





Performance Quality Value

November 15, 2005

Document Processing Desk (NOTIF)
Office of Pesticide Programs (7504C)
U.S. Environmental Protection Agency
1801 S. Bell Street
Room 226A, Crystal Mall 2
Arlington, VA 22202

Subject: Chlorothalonil 6 - EPA Reg. No. 34704-870

Loveland Products, Inc., is submitting the enclosed notification to add an alternate brand name to our Chlorothalonil 6 - EPA Reg. No. 34704-870 registration. The alternate name is Ensign 720.

Please find the following enclosed:

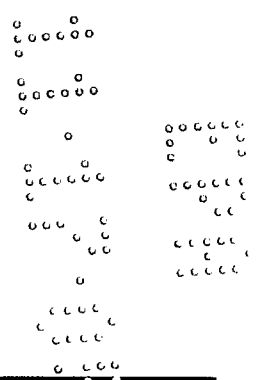
- 1. Application for Registration
2. 5 copies of label

Please contact me at 970-347-1468 or by e-mail: scott.baker@uap.com if there are any questions or comments concerning this submission.

Sincerely,

Handwritten signature of Scott Baker

Scott Baker
Registration Manager
Enclosures



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# ENSIGN 720

## Agricultural Fungicide

### A Broad Spectrum Agricultural Fungicide

**ACTIVE INGREDIENT:**

Chlorothalonil (tetrachloroisophthalonitrile)	54.0%
<b>OTHER INGREDIENTS:</b>	<b>46.0%</b>
<b>TOTAL</b>	<b>100.0%</b>

Contains 6.0 lbs. Chlorothalonil per gal.  
(720 grams per liter)

## KEEP OUT OF REACH OF CHILDREN WARNING — AVISO

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

EPA REG. NO. 34704-870  
EPA EST. NO. 50534-TX-1  
NET WEIGHT 1 GALS. (3.78 L)

IHT

11R05

## PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

### WARNING

Causes eye irritation. May cause skin irritation. May be a potential skin sensitizer.

Do not get in eyes. Avoid prolonged contact with skin. Avoid breathing spray mist. Do not take internally.

**NOTE TO USER:** This product may produce temporary allergic side effects characterized by redness of the eyes, mild bronchial irritation and redness or rash on exposed skin areas. Persons having allergic reaction should contact a physician.

**Personal Protective Equipment (PPE)**

**Mixers, Loaders, Applicators and all other handlers must wear:** Long-sleeved shirt and long pants, chemical resistant gloves made of any waterproof material - Category A (e.g. barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyethylene, polyvinyl chloride (PVC) or Viton), shoes plus socks, protective eyewear, and a dust/mist filtering respirator (MSHA/NIOSH approval number prefix TC-21C), or a NIOSH approved respirator with any N, R, P or HE filter.

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.

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

#### USER SAFETY RECOMMENDATIONS

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

## FIRST AID

<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 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 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 swallowed:</b>	<ul style="list-style-type: none"> <li>• Call a poison control center or doctor immediately for treatment advice.</li> <li>• Have affected person sip a glass of water if able to swallow.</li> <li>• Do not induce vomiting unless told by a poison control center or doctor.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>

**NOTE TO PHYSICIAN:** Probable mucosal damage may contraindicate the use of gastric lavage. Persons having a temporary allergic reaction respond to treatment with antihistamines or steroid creams and/or systemic steroids.

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

**FOR A MEDICAL EMERGENCY INVOLVING THIS PRODUCT CALL:**  
1-800-301-7976.

## ENVIRONMENTAL HAZARDS

This product is toxic to aquatic invertebrates, and wildlife. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Drift and runoff may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment wash water or rinsate. This chemical is known to leach through soil into groundwater under certain conditions as a result of label use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

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

## 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, or pets either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

## AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard. Do not enter or allow workers to enter treated areas during the restricted-entry interval (REI) of 12 hours.

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

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

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### Agricultural Use Requirements cont'd.:

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

### NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are not within the scope of the Worker Protection Standard for agricultural pesticides, 40 CFR part 170.

The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries or greenhouses.

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

### STORAGE AND DISPOSAL

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

**STORAGE:** Store in a cool place. Protect from excessive heat.

**PESTICIDE DISPOSAL:** Pesticide wastes are toxic. Improper disposal of excess pesticide, pesticide spray or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

**CONTAINER DISPOSAL:** 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, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

**RETURNABLE REFILLABLE CONTAINER:** If this product is packed in a returnable, refillable container, then, after use, do not rinse container. Return container, intact, to point of purchase. This container must only be refilled with this product. **DO NOT REUSE THE CONTAINER FOR ANY OTHER PURPOSE.** Before refilling, inspect thoroughly for damage such as cracks, punctures, abrasions, and damaged or worn threads on closure devices. Check for leaks after refilling and before transport.

### GENERAL INFORMATION

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

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

This product can be used effectively in dilute or concentrate sprays. Thorough, uniform coverage is essential for disease control.

### GENERAL PRECAUTIONS AND RESTRICTIONS

DO NOT use on greenhouse-grown crops.

DO NOT combine this product in spray tank with pesticides, surfactants or fertilizers, unless your prior use has shown the combination physically compatible, effective and non-injurious under your conditions of use. Do not combine this product with Dipek® 4L, Foil®, Triton® AG-98, Triton® B-1956 or Latron® B-1956 as phytotoxicity may result from the combination when applied to the crops on this label.

This product must not be applied within 150 ft. (for aerial applications) or 25 ft. (for ground applications) of marine/estuarine water bodies unless there is an untreated buffer area of that width between the area to be treated and the water body.

### SPRAY DRIFT PRECAUTIONS

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

The following drift management requirements must be followed to avoid off target drift movement from aerial applications to agricultural field crops. These requirements do not apply to forestry applications, public health uses or applications using dry formulations.

1. The distance of the outer most nozzles on the boom must not exceed  $\frac{3}{4}$  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.

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

The applicator should be familiar with and take into account the information covered in the [Aerial Drift Reduction Advisory Information](#).

### Aerial Drift Reduction Advisory Information

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

#### Information on Droplet Size

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

#### Controlling Droplet Size

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

#### Boom Length

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

#### 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 directions 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.

### APPLICATION

Dosage rates on this label indicate pints of this product per acre, unless otherwise stated. Under conditions favoring disease development the high rate specified and shortest application interval should be used.

**Note:** Slowly invert container several times to assure uniform mixture.

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

#### Field and Row Crops

Apply this product in sufficient water to obtain adequate coverage of foliage. Gallonage to be used will vary with crop and amount of plant growth. Spray volume usually will range from 20-150 gallons per acre (200 to 1400 liters per hectare) for dilute sprays and 5 to 10 gallons per acre (50-100 liters per hectare) for concentrate ground sprays and aircraft applications. Both ground and aircraft methods of application are recommended unless specific directions are given for a crop. Application through sprinkler irrigation systems is not recommended unless specific directions are given for a crop. See applications and calibration instruction below.

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**Application and Calibration Techniques for Sprinkler Irrigation**

Apply this product only through center pivot, motorized lateral move, traveling gun, solid set and portable (wheel move, side roll, end tow, or hand move) irrigation system(s). DO NOT apply this product through any other type of irrigation system.

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

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

Do not apply this product through irrigation systems connected to a public water system. "Public water system" means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days per year. Controls for both irrigation water and pesticide injection systems must be functionally interlocked, so as to automatically terminate pesticide injection when the irrigation water pump motor stops. A person knowledgeable of the irrigation system and responsible for its operation shall be present so as to discontinue pesticide injections and make necessary adjustments, should the need arise.

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

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

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

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.

The irrigation line or water pump must include a functional pressure switch, which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

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

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

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

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

Fill chemical supply tank of injection equipment with water. Operate system for one complete revolution or run across the field, measuring time required, amount of water injected, and acreage covered. Thoroughly mix recommended amount of this product for acreage to be covered into same amount of water used during calibration and inject into system continuously or one revolution or run. Mixture in the chemical supply tank must be continuously agitated during the injection run. Shut off injection equipment after one revolution or run, but continue to operate irrigation system until this product has been cleared from last sprinkler head.

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

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

Determine acreage covered by sprinkler. Fill tank of injection equipment with water and adjust flow to use contents over a thirty to forty-five minute period. Mix desired amount of this product for acreage to be covered with water so that the total mixture of this product plus water in the injections tank is equal to the quantity of water used during calibration and operate entire system at normal pressures recommended by the manufacturer of injection equipment used for amount of time established during calibration. No agitation should be required. This product can be injected at the beginning or end of the irrigation cycle or as a separate application. Stop injection equipment after treatment is completed and continue to operate irrigation system until this product has been cleared from last sprinkler head.

Crop	Diseases	Rate Per Acre (lbs. a.i./A)	Application Directions
Asparagus (Except Arizona)	Rust, Purple Spot, Cercospora Leaf Blight	2.0 to 4.0	Begin application after harvest of spears, when conditions favor disease development on ferns, generally when leaf wetness occurs. Repeat applications at 2 to 4 week intervals until ferns are no longer productive. Use high rate and shortest application interval when conditions favor disease development. DO NOT apply within 190 (120 days in California) days before harvest. DO NOT apply more than 12 pints product per year.
Bean (Snap)	Rust	1-3/8 - 3 pts. (1.0 to 2.25)	Use in sufficient water to obtain adequate coverage. Begin applications during early bloom stage or when disease first threatens and repeat as necessary (the minimum retreatment interval is 7 days) to maintain control. DO NOT apply more than 12 pints of this product (9 lbs. a.i.) per acre during each growing season. DO NOT apply within 7 days of harvest.
	Botrytis blight (gray mold)	3 pts (2.25)	
Beans (Dry) (except soybeans)	Rust, Anthracnose, Downy mildew, Cercospora leaf spot (blackeye only), Ascocytia blight	1-3/8 - 2 pts. (1.0 to 1.5)	Use in sufficient water to obtain adequate coverage. Begin applications during early bloom stage and repeat 7-10 day intervals (the minimum retreatment interval is 7 days) to maintain control. DO NOT apply more than 12 pints of this product (9 lbs. a.i.) per acre during each growing season. DO NOT apply within 14 days of harvest. This product may be applied through sprinkler irrigation equipment. See calibration directions which appear on the product label.
Cabbage, Chinese Cabbage (tight-headed varieties only), Cauliflower, Broccoli, Chinese Broccoli, Brussels Sprouts	Alternaria leaf spot, Downy mildew	1 1/2 pts. (1.125)	Use in sufficient water to obtain adequate coverage. Begin applications after transplants are set in field, or shortly after emergence of field-seeded crop, or when conditions favor disease development. Repeat at 7-10 day intervals or as necessary (the minimum retreatment interval is 7 days) to maintain control. DO NOT apply more than 16 pints of this product (12 lbs. a.i.) per acre during each growing season. DO NOT apply within 7 days of harvest to Chinese cabbage or Chinese broccoli. For field-seeded Brussels sprouts, begin applications at time of early sprout development or when conditions favor disease development. Repeat at 7-10 day intervals or as necessary (the minimum retreatment interval is 7 days) to maintain control.
	Ring spot (California only)	2 pts. (1.5)	
Carrot	Cercospora (Early) blight, Alternaria (Late) blight	1 1/2 - 2 pts. (1.125 to 1.5)	Use in sufficient water to obtain adequate coverage. Start applications when disease threatens and repeat at 7-10 day intervals or as necessary (the minimum retreatment interval is 7 days) to maintain control. DO NOT apply more than 20 pints of this product (15 lbs. a.i.) per acre during each growing season. This product may be applied through sprinkler irrigation equipment (solid set, portable wheel move, motorized lateral move or center pivot systems only). See calibration directions preceding this section.
Celery	Cercospora (Early) blight, Septoria (Late) blight, Basal stalk rot ( <i>Rhizoctonia solani</i> )	2 - 3 pts. (1.5 to 2.25)	Use in sufficient water to obtain adequate coverage. Start applications when transplants are set in the field and repeat at a 7-day interval as needed to maintain control (the minimum retreatment interval is 7 days). DO NOT apply more than 24 pints of this product (18 lbs. a.i.) per acre during each growing season. DO NOT apply within 7 days of harvest. This product may be applied through sprinkler irrigation equipment (solid set, portable wheel move, motorized lateral move or center pivot systems only). See calibration directions preceding this section.
	Pink rot (Suppression-7 day schedule)	3 pts. (2.25)	
	Early blight, Late blight	1 1/2 - 2 pts. (1.125 to 1.5) per 100 gal.	
Corn (Sweet), Corn grown for seed	Helminthosporium leaf blights, Rust	3/4 - 2 pts. (0.6 to 1.5)	Use in sufficient water to obtain adequate coverage. Begin applications when conditions favor disease development and repeat at 7-day intervals as required to maintain control (the minimum retreatment interval is 7 days). Under severe disease conditions, use 1 1/2 to 2 pints of this product per acre. DO NOT apply more than 12 pints of this product (9 lbs. a.i.) per acre during each growing season. DO NOT apply within 14 days of harvest. DO NOT apply to sweet corn to be processed. DO NOT allow livestock to graze in treated fields. DO NOT ensile treated corn or use as livestock forage.

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Crop	Diseases	Rate Per Acre (lbs. a.i./A)	Application Directions
Cranberry	Fruit rots, Lophodermium leaf/twig blight	4 - 6 1/2 pts. (3.0 to 4.9)	Apply at early bloom and repeat at 10 to 14 day intervals (minimum retreatment interval is 10 days). Under severe disease conditions, use the 6 1/2 pint per acre rate on a 10-day schedule. DO NOT apply this product more than 3 times per season. DO NOT apply more than 20 pints of this product (15 lbs. a.i.) per acre during each growing season. DO NOT apply within 50 days of harvest. DO NOT apply to beds when flooded or allow release of irrigation water from beds for at least 3 days following application. This product may be applied through sprinkler irrigation equipment. Use 300 gals. of water per acre through solid set systems only. See calibration directions preceding this section.
Cucurbits: Cucumber, Cantaloupe, Muskmelon, Honeydew melon, Watermelon, Squash, Pumpkin	Anthracoese, Downy mildew, Target spot	1 1/2 - 2 pts. (1.125 to 1.5)	Use in sufficient water to obtain adequate coverage. Begin applications when plant are in first true leaf stage or when conditions are favorable for disease development. Repeat applications at 7-day intervals (the minimum retreatment interval is 7 days). DO NOT apply more than 21 pints of this product (15.75 lbs. a.i.) per acre during each growing season. This product may be applied through sprinkler irrigation equipment (solid set, portable wheel move or center pivot systems only). See calibration directions preceding this section. Note: Spraying mature watermelons may result in sunburn of the upper surface of the fruit. DO NOT apply this product to watermelons when any of the following conditions are present: 1. Intense heat and sunlight; 2. Drought conditions; 3. Poor vine canopy; 4. Other crop and environmental conditions which may be conducive to increased natural sunburn. DO NOT combine this product with anything except water for application to watermelons unless your prior use has shown the combination to be non-injurious to watermelons under your conditions of use.
	Cercospora leaf spot, Gummy stem blight (black rot), Alternaria leaf blight, Scab, Powdery mildew (Sphaerotheca only)	2 - 3 pts. (1.5 to 2.25)	
Grasses Grown for Seed	Stem rust, Leaf rust, Stripe rust, Septoria leaf spot, Glume blotch, Bipolaris and Drechslera leaf spots	1 1/2 pts. (0.75 to 1.125)	Use in sufficient water to obtain adequate coverage. Begin applications during stem elongation when conditions favor disease development. Re-apply at flag (top) leaf emergence and repeat applications at 14-day intervals (minimum retreatment interval is 14 days). DO NOT apply within 14 days of harvest. DO NOT allow livestock to graze in treated areas or feed treated plant parts to livestock.
	Selenophoma (eyespot)	1 - 2 pts. (0.75 to 1.5)	
Mint (Indiana, Michigan and Wisconsin only)	Rust, Septoria leaf spot	1 3/8 pts. (1.0)	Use in sufficient water to obtain adequate coverage, normally 20 to 150 gallons per acre for dilute sprays and 5-10 gallons per acre for concentrate ground and aircraft applications. Begin applications when emerging plants are 4-8 inches high. Repeat applications at 7-10 day intervals or as necessary to maintain control (the minimum retreatment interval is 7 days). DO NOT apply more than 3 times per season. DO NOT apply more than 4 pints of this product (3 lbs. a.i.) per acre during each growing season. DO NOT apply within 80 days of harvest. DO NOT feed fresh or extracted mint hay from treated fields to livestock.
Onion (Dry bulb) and Garlic	Botrytis leaf blight/blast, Botrytis neck rot (suppression), Purple blotch, Downy mildew (suppression)	1 - 3 pts. (0.75 to 2.25)	Apply in sufficient water to obtain thorough coverage of tops. This product is recommended for use with disease monitoring systems which adjust fungicide rates and frequency of application according to disease hazard. Apply as follows:
		Low Disease Hazard & Prior to Infection	Low Disease Hazard & Some Disease Present
		High Disease Hazard	
Rate per Acre:	1 pt.	1-3/8 pts.	3 pts.
Frequency:	10 days	7 to 10 days	7 days
For suppression of neck rot (Botrytis spp.) during storage, a minimum of three weekly applications prior to lifting, using 1-3/8 pints of this product per acre, is recommended. The minimum retreatment interval is 7 days. DO NOT apply more than 20 pints of this product (15 lbs. a.i.) per acre during each growing season. DO NOT apply within 7 days of harvest.			

Crop	Diseases	Rate Per Acre (lbs. a.i./A)	Application Directions
Onion (Green bunching), Leek, Shallot, Onion grown for seed	Botrytis leaf blight/blast, Purple blotch, Downy mildew (suppression)	1 1/2 - 3 pts. (1.125 to 2.25)	Use in sufficient water to obtain thorough coverage of tops. Begin applications prior to favorable infection periods, and repeat at 7-10 day intervals for as long as conditions favor disease (the minimum retreatment interval is 7 days). Use the high rate and a 7-day schedule of applications when heavy dew or rain persists. DO NOT apply more than 3 times per season or within 14 days of harvest on green bunching onions, leeks, or shallots. If additional disease control is needed before harvest, use another registered fungicide.
Papaya	Alternaria fruit spot, Anthracnose, Stem end rot	2 - 3 pts. (1.5 to 2.25)	Apply with ground equipment only, in sufficient water to obtain adequate coverage of fruit and leaves. Begin treatment when conditions favor development of disease and continue treatments at 14 day intervals until weather conditions no longer favor disease development (the minimum retreatment interval is 14 days). DO NOT apply more than 9 pints of this product (6.75 lbs. a.i.) per acre during each growing season.
Parsnip	Alternaria leaf spot, Downy mildew, Anthracnose, Botrytis blight (gray mold), Bottom rot (Rhizoctonia)	1 1/2 - 2 pts. (1.125 to 1.5)	Apply in sufficient water to obtain adequate coverage. Make the first application at the first sign of disease or when conditions are favorable for infection. Continue applications on a 7-10 day schedule (the minimum retreatment interval is 7 days). DO NOT apply more than 4 times per season or within 10 days of harvest. DO NOT apply more than 8 pints of this product (6 lbs. a.i.) per acre during each growing season.
Passion Fruit (Hawaii only)	Alternaria fruit and leaf spot, (passion fruit brown spot)	2 pts. (1.5)	Apply with ground equipment in sufficient water to obtain adequate coverage of fruit and leaves. Begin treatment when fruit spots appear (April to July) and continue treatments at 14 day intervals until weather conditions no longer favor disease development (the minimum retreatment interval is 14 days). DO NOT apply more than 10 pints of this product (7.5 lbs. a.i.) per acre during each growing season.
Peanut	Early leafspot (Cercospora), Late Leafspot (Cercosporidium)	1 1/2 pts. (0.75 to 1.125)	Apply in sufficient water for coverage when leaf wetness first occurs or 30 to 40 days after planting; repeat at 14-day intervals (the minimum retreatment interval is 14 days). When conditions favor late leafspot or when rust or web blotch occur, apply 1 1/2 pints of this product per acre at 14-day intervals for the remainder of the season. DO NOT apply more than 12 pints of this product (9lbs. a.i.) per acre during each growing season. DO NOT apply within 14 days of harvest. DO NOT allow livestock to graze in treated areas. DO NOT feed hay or threshings from treated fields to livestock. This product may be applied through sprinkler irrigation equipment. Use 1 1/2 pints of this product per acre in solid set, portable wheel move, center pivot, motorized lateral move or traveling gun sprinkler irrigation equipment. See calibration directions preceding this section.
	Rust, Web blotch	1 1/2 pts. (1.125)	
Potato	Late blight, Early blight, Botrytis vine rot	3/4 pt. (0.6) - then - 1 1/2 pts. (0.75 to 1.125)	Begin applications at the low rate when vines are first exposed and leaf wetness occurs. Repeat applications at 5-10 day intervals (the minimum retreatment interval is 5 days). Begin applying the higher label rates at 5-10 day intervals when any one of the following events occurs: • Vines close within the rows; • Late blight forecasting measures 18 disease severity values (DSV); • The crop reaches 300 P-days Increase water spray volume as canopy density increases. Use the highest rate and shortest interval when plants are rapidly growing and disease conditions are severe. DO NOT apply more than 15 pints of this product (11.25 lbs. a.i.) per acre during each growing season. DO NOT apply within 7 days of harvest. This product may be applied through sprinkler irrigation equipment (solid set, portable wheel move, motorized lateral move or center pivot systems only). DO NOT exceed a 10-day interval between applications when using this technique. See calibration directions preceding this section.
Soybean Determinate (Southern) Varieties	Anthracoese, Diaporthe pod and stem blight, Frogeye leaf spot (Cercospora sojina), Purple seed stain, Cercospora leaf blight (Cercospora kikuchii), Septoria brown spot		Apply in sufficient water to obtain complete coverage, using at least five gallons of water per acre for aerial application. Use the three application program in areas having a history of moderate to severe disease intensity. This product may be applied through sprinkler irrigation equipment. Follow application and calibration directions preceding this section. The minimum retreatment interval is 14 days. DO NOT exceed total of 3 applications per season. DO NOT apply more than 6 pints of this product (4.5 lbs. a.i.) per acre during each growing season. DO NOT apply within 42 days of harvest. DO NOT feed treated parts to livestock or allow grazing in treated fields.
		1 1/2 - 2 1/4 pts. (1.125 to 1.7)	Two-application program - Make the first application at early pod set (R3 stage, when majority of pods are to inch in length) and the second at beginning of seed formation (R5).

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Crop	Diseases	Rate Per Acre (lbs. a.i./A)	Application Directions
Soybean Determinate (Southern Varieties) cont'd.:		1 - 2 pts. (0.75 to 1.5)	<b>Three application program</b> - Make the first application at the beginning of the flowering (R1), the second at early pod set (R3) and the third at beginning of seed formation (R5).
	Stem canker ( <i>Diaporthe phaseolorum</i> var. <i>caulivora</i> )	1 pt. (0.75)	Apply in 10 to 20 gallons of water per acre, as a band treatment directing spray to provide coverage of entire plant. Make the application at time of emergence of the second trifoliate leaves (V2). If conditions favor stem canker disease make a second and third application. Make all applications at 10 to 14 day intervals.
Soybean Indeterminate (Northern Varieties)	Anthracnose, Diaporthe pod and stem blight, Frogeye leaf spot ( <i>Cercospora sojina</i> ), Purple seed stain, Cercospora leaf blight ( <i>Cercospora kikuchii</i> ), Septoria brown spot		Apply in sufficient water to obtain complete coverage, using at least five gallons of water per acre for aerial application. Use the three application program in areas having a history or moderate to severe disease intensity. This product may be applied through sprinkler irrigation equipment. Follow application and calibration directions preceding this section. (The minimum retreatment interval is 14 days.) DO NOT exceed total of 3 applications per season. DO NOT apply more than 6 pints of this product (4.5 lbs. a.i.) per acre during each growing season. DO NOT apply within 42 days of harvest. DO NOT feed soybean hay or threshings from treated fields to livestock.
		1 1/2 - 2 3/4 pts. (1.125 to 1.7)	<b>Two application program</b> - Make the first application when largest pods are 1-1 1/2 inches in length and make the second application 14 days later.
		1 - 2 pts. (0.75 to 1.5)	<b>Three-application program</b> - Make the first application one week after first flowering and continue applications at 14-day intervals.
Soybeans Determinate (Southern Varieties And Indeterminate (Northern Varieties)	Stem canker ( <i>Diaporthe phaseolorum</i> var. <i>caulivora</i> )	1 pt. (0.75)	Make the first application at the first sign of disease. Alternate with another fungicide registered for soybean rust control. Apply in sufficient water to obtain complete coverage, generally 10-20 gallons water per acre. The minimum retreatment interval is 14 days. DO NOT exceed total of 3 applications per season. DO NOT apply more than 6 pints of this product (4.5 a.i.) per acre during each growing season. DO NOT apply within 42 days of harvest. DO NOT feed treated parts to livestock or allow grazing in treated fields.
Tomato	Foliage (apply every 7-10 days): Early blight, Late blight, Gray leaf spot, Gray leaf mold, Septoria leaf spot, Target spot	1-3/8 - 2 pts. (1.0 to 1.5)	Apply in sufficient water to obtain adequate coverage. Begin applications when dew or rain occur and disease threatens. Use the highest rate and shortest interval specified when disease conditions are severe. The minimum retreatment interval is 7 days. DO NOT apply more than 20 pints of this product (15 lbs. a.i.) per acre during each growing season.
	Fruit (apply every 7-14 days beginning at fruit set): Anthracnose, Alternaria fruit rot (black mold), Botrytis gray mold, Late blight fruit rot, Rhizoctonia fruit rot	2 - 2 3/4 pts. (1.5 to 2.1)	This product may be combined in the spray tank with EPA-registered pesticide products that claim copper as the active ingredient and are labeled for control of bacterial diseases of tomatoes. Check the copper manufacturer's label for specific instructions, precautions and limitations prior to mixing with this product. DO NOT use with Copper-Count® N in concentrated spray suspensions. This product may be applied through sprinkler irrigation equipment (solid set or portable wheel move systems only). See calibration directions preceding this section.

**TREE AND ORCHARD CROPS**

Apply this product in sufficient water and with proper calibration to obtain uniform coverage of tree canopy. Application with ground equipment is preferable to aerial application because ground applications generally give better coverage of the tree canopy.

If application with ground equipment is not feasible, this product may be applied with aircraft using at least 20 gals. of spray per acre. When concentrate sprays are used or when treating non-bearing or immature trees, the lower rate of this product listed may be used. DO NOT allow livestock to graze in treated areas. The following spray volumes are recommended as gals. of spray per acre:

CROP	SPRAY VOLUME (GALLONS PER ACRE)	
Peach, Nectarine, Apricot, Tart Cherry, Plum, Prune	20 (concentrate) to 300 (full dilute)	
Sweet Cherry	20 (concentrate) to 400 (full dilute)	
Conifers:	<b>Dilute</b>	<b>Concentrate</b>
Forest stands	Not used	10-20 (aircraft)
Christmas trees	100	10-50 (aircraft or ground equipment)
Nursery beds	100	5-10 (ground equipment only)

CROP	DISEASES	N 720 RATE PER (lbs. a.i. per)		APPLICATION DIRECTIONS
		ACRE	100 GAL*	
Peach, Nectarine, Apricot, Cherry, Plum, Prune	Leaf curl, Coryneum blight (shot hole)	3 1/8 - 4 1/8 pts. (2.3 to 3.1)	1-1 1/8 pts. (0.75 to 1.0)	For best control of both diseases apply at leaf fall in late autumn, using sufficient water and proper sprayer calibration to obtain uniform coverage. When conditions favor high disease levels use the high rate of application and apply once or twice more in mid to late winter before budswell. If the leaf fall application is not practical, application of this product for control of leaf curl may be made at any time prior to budswell and following spring. Where Coryneum blight (shothole) occurs, also apply at budbreak to protect newly emerging leaves and at shuck split to prevent fruit infections.
	Lacy (russet) scab (plum/prune)	3-1/8 - 4-1/8 pts. (2.3 to 3.1)	1 - 1 3/8 pts. (0.75 to 1.0)	Make one application at popcorn (pink, red or early white bud) and a second application at full bloom. If weather conditions favor disease development, make an additional application at petal fall.
	Cherry leaf spot, Peach, Nectarine, Apricot scab, Black knot (cherry, plum)	3 1/8 - 4-1/8 pts. (2.3 to 3.1)	1 - 1 3/8 pts. (0.75 to 1.0)	In addition to the bloom application listed above, make one application at shuck split. DO NOT apply this product after shuck split and before harvest. If additional disease control is needed before harvest, use another registered fungicide. For control of cherry leaf spot after harvest, make one application to foliage within 7 days after fruit is removed. In orchards with a history of high leaf spot incidence, make a second application 10-14 days later.
Conifers (Pine, Spruce) DO NOT apply more than 22 pints of this product (16.5 lbs. a.i.) per acre during each growing season. The minimum retreatment interval for established trees is 21 days. The minimum retreatment interval in nursery beds is 7 days.	Swiss needlecast	2 3/4 - 5 1/2 pts. (2.1 to 4.125)	2 3/4 - 5 1/2 pts. (2.1 to 4.125)	<b>Single application technique:</b> In Christmas tree plantations or forest stands make one application in the spring when new shoot growth is 1/2-2 inches in length.
	Scleroderma canker (pines), Swiss needle-cast	1 1/2 - 2 3/4 pts. (1.125 to 2.1)	1 1/2 - 2 3/4 pts. (1.125 to 2.1)	Make the first application in spring when new shoot growth is 1/2 - 2 inches in length. Make additional applications at 3-4 week intervals until conditions no longer favor disease development. For use in nursery beds, apply the highest rate specified on a 3-week schedule.
	Sirococcus tip blight	2 - 3 1/2 pts. (1.5 to 2.6)	2 - 3 1/2 pts. (1.5 to 2.6)	
	Rhizosphaera needlecast (spruces), Scintia brown spot (pines)	5 1/2 pts. (4.125)	5 1/2 pts. (4.125)	
Conifers (Pine, Spruce) DO NOT apply more than 22 pints of this product (16.5 lbs. a.i.) per acre during each growing season. The minimum retreatment interval for established trees is 21 days. The minimum retreatment interval in nursery beds is 7 days.	Cyclaneusma and Lophodermium needlecasts (pines)	2 - 5 1/2 pts. (2.1 to 4.125)	2 3/4 - 5 1/2 pts. (2.1 to 4.125)	Apply in early spring prior to bud-break. Repeat applications at approximately 6-8 week intervals, until spore release ceases in late fall. Apply monthly during periods of frequent rainfall, and where Lophodermium infections occur during dormancy (Pacific Northwest). During drought periods, applications may be suspended, then resumed upon next occurrence of needle wetness.
	Rhabdochloa needlecast (Douglas-fir)	1 1/2 - 2 3/4 pts. (1.125 to 2.1)	1 1/2 - 2 3/4 pts. (1.125 to 2.1)	Apply at budbreak and repeat at 3-4 week intervals until needles are fully elongated and conditions no longer favor disease development. In plantations of mixed provenance, or when irregular budbreak occurs, apply weekly until all trees have broken bud, then every 3-4 weeks as specified above. In nursery beds, use the high rate on a 3-week schedule.

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**MUSHROOMS**

Verticillium brown spot and G. bubble - Apply 2.75 to 5.5 fl. oz. of this product per 1,000 sq. ft. of mushroom bed. Apply as a drench to the mushroom bed surface in at least 12.5 gallons of water per 1,000 sq. ft. of mushroom bed. Make two applications. Apply the high rate (5.5 fl. oz.) of this product in the first application and the low rate (2.75 fl. oz.) of this product in the second application. The first application should be made within two days of top-dressing the spawn-colonized mushroom compost with a casing layer. The second application should be made at pinning. Do not apply within 5 days of first harvest. Make no more than two applications per cropping cycle. Do not apply more than 8.25 fl. oz. of this product per cropping cycle.

**GRASSES: GOLF COURSE FAIRWAYS**

For low disease pressure, follow the re-treatment intervals and the application rates provided below.

For an extreme disease condition, a single maximum application of 15 pints per acre with a minimum re-treatment interval of 7 days can be made each year. After making the 15 pints per acre application, the low disease regime must be followed for the remainder of the year.

No more than 34.6 pints/acre of this product may be applied per year on fairways.

For reentry into treated areas, refer to the Non-Agricultural Use Requirements Box.

CROP	DISEASES	ENSIGN 720 RATE PER (lbs. a.i. per)		APPLICATION DIRECTIONS
		ACRE	100 GAL*	
Conifers (Pine, Spruce) DO NOT apply more than 22 pints of this product (16.5 lbs. a.i.) per acre during each growing season. The minimum retreatment interval for established trees is 21 days. The minimum retreatment interval in nursery beds is 7 days.	Botrytis seedling blight, Phoma twig blight	1 1/2 - 2 3/4 pts. (1.125 to 2.1)	1 1/2 - 2 3/4 pts. (1.125 to 2.1)	Begin applications in nursery beds when seedlings are 4 inches tall and when cool, moist conditions favor disease development. Make additional applications at 7-14 day intervals as long as disease favorable conditions persist.
	Autoecious needle rust (Weir's cushion) (spruce)	5 1/2 pts. (4.125)	5 1/2 pts. (4.125)	

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

DISEASES CONTROLLED	LOW DISEASE PRESSURE TREATMENT REGIME		EXTREME DISEASE CONDITION		MAXIMUM APPLICATION RATE PER YEAR FOR FAIRWAYS (PINTS/ACRE)
	RETREATMENT INTERVAL (DAYS)	APPLICATION RATE (PINTS/ACRE)	MAXIMUM SINGLE APPLICATION ALLOWED IN A YEAR (PINTS/ACRE)	MINIMUM RETREATMENT INTERVAL FOR THE MAXIMUM SINGLE APPLICATION (DAYS)	
Dollar spot	7-10	2.75-5.5	15	7	34.6
	14-21	5.5-9.7			
Leaf Spot, Melting Out, Brown Blight	7-10	5.5	15	7	34.6
	14-21	5.5-9.7			
Brown Patch	7-14	5.5-9.7	15	7	34.6
Gray Leaf Spot	7-10	5.5-9.7			
Red Thread	7-10	5.5-9.7	15	7	34.6
Anthracnose	7-14	8.33-9.7			

<sup>a</sup>Low rate is not effective on intensively mowed turfgrasses such as golf course tees and greens.

Diseases are caused by some of the following fungi:  
 Dollar Spot: *Sclerotinia homeocarpa*, *Lanzia* or *Moellerodiscus* spp.  
 Leaf Spot, Melting out and Brown Blight: *Drechslera* spp., *Bipolaris* spp., *Curvularia* spp.  
 Anthracnose: *Colletotrichum*.

**GRASSES: GOLF COURSE TEES, GREENS, AND ORNAMENTAL TURF USES**

For low disease pressure, follow the re-treatment intervals and the application rate provided below. For an extreme disease condition, a single maximum application of 15 pints per acre with a minimum re-treatment interval of 7 days can be made. For this product, maximum yearly application limits exist for fairways, greens and other non-residential ornamental turf, such as municipal parks. For reentry after treatment, follow requirements outlined in the Non-Agricultural Use Requirements Box.

DISEASES* CONTROLLED	RETREATMENT INTERVAL (DAYS)	APPLICATION RATE (FL. OZ. PER 1000 SQ. FT.)		MAXIMUM APPLICATION RATE PER YEAR FOR ORNAMENTAL TURF, TEES AND GREENS (FL. OZ. PER 1000 SQ. FT.)
		LOW DISEASE PRESSURE REGIME	HIGH DISEASE PRESSURE REGIME	
Dollar spot	7 to 14	2.12 - 3.5	5.5 (14)	12.7 fl. oz. per 1000 sq. ft. (ornamental turf)
Brown Patch	7 to 14	2.12 - 3.5	5.5 (14)	
Leaf Spot, Melting Out	7 to 10	2.12 - 3.5	5.5 (14)	25.4 fl. oz. per 1000 sq. ft. (trees)
Gray Leaf Spot	7 to 10	2.12 - 3.5	5.5 (14)	
Red Thread	7 to 10	2.12 - 3.5	5.5 (14)	35.7 fl. oz. per 1000 sq. ft. (greens)
Anthracnose	7 to 14	2.12 - 3.5	5.5 (14)	
Copper Spot	7 to 10	2.12 - 3.5	5.5 (14)	
Stem Rust (Bluegrass)	7 to 14	2.12 - 3.5	5.5 (14)	
DICHONDRA:	7 to 14	2.12 - 3.5	5.5 (14)	
Leaf Spot (California Only)	7 to 14	2.12 - 3.5	5.5 (14)	



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\*Diseases are caused by some of the following fungi:

- Dollar Spot: *Sclerotinia homeocarpa*, *Lanzia* or *Moellerodiscus* spp.
- Brown Patch: *Rhizoctonia* spp.
- Leaf Spot, Melting Out and Brown Blight: *Drechslera* spp., *Bipolaris* spp., *Curvularia* spp.
- Gray Leaf Spot: *Pyricularia* spp.
- Red Thread: *Laetisaria fuciformis*.
- Anthracnose: *Colletotrichum* spp.
- Copper Spot: *Gloeocercospora* spp.
- Stem Rust: *Puccinia* spp.
- Dichondra Leaf Spot: *Alternaria* spp.

Gray snow mold caused by *Typhula* spp.: Apply in sufficient water to obtain adequate coverage (2 to 10 gallons per 1000 sq. ft.). Apply a single application of 3 ½ fluid ounces of this product per 1000 sq. ft. of turf area. Application must be made before snow cover in autumn. If snow cover is intermittent or lacking during the winter, reapply at 3 ½ fl. oz. per 1000 sq. ft. at monthly intervals until gray snow mold conditions no longer prevail. In areas where pink snow mold (*Gerlachia* or *Fusarium* patch) is likely to occur, apply this product at 3 ½ fl. oz. in combination with products containing iprodione at 2 oz. active ingredient per 1000 sq. ft. of turf area. Read and observe all label directions for products containing this active ingredient. A maximum seasonal limit of 12.7 oz. per 1000 sq. ft. may be applied to ornamental turf, no more than 25.4 oz. per 1000 sq. ft. may be applied to tees and a maximum seasonal amount of 35.7 oz. per 1000 sq. ft. of this product may be applied to greens.

*Fusarium* (*Gerlachia*) Patch: For control of *Fusarium* patch only in areas where snow cover is intermittent or lacking during the winter, apply 3 ½ fl. oz. of this product per 1000 sq. ft. Begin applications in autumn and reapply at 21- to 28 day intervals until conditions favorable for *Fusarium* patch no longer prevail. A maximum seasonal limit of 12.7 oz. per 1000 sq. ft. may be applied to ornamental turf, no more than 25.4 oz. per 1000 sq. ft. may be applied to tee and a maximum seasonal amount of 35.7 oz. per 1000 sq. ft. of this product may be applied to greens.

Algae: For prevention of algae on turfgrasses, apply this product at the rate of 2 1/8 to 3 ½ fl. oz. per 1000 sq. ft. on a 7 to 14 day schedule. When algae is well established, every attempt should be made to dry out the afflicted areas. Once dry, spiking or verticutting should be done to enhance turfgrass recovery in conjunction with applications of this product. Several applications may be necessary for turfgrass recovery. Only a preventive spray program with this product will prevent a recurrence of the algae when environmental conditions are favorable for algae growth. A maximum seasonal limit of 12.7 oz. per 1000 sq. ft. may be applied to ornamental turf. No more than 25.4 oz. per 1000 sq. ft. may be applied to tees and a maximum seasonal amount of 35.7 per 1000 sq. ft. of this product may be applied to greens.

**GRASS: SODFARMS**

Use of this product on home lawns is prohibited.

Apply this product in 30 to 40 gallons of water per acre. Begin applications when conditions favor disease development and repeat applications as long as these conditions persist using the rates recommended in the following table.

Under severe disease conditions, a single application of 15 pints per acre may be made with a 7-day retreatment interval. Subsequent applications must follow the rates and retreatment intervals outlined in the following table for the remainder of the year.

~~Do not mow or water after treatment until spray deposited on grass is thoroughly dry. This product should always be used in conjunction with good turf management practices.~~

Sodfarm turf treated with chlorothalonil prior to harvest must be mechanically cut, rolled, and harvested. Follow provisions outlined in the Agricultural Use Requirements box.

DISEASES CONTROLLED	LOW DISEASE PRESSURE TREATMENT REGIME		EXTREME DISEASE CONDITION		APPLICATION LIMIT PER YEAR FOR SODFARMS (PINTS/ACRE)
	RETREATMENT INTERVAL (DAYS)	APPLICATION RATE (PINTS/ACRE)	MAXIMUM SINGLE APPLICATION ALLOWED IN A YEAR (PINTS/ACRE)	MINIMUM RETREATMENT INTERVAL FOR THE MAXIMUM SINGLE APPLICATION (DAYS)	
Dollar Spot	7 - 10	2.75 <sup>a</sup> - 5.5	15	7	34.6
	14 - 21	5.5 - 9.66			
Leaf Spot, Melting Out, Brown Blight	7 - 10	5.5	15	7	34.6
	14 - 21	5.5 - 9.66			
Brown Patch	7 - 14	5.5 - 9.66	15	7	34.6
Gray Leaf Spot	7 - 10	5.5 - 9.66			
Red Thread	7 - 10	5.5 - 9.66	15	7	34.6
Anthracnose	7 - 14	8.12 - 9.66			

<sup>a</sup> Low rate is not effective on intensively mowed grasses.

Diseases are caused by some of the following fungi:

- Dollar Spot: *Sclerotinia homeocarpa*, *Lanzia* or *Moellerodiscus* spp.
- Leaf Spot, Melting Out and Brown Blight: *Drechslera* spp., *Bipolaris* spp., *Curvularia* spp.
- Anthracnose: *Colletotrichum*.

**ORNAMENTAL PLANTS**

This product may be used on ornamental plants grown in the field, nurseries, greenhouses and for spot-treatment of ornamental plants growing in landscapes. Due to the large number of species and varieties of ornamental and nursery plants and the widely varying growing conditions, it is impossible to test every one for sensitivity to this product. Prior to commercial use, apply the recommended rates to a small area of plants in question, i.e. bedding plants, foliage, etc. and observe for 7 to 10 days prior to treatment of a commercial crop.

Field-grown ornamentals:

No more than 48 pints per acre of this product may be applied to field-grown ornamentals per year.

For aerial application to field-planted ornamentals, a minimum rate of 10 gals of spray per acre should be used during application. This product should be applied to plants when both foliage and flowers are dry or nearly dry.

For field-grown roses, apply 1.4 pints of this product per acre for a single application.

For field-planted pachysandra, apply 4.1 pints per acre of this product for a single application.

Ornamentals grown in nurseries, greenhouses:

DO NOT use mistblowers or high-pressure spray equipment when making applications of this product in greenhouses.

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Apply this product at a rate of 1.37 pints per 100 gallons of water unless other directions are given in table below. Apply in a spray until foliage run-off occurs when conditions are favorable for disease development. Repeat applications at 7- to 14-day intervals until conditions are no longer favorable. During periods when conditions favor severe disease incidence, generally cloudy or wet weather, apply this product at 7-day intervals. This product should be applied to plants when both foliage and flowers are dry or nearly dry.

DO NOT combine this product in the spray tank with pesticides, surfactants or fertilizers unless prior use has shown the combination to be physically compatible, effective and non-injurious under your conditions of use.

Spot-treatment of ornamental plants growing in landscapes:

Apply this product at a rate of 1.3 teaspoons per 2 gallons of water. Apply in a spray until foliage run-off occurs when condition are favorable for disease development. Repeat applications at 7- to 14-day intervals until conditions are no longer favorable. During periods when conditions favor severe disease incidence, generally cloudy or wet weather, apply this product in 7-day intervals. This product should be applied to plants when both foliage and flowers are dry or nearly dry.

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

NOTE: Fruits and other treated foliage must not be eaten or fed to livestock.

Diseases controlled by this product:

1. Leafspots/Foliar Blights:

- Actinopelte leaf spot
- Alternaria leafspot/leaf blight
- Anthraco-nose-leaf blotch, spot
- Anthraco-nose- (Discula) blight
- Ascochyta blight
- Bipolaris (Helminthosporium) leaf spot
- ~~Botrytis leaf spot; leaf blight~~
- Cephalosporium leafspot
- Cercospora leafspot
- Cercosporidium leafspot
- Coryneum blight (shothole)
- Corynespora leafspot
- Curvularia leafspot
- Cylindrosporium leafspot
- Dactylaria leafspot
- Didymellina leafspot
- Dreschlera leafspot
- Fabraea (Entomosporium) leafspot
- Fusarium leafspot
- Gloesporium black leafspot
- Inkspot (Dreschlera)
- Marssonina leafspot
- Monilinia blossom blight, twig blight.
- Mycosphaerella ray blight
- Mycothecium leafspot, brown rot
- Nematostoma leaf blight
- Phyllosticta leafspot
- Rhizoctonia web blight
- Ramularia leafspot
- Septoria leafspot
- Sphaeropsis leafspot
- Stagonospora leaf scorch
- Tan leafspot (Curvularia)
- Volutella leaf blight

2. Flower spots/blights:

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

3. Cylindrocladium stem canker

4. Phytophthora leaf blight, dieback

5. Powdery mildews:

- Erysiphe cichoracearum
- Microsphaera spp.

6. Rusts:

- Gymnosporangium spp.
- Puccinia spp.
- Pucciniastrum hydrangeae

7. Taphrina blister

8. Scab

Ventrua inaequalis

Ornamentals recommended for treatment with this product:

Avoid applications during bloom periods for those plants where flower injury is unacceptable.

For poinsettia, discontinue applications prior to bract formation; phytotoxicity is possible on bracts. For roses, use 1.1 pints per 100 gallons of water.

PLANT	DISEASE(S)	COMMENTS/INSTRUCTIONS
Aglaonema	1	
Andromeda (Pieris)	4	
Arabian Violet	2	
Areca palm	1	
Artemisia	1	
Ash, Fraxinus	1	
Aspen	1	
Azalea	1,2,4	
Begonia	1	
Boston fern	1	
Buckeye, Horse-chestnut	1	
Camellia	2	
Carnation	1,2	
Cherry-laurel	1	
Chrysanthemum	1,2	
Crabapple	1,6,8	
Crocus	1	
Daffodil	1	
Daisy	1	
Dogwood	1	
Dumbcane, Dieffenbachia	1	
Dracaena	1	
Eucalyptus	3	
Euonymus	1	
Fatsia (Aralia)	1	
Ficus	1	
Firethorn; Pyracantha	1	
Florida Ruffie Fern	1	
Flowering Almond	1,2	
Flowering Cherry	1,2	
Flowering Peach	1,2	
Flowering Plum	1,2	
Flowering Quince	1,2	
Geranium	1,6	
Gladiolus	1,2	
Hawthorn	1,6	
Holly	1	
Hollyhock	6	
Hydrangea (foliage only)	1,6	
Iris	1,2	
Leatherleaf Fern	1	
Lilac	5	
Lily	1	
Lipstick plant	1	
Magnolia	1	
Maple	1	
Marigold	1	
Ming aralia	1	
Mountain Laurel	1	
Narcissus	1	
Oak (red group only)	1,7	
Oregon Grape (Mahonia)	6	
Oyster plant (Rhoeoe)	6	
Pachysandra	1	Use 3 pints of this product per 100 gallons of water for greenhouse-grown plants.
Pansy	1	
Parlor palm (Chamaedorea)	1	
Peperomia	1	
Petunia	1,4	
Philodendron	1,4	
Phlox	1	
Photinia	1	
Poinsettia	1	Discontinue applications prior to bract formation; phytotoxicity is possible.
Poplar	1	
Prayer Plant (Maranta)	1	
Privet, Ligustrum	1	
Rhododendron	1,2,4	
Rose	1	Use 1.1 pints per 100 gallons of water for greenhouse grown plants.
Sand Cherry	1,2	

**ENSIGN 7**  
**EPA REG. NO. 34704-870**

PLANT	DISEASE(S)	COMMENTS/INSTRUCTIONS
Sequoia	1	
Spiraea	1	
Statice	1	
Sycamore, Planetree	1	
Syngonium	1	
Tulip	1	
Viburnum	5	
Walnut, Juglans	1	
Zebra plant (Aphelandra)	1	
Zinna	1,5	

The following ornamental plant species, which have been tested with this product at recommended rates, did not exhibit phototoxicity.

<u>Botanical name</u>	<u>Common name</u>
<i>Aechmea fasciata</i>	Aechmea
<i>Araucaria heterophylla</i>	Norfolk Island Pine
<i>Asplenium nidus</i>	Birdnest Fern
<i>Bougainvillea</i> spp.	Bougainvillea
<i>Caladium</i> spp.	Caladium
<i>Calathea makoyana</i>	Peacock plant
<i>Callistephus chinensis</i>	Aster
<i>Carissa grandiflora</i>	Natal plum
<i>Clerodendron thomsonae</i>	Bleeding Heart
<i>Codiaeum</i> spp.	Croton
<i>Cordylone terminalis</i>	Ti Plant
<i>Crassula argentea</i>	Jade Plant
<i>Cyrtomium falcatum</i>	Holly Leaf Fern
<i>Dionaea muscipula</i>	Venus Fly Trap
<i>Dizygotheca elegantissiam</i>	False Aralia
<i>Epipremnum aureum</i>	Golden Pothos, Scindapsus
<i>Episcia cupreata</i>	Flame Violet
<i>Fittonia</i> spp.	Silver-nerve Plant
<i>Gerbera jamesonii</i>	Gerber Daisy
<i>Gynura sarmenosa</i>	Purple Passion Vine
<i>Gypsophila paniculata</i>	Baby's Breath
<i>Hoya</i> spp.	Wax Plant
<i>Ilex cornuta</i>	Chinese Holly
<i>Ilex crenata</i>	Japanes Holly
<i>Impatiens</i> spp.	Impatiens
<i>Pilea cadierei</i>	Aluminum Plant
<i>Platycoerium</i> spp.	Staghorn Fern
<i>Sansevieria trifasciata</i> "Hahnii"	Birdsnest Sansevierieia
<i>Tolmiea menziesii</i>	Piggy-back Plant
<i>Yucca elephantipes</i>	Spineless Yucca
<i>Zygocactus truncatus</i>	Christmas Cactus

NOTE: DO NOT apply this product to either green or variegated Pittosporium or to Schefflera, as multiple applications have been demonstrated to cause phytotoxic responses.

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