb hydrochloride fungicides. Follow the label directions and use precautions for all tank-mix partners and ensure that the use of that fungicide is registered for use on turf.

**Gray Snow Mold (***Typhula* spp.): To use ArmorTech IP 238 as a tank-mix in sites where continuous snow cover occurs, use 4 to 8 fl. oz. per 1,000 sq. ft. with one of the following registered products: chlorothalonil, such as Quali-Pro<sup>®</sup> Chlorothalonil 720 SFT, or pentachloronitrobenzene (PCNB) fungicides. Use the rates according to the directions on the labels of the registered tank mix partner products.

For optimum control, application must be made in autumn prior to snow cover. Ensure thorough coverage is attained by dilution in sufficient water (1 to 5 gallons of spray solution per 1,000 sq. ft.). If the turf has been frozen prior to application, use the higher rate of ArmorTech IP 238, and make a repeat application only if a thaw occurs and all snow cover has melted.

## ORNAMENTALS - FIELD, LANDSCAPE AND GREENHOUSE ORNAMENTALS AND CONIFER NURSERIES

Applied according to the label directions below, ArmorTech IP 238 may be applied either as a foliar spray, as a soil drench, or as a dip application to ornamental flowers and foliage to control certain diseases.

## **Restrictions:**

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

**Mixing and Application Instructions:** Use the tables below to determine the recommended rates of ArmorTech IP 238. Prepare only the amount of spray mixture required for a single day's (12 hours) application to avoid decomposition of the product. Add the required amount of ArmorTech IP 238 to water. Agitate the spray mixture during mixing and application in a properly calibrated sprayer. Apply when disease first appears or when disease development can be expected. Follow additional directions, below, for foliar, drench or dip applications.

## List of Diseases:

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

## TABLE 1

### List of Ornamentals:

ArmorTech IP 238 is recommended for use on the following ornamentals. Although ArmorTech IP 238 has been tested for plant tolerance and found to be acceptable for the specific genera and species listed on this label, it is impossible to test every species or variety of ornamental plant grown under different conditions for its tolerance to ArmorTech IP 238 Fungicide. The user should test a few plants using the recommended rates if they are not listed on this label and evaluate for possible phytotoxicity before using ArmorTech IP 238 on a large scale

Ageratum (1 to 7)	Dieffenbachia (1 to 7)	Peach (ornamental) (1 to 7)
Ajuga (1 to 7)	Dizygotheca (1 to 7)	Peperomia (1 to 7)
Almond (ornamental) (1 to 7)	Dogwood (1 to 7)	Periwinkle (1 to 7)
Alyssum (1 to 7)	Dracena (1 to 7)	Philodendron (1 to 7)
Andromeda (1 to 7)	English Ivy (1 to 7)	Phlox (1 to 7)
Aphelandra (1 to 7)	Episcia (1 to 7)	Pilea (1 to 7)
Artemisia (1 to 7)	Euonymous (1 to 7)	Pine (1 to 7)

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

**Foliar Applications:** Make applications of ArmorTech IP 238 when disease develops or if conditions are favorable for disease development. Foliar applications may be made to all ornamentals listed in Table 1.

DISEASE	APPLICATION RATE OF ArmorTech IP 238 (QT. PER ACRE)	APPLICATION INSTRUCTIONS	RESTRICTIONS	
Aerial Web Blight ( <i>Rhizoctonia</i> sp.)	1.0 to 2.5	Apply ArmorTech IP 238 as a foliar spray in sufficient	Do not apply ArmorTech IP 238 on <i>Spathiphylium</i>	
Alternaria Leaf Blight ( <i>Alternaria euphorbiae</i> )	-	water to ensure thorough coverage of the plant foliage.	(Peace lily or White An- thurium). Do not apply more than	
Alternaria Leaf Spot (Alternaria panax)		Make repeat applications as needed every 7 to 14 days.	2.5 qts. product/acre per application.	
(Alternaria tenissima) Botrytis Blight ( <i>Botrytis</i> sp.)		Under severe disease pres- sure, use the highest rate listed and/or the shortest interval between applica-	Do not make more than 4 applications per crop per year.	
Fusarium Leaf Spot ( <i>Fusarium moniliforme</i> )		tion	tions. When disease pressure is	
Helminthosporium Leaf Spot ( <i>Helminthosporium</i> sp.)		light to moderate, use the lower rates and longer spray intervals.		

**Drench Applications:** Use ArmorTech IP 238 as a soil drench at seeding and/or after transplanting to control *Rhizoctonia.* Drench applications may be made to all ornamentals listed in Table 1 except Impatiens and Pothos.

DISEASE	APPLICATION RATE OF ArmorTech IP 238 (AMOUNT PER 100 GAL)	APPLICATION INSTRUCTIONS	RESTRICTIONS
Stem and Root Rot ( <i>Rhizoctonia</i> spp.)	13 fl. oz.	Apply ArmorTech IP 238 using 1 to 2 pints of the drench solution per sq. ft. of soil. Make repeat applications as needed every 14 days. Use the highest rate listed for severe disease pres- sure and the lower rate for light to moderate disease pressure.	Do not exceed a total of 35 flu- id oz. product/1000 sq. ft. (24 lb Al per acre) per year. Do not make more than 6 applications per year. <b>NOTE:</b> Do not use ArmorTech IP 238 as a drench on Impa- tiens and Pothos. Do not use ArmorTech IP 238 on <i>Spathiphylium</i> (Peace lily or White Anthurium).

## FOR DISEASES SPECIFIC TO CERTAIN ORNAMENTALS

Foliar Applications: Make applications of ArmorTech IP 238 when disease develops or if conditions are favorable for disease development.

DISEASE	ORNAMENTALS	APPLICATION RATE OF ArmorTech IP 238 (QT. PER ACRE)	APPLICATION INSTRUCTIONS
Alternaria Leaf Blight ( <i>Alternaria zinniae</i> )	For use on Zinnia	1.0 to 2.5	Apply ArmorTech IP 238 as a foliar spray in sufficient water to ensure thorough coverage of
Ink Spot ( <i>Drechslera iridis</i> )	For use on Iris		the plant foliage.
Ray Blight	For use on Chrysan-		Make repeat applications as needed every 7 to 14 days.
(Ascochyta chrysanthami)	themum		Under severe disease pressure,
Tulip Fire ( <i>Botrytis tulipae</i> )	For use on Tulips	use the highest rate li or the shortest interva applications. Is When disease pressu light to moderate, use	use the highest rate listed and/ or the shortest interval between
Daffodil Leaf Scorch ( <i>Stagnospora curtissi</i> )	For use on Daffodils		When disease pressure is light to moderate, use the lower rates and longer spray
Blossom Blight ( <i>Monilinia fructicola</i> )	For use on Cistena Plum		intervals.

## **Restrictions:**

• Do not apply more than 2.5 qts. product/acre per application.

• Do not make more than 4 applications per crop per year.

Dip Applications: Apply ArmorTech IP 238 as a dip to control diseases of the ornamentals listed in the table below.

DISEASE	ORNAMENTALS	APPLICATION RATE OF ArmorTech IP 238 (QT. PER 100 GAL.)	APPLICATION INSTRUCTIONS
Botrytis Storage Rot ( <i>Botrytis</i> sp.)	For use on Roses	1.0	Dip the rose plant roots for 5 min- utes prior to cold storage.
Cylindrocladium Blight and Wilt ( <i>Cylindrocladium</i> <i>scoparium</i> )	For use on Azalea and Rhododendron	1.0	Dip cuttings of azaleas and rho- dodendron for 5 minutes before planting.
Fusarium Corm Rot (Fusarium oxysporum)	For use on Gladiolus	2.0	Dip the gladiolus corms for 5 min- utes prior to storage.

## TANK MIXES

Additional Disease Control: Other diseases that may infect ornamentals can be treated with tank mixes of ArmorTech IP 238 with other commonly used fungicides. *Pythium* and *Phytophthora* are controlled by tank-mixes of ArmorTech IP 238 with any fosetyl-al-containing pesticide registered for use on ornamentals. Refer to the label of the tank-mix partner for a full list of diseases controlled, application rates and directions for use. Verify the compatibility of the tank mix partner with ArmorTech IP 238 before making an application.

When applied as a tank mix, follow all restrictions noted above for ornamental uses when ArmorTech IP 238 is used alone.

## DIRECTIONS THROUGH SPRINKLER IRRIGATION SYSTEMS

Do not use through sprinkler irrigation systems in California.

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

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

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

**APPLICATION INSTRUCTIONS:** First prepare a suspension of ArmorTech IP 238 in a mix tank. Fill tank with ½ to ¾ the desired amount of water. Start mechanical or hydraulic agitation. Add the required amount of ArmorTech IP 238 and then the remaining volume of water. (Suspension concentrations using the appropriate dosage per acre recommended on this label of ArmorTech IP 238 per 1 to 4 gallons of water are recommended). Then set sprinkler to deliver 0.1 to 0.3 inch of water per acre. Start sprinkler and uniformly inject the suspension of ArmorTech IP 238 into the irrigation water line so as to deliver the desired rate per acre. The suspension of ArmorTech IP 238 should be injected with a positive displacement pump into the main line ahead of a right angle turn to ensure adequate mixing. If you should have any other questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.

**Note:** When treatment with ArmorTech IP 238 has been completed, further field irrigation over the treated area should be avoided for 24 to 48 hours to prevent washing the chemical off the crop.

## 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 shutdown. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops. The irrigation line or water pump must include a functional pressure switch, which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected. Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with system interlock.

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

Crop injury or lack of effectiveness may result from 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 must shut the system down and make necessary adjustments should the need arise.

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

## SPRAY DRIFT

Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment-and-weather-related factors determines the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making 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 the length of the wingspan or rotor.
- 2. Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees.

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

## **Aerial Drift Reduction Advisory Information**

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

## **Controlling Droplet Size:**

- Volume Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- Pressure Do not exceed the nozzle manufacturer's recommended pressures. For many nozzle types lower
  pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead
  of increasing pressure.
- Number of 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:** This pesticide should only be applied when the potential for drift to adjacent sensitive areas (e.g., residential areas, bodies of water, known habitats for threatened or endangered species, non-target crops) is minimal (e.g., when wind is blowing away from the sensitive areas).

## STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Store only in original container.

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

### CONTAINER DISPOSAL:

Nonrefillable Container (five gallons or less): Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

## LIMITATION OF WARRANTY AND LIABILITY

Read the entire directions for use, conditions of warranties and limitations of liability before using this product. If terms are not acceptable, return the unopened product container at once.

By using this product, user or buyer accepts the following CONDITIONS, DISCLAIMER OF WARRANTIES, and LIMITATIONS OF LIABILITY.

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

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