

U.S. ENVIRONMENTAL PROTECTION AGENCY

Office of Pesticide Programs Registration Division (7505P) 1200 Pennsylvania Ave., N.W. Washington, D.C. 20460

6836-389

EPA Reg. Number:

Date of Issuance:

9 11/8/18

NOTICE OF PESTICIDE:

X Registration
Reregistration
(under FIFRA, as amended)

Term of Issuance: Conditional

Name of Pesticide Product:

Barrachlor Fungicide

Name and Address of Registrant (include ZIP Code):

Liane Jenkins, Regulatory Manager Lonza Inc. 90 Boroline Road Allendale, NJ 07401

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is conditionally registered in accordance with FIFRA section 3(c)(7)(A). You must comply with the following conditions:

1. Submit and/or cite all data required for registration/registration/registration review of your product under FIFRA when the Agency requires all registrants of similar products to submit such data.

Signature of Approving Official:

Date:

11/8/18

Marianne Lewis,

Acting Product Manager 22, Fungicide Branch

Registration Division (7505P)

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- 2. You are required to comply with the data requirements described in the DCI identified below:
 - a. Chlorothalonil GDCI--081901-1301

You must comply with all of the data requirements within the established deadlines. If you have questions about the Generic DCI listed above, you may contact the Chemical Review Manager in the Pesticide Reevaluation Division: http://iaspub.epa.gov/apex/pesticides/f?p=chemicalsearch:1

- 3. Make the following label changes before you release the product for shipment:
 - Revise the EPA Registration Number to read, "EPA Reg. No. 6836-389."
- 4. Submit one copy of the final printed label for the record before you release the product for shipment.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

If you fail to satisfy these data requirements, EPA will consider appropriate regulatory action including, among other things, cancellation under FIFRA section 6(e). Your release for shipment of the product constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records. Please also note that the record for this product currently contains the following CSFs:

- Basic CSF dated 6/12/2018
- Alternate CSF #1 dated 6/12/2018

If you have any questions, please contact Marianne Lewis by phone at 703 308-8043, or via email at lewis.marianne@epa.gov; or Craig Reeves by phone at 703 347-0486, or via email at reeves.craig@epa.gov.

Enclosure: Stamped Label

6836-xxx Barrachlor™ Fungicide MASTER LABEL

ACCEPTED

11/08/2018

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 2000, 2000

6836-389

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Chlorothalonil Group M5 Fungicide

ACTIVE INGREDIENTS:

Contains 6.0 pounds of chlorothalonil per gallon.

For control of crop and turf diseases

Barrachlor[™] Fungicide

KEEP OUT OF REACH OF CHILDREN

WARNING / AVISO

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

See side panel for other precautionary statements For Product Use information Call 1-800-654-6911

	FIRST AID				
IF INHALED	Move person to fresh air.				
	 If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferable by mouth-to-mouth if possible. 				
	Call a Poison Control Center or doctor for treatment				
IF SWALLOWED	Immediately call a Poison Control Center or doctor.				
	Have a person sip a glass of water if able to swallow.				
	Do not induce vomiting unless told to do so by poison control center or doctor.				
	Do not give anything by mouth to an unconscious person				
IF ON SKIN	Take off contaminated clothing.				
	Rinse skin immediately with plenty of water for 15-20 minutes.				
	Call a Poison Control Center or doctor for treatment advice.				
IF IN EYES	Hold eye open and rinse slowly and gently for 15-20 minutes.				
	Remove contact lenses, if present, after the first 5 minutes, then continue rinsing.				
	Call a Poison Control Center or doctor for treatment				
Have the product co	ontainer or label with you when you call a Poison Control Center or doctor, or when				
going for treatment					
HOTLINE NUMBER					
	In case of emergency call 1-800-654-6911				
	NOTE TO PHYSICIAN				
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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.

EPA Reg. No. 6836-xxx EPA Est. No. xxxxx-yy-zz

NET CONTENTS: 2.5 gallons, 5 gallons

Manufactured for: Lonza Inc. 90 Boroline Road Allendale, NJ 07401

PRECAUTIONARY STATEMENTS:

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

WARNING. May be fatal if inhaled. Harmful if swallowed. Harmful if absorbed through the skin. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Do not breathe spray mist.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Mixers, loaders, applicators and all others who handle this pesticide must wear:

- Long-sleeved shirt and long pants
- Shoes plus socks
- Protective eye wear
- Chemical resistant gloves made of: Barrier Laminate; Butyl Rubber ≥ 14 mil; Nitrile Rubber ≥ 14 mils;
 Neoprene Rubber ≥ 14 mils; Natural Rubber ≥ 14 mils; Polyethylene, Polyvinyl chloride ≥ 14 mils, or Viton ≥ 14 mils.
- A minimum of a NIOSH approved elastometric half mask respirator with an organic vapor (OV) cartridge and a combination N, R, or P filter; or a NIOSH-approved gas mask with OV canisters; or a NIOSH-approved powered air-purifying respirator with OV cartridges and combination HE filters.

USER SAFETY REQUIREMENTS

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry. Discard clothing or other absorbent 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 (40CFR 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 skin thoroughly and put on clean clothing.

ENVIRONMENTAL HAZARDS:

This product is toxic to aquatic invertebrates and wildlife. 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.

Groundwater Advisory

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

Suface Water Advisory

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 overlaying extremely shallow groundwater, areas with infield 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.

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.

DO NOT use on home lawns and turf sites associated with apartment buildings, daycare centers, playground, recreation park athletic fields, athletic fields located on or next to schools (i.e. elementary, middle, and high schools), campgrounds, churches and theme parks.

Agricultural Use Sites: Asparagus, beans (snap and dry), Blueberries, Cabbage Chinese cabbage, Cauliflower, Broccoli, Chinese Broccoli, Brussel Sprouts, Carrot, Celery, Corn (sweet and grown for seed), Cranberry, Cucurbits (cucumber, cantaloupe, muskmelon, honeydew melon, watermelon, squash, pumpkin) Grass grown for seed, mango, mint, onion (dry bulb), onion (green bunching), leeks, shallots, onion and garlic (grown for see), papaya, parsnips, passion fruit, peanut, potato, soybean, tomato, Tree & Orchard Crops (almonds, filberts, apricot, cherry nectarine, peach, plum and prune) pistachio, Conifers (nursery beds, Christmas tree and bough protection plantations, tree seed orchard) mushrooms.

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 (REI). 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 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: long-sleeved shrit and long pants or coveralls, shoes plus socks, chemical resistant gloves and protective eyewear.

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

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

Resistance Management

For resistance management, Initiate ZN contains a Group M5 fungicide. Any fungal population may contain individuals naturally resistant to Initiate ZN and other Group M5 fungicides. A gradual or total loss of pest control may occur over time if these fungicides are used repeatedly in the same fields. Appropriate resistance-management strategies should be followed.

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

- Rotate the use of Barrachlor or other Group M5 fungicides within a growing season sequence with different groups that control the same pathogens.
- Use tank mixtures with fungicide from a different group that are equally effective on the target pest when such use is permitted. Use at least the minimum application rate as labeled by the manufacturer.
- Adopt an integrated disease management program for fungicide use that includes scouting, uses historical
 information related to pesticide use, and crop rotation, and which considers host plant resistance, impact of
 environmental conditions on disease development, disease thresholds, as well as cultural, biological and
 other chemical control practices.
- Where possible, make use of predictive disease models to effectively time fungicide applications. Note that using predictive models alone is not sufficient to manage resistance.
- Monitor treated fungal populations for resistance development.
- Contact your local extension specialist or certified crop advisor for any additional pesticide resistancemanagement and/or IPM recommendations for specific crops and pathogens.
- For further information or to report suspected resistance contact Lonza, Inc. at 1-800-654-6911. You can also contact your pesticide distributor or university extension specialist to report resistance

Non-Agricultural Uses

For use to control turf diseases on golf courses, on lawns around commercial (non-residential) and industrial buildings, and on professional and collegiate athletic fields.

NON-AGRICULTURAL USE REQUIREMENTS

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

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

Use 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 that are compatible with the principles of Integrated Pest Management (IPM), which include the use of disease resistant crop varieties, cultural practices, pest scouting and disease forecasting systems, which reduce unnecessary applications of pesticides.

This product is effective for strategic use in programs that attempt to minimize disease resistance to fungicides. Some other fungicides that are at risk from disease resistance exhibit a single-site mode of fungicidal action. 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 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.

Restrictions

Do not use on home lawns and turf sites associated with apartment buildings, daycare centers, playgrounds, playfields, recreational park athletic fields, athletic fields located on or next to schools (e.g., elementary, middle and high schools), campgrounds, churches, and theme parks.

Do not apply to forests.

DO NOT apply this product within 150 feet for aerial applications, or 25 feet for ground applications of marine/estuarine water bodies unless there is an untreated buffer area of that width between the area to be treated and the water body.

Agricultural Use Sites

Sod farms and greenhouses, conifers nursery beds, Christmas tree and bough production plantation, and tree seed orchards; and apricot, cherry (sweet and tart), nectarine, peach, plum and prune trees.

Non-Agricultural Uses

For use to control turf diseases on golf courses, on lawns around commercial (non-residential) and industrial buildings, and on professional and collegiate athletic fields.

Tank Mix Restrictions

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

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

SPRAY DRIFT

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 movement form aerial applications to agricultural field crops. These requirements do not apply to public health uses or to applications using dry formulations.

- 1. The distance of the outer most nozzles on the boom must not exceed \(^3\)4 the length of the wingspan or rotor.
- 2. Nozzles must always point 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 Management Reduction Advisory Information**

Aerial Drift Management Reduction Advisory Information

This section is advisory in nature and does not supersede 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 make 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 nozzles types
 lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles
 instead of increasing pressure.
- Number of nozzles Use the minimum number of nozzles that provide uniform coverage.
- **Nozzle Orientation –** Orienting the nozzles so that the spray is released parallel to the airstream produces larger droplets than other orientations and is the recommended practice. Significant deflections 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, narrow spray angles produced larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back product the largest droplets and the lowest drift potential.

Boom Length

For some use patterns, reducing the effective boom length to less than 3.4 of the wingspan or rotor length may further reduce drift without reducing swath width.

Application Height

Application 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 upwind and downwind edges of the field, the applicator should 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. Applications should be avoided below 2 mph due to variable wind direction and high inversion potential. 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 inversions 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 b indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

Sensitive Areas

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

APPLICATION INSTRUCTIONS

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 filing spray tank and during spray operations.

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.

For field and row crops, spray volume usually will range from 20 to 150 gallons per acre for dilute sprays and 5-10 gallons per acre for concentrate ground sprays and aircraft applications.

For tree and orchard crops, apply {this product} in sufficient water and with proper calibration to obtain uniform coverage of tree canopy. For fruit and nut bearing crops, the maximum volume is 300 gallons per acre unless indicated otherwise in the specific use directions. For conifers, the maximum volume is 100 gallons per acre.

CHEMIGATION

APPLICATION AND CALIBRATION TECHNIQUES FOR CHEMIGATION

Apply this product only through sprinkler irrigation systems including center pivot, motorized lateral move, traveling gun, solid set or portable (wheel move, slide roll, end tow, or hand move) irritation 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 irrigation 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 regulator serves an average of at least 25 individuals daily at least 60 days per year.

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

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

Always inject {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 injection pump. Interlock this valve to the power system, so as to prevent fluid from being withdrawn from the chemical supply tank when the irrigation system is either automatically or manually turned off.

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

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

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

Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump), effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

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

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

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

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 for one revolution or run. Mixture in the chemical supply tank must be continuously agitated during the injection run. Shut off injection equipment after one revolution or run, but continue to operate irrigation system until {this product} has been cleared from the 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 coverage by sprinkler. Fill tank of injection equipment with water and adjust flow to use contents over a 30 to 45 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 injection tank is equal to the quantity of water used during calibration, and operate entire system at normal pressures recommended by the manufacturer of injection equipment used, for amount of time established during calibration. Agitation is recommended. {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.

DIRECTIONS FOR APPLICATION - NON-AGRICULTURAL

TURF

Do not use on home lawns and turf sites associated with apartment buildings, daycare centers, playgrounds, playfields, recreation park athletic fields located on or next to schools (ie., elementary, middle and high schools), campgrounds, churches, and theme parks.

Group A. Golf Course Fairways and Roughs, Lawns around Commercial and Industrial Buildings, and Professional and Collegiate Athletic Fields

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

Spray Volume:

Apply this product in an adequate amount of water to provide complete coverage. This amount may vary from 30 to 450 gallons per acre. See table below for suggested rates and timing.

Restrictions:

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

Group B. Golf course Tees and Greens

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

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

Restrictions:

Golf Course Tees:

- DO NOT apply more than 69.3 pints/acre (25.4 fl oz/1000 sq. ft.) of this product (52 lb a.i./acre) per year.
- The minimum re-treatment interval for single application rates **up to** 9.75 pints/acre (3.6 fl oz/1000 sq. ft.) of this product (7.3 lb a.i./acre) in 7 days.

- The minimum re-treatment interval for after an application of a rates **greater than** 9.75 pints/acre (3.6 fl oz/1000 sq. ft.) of this product (7.3 lb a.i./acre) in 14 days.
- **Do not** apply more than two applications of a rate greater than 9.75 pints/acre (3.6 fl oz/1000 sq. ft.) of this product (7.3 lb a.i./acre) per year.
- The maximum single application rate is 15.1 pints/acre (5.5 fl oz/1000 sq. ft.) of this product (11.3 lb a.i./acre).

Golf Course Greens:

- DO NOT apply more than 97.3 pints/acre (35.7 fl oz/1000 sq. ft.) of this product (73 lb a.i./acre) per year.
- The minimum re-treatment interval for single application rates **up to** 9.75 pints/acre (3.6 fl oz/1000 sq. ft.) of this product (7.3 lb a.i./acre) in 7 days and the minimum re-treatment interval after an application of a rate **greater than** 9.75 pints/acre (3.6 fl oz/1000 sq. ft.) of this product (7.3 lb a.i./acre) in 14 days.
- **Do not** apply more than two applications of a rate greater than 9.75 pints/acre (3.6 fl oz/1000 sq. ft.) of this product (7.3 lb a.i./acre) per year.
- The maximum single application rate is 15.1 pints/acre (5.5 fl oz/1000 sq. ft.) of this product (11.3 lb a.i./acre).

Sod Farms:

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

Spray Volume: Apply this product in 30 to 450 gallons of water per acre.

Restrictions:

- IMPORTANT: Sod farm turf treated with chlorothalonil prior to harvest must be mechanically cut, rolled and harvested.
- **Do not** use for sod farms at application rates greater than 13 pounds of active ingredient per acre per year.
- **Do not** apply more than 17 pints/acre (6.4 fl oz/1000 sq. ft.) of this product (13 lb a.i./acre) per year.
- The minimum re-treatment interval for single application rates up to 9.7 pints/acre (3.5 fl oz/1000 sq. ft.) of this product (7.3 lb a.i./acre) in 7 days.
- **Do not** apply more than one application of a rate greater than 9.7 pints/acre (3.5 fl oz/1000 sq. ft.) of this product (7.3 lb a.i./acre) per year.
- The maximum single application rate is 15.1 pints/acre (5.5 fl oz/1000 sq. ft.) of this product (11.3 lb a.i./acre).

Application Timing (All Turf):

Begin applications when conditions favor disease development and repeat applications as long as these conditions persist. Under severe disease conditions, use the highest rate and shortest interval corresponding with the application schedule selected from the table below.

Pre-Disease Rates ^a				Post-Dise	ase Rates ^a		
Disease Controlled*	Applicatio n Interval (Days)	fl oz product/ 1000 sq ft	pints product/acre	Ib a.i./acre	fl oz product/ 1000 sq ft	pints product/ acre	lb a.i./ acre
Dollar spot	7 to 10 7 to 21 14	1.0° to 2.0 2.0 to 3.6	2.8° to 5.0 5.5 to 9.75	2.1 ^b to 4.1 4.1 to 7.3	- - 4.0 to 5.5	- - 11 to 15.1	- - 8.25 to 11.3
Leaf Spot Melting-Out Brown Blight	7 to 10 7 to 21 14	2.0 2.0 to 3.6 -	5.5 5.5 to 9.75 -	4.1 4.1 to 7.3	- - 4.0 to 5.5	- - 11 to 15.1	- - 8.25 to 11.3
Brown Patch	7 to 14 14	2.0 to 3.6	5.5 to 9.75 -	4.1 to 7.3	- 4.0 to 5.5	- 11 to 15.1	- 8.25 to 11.3
Gray Leaf Spot	7 to 10 14	2.0 to 3.6 -	5.5 to 9.75 -	4.1 to 7.3	- 4.0 to 5.5	- 11 to 15.1	- 8.25 to 11.3
Red Thread	7 to 10 14	2.0 to 3.6 3.6 to 5.5	5.5 to 9.75 9.9 to 15.1	4.1 to 7.3 7.4 to 11.3	- 5.5	- 15.1	- 11.3
Anthracnose	7 to 10 14	3.0 to 3.6 3.6 to 5.5	8.3 to 9.75 9.9 to 15.1	6.2 to 7.3 7.4 to 11.3	-	- -	-
Copper Spot Stem Rust	14 14	4.0 to 5.5 4.0 to 5.5	11 to 15.1 11 to 15.1	8.25 to 11.3 8.25 to 11.3	5.5 5.5	15.1 15.1	11.3 11.3

(Bluegrass)							
Dichondra Leaf Spot (CA only)	14	4.0 to 5.5	11 to 15.1	8.25 to 11.3	5.5	15.1	11.3
Gray Snow Mold ^c	30	5.5	15.1	11.3	-	-	-
Fusarium (Gerlachia) Patch ^c	21 to 28	5.5	15.1	11.3	-	-	-
Algae ^c	7 to 14 14	2.0 to 3.6 -	5.5 to 9.75 -	4.1 to 7.3 -	2.0 to 3.6 4.0 to 5.5	5.5 to 9.75 11 to 15.1	4.1 to 7.3 8.25 to 11.3

^a**Group A Turf:** Limit of one application per season at rates greater than 7.3 lb a.i./acre (9.75 pints/acre of 3.6 fl oz/1000 sq. ft.) of this product.

Group B Turf: Limit of two applications per season at rates greater than 7.3 lb a.i. (9.75 pints/acre of 3.6 fl oz/1000 sq. ft.) of this product.

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

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

- Dollar Spot: Sclerotinia homeocarpa; Lanzia or Moellerodiscus spp.
- Leaf Spot, Melting-Out, Brown Blight: *Drechslera* spp. (including D. *poae*, *D. siccans*), *Bipolaris sorokiniana*, *Curvularia* ssp.
- Brown Patch: Rhizoctonia solani, R. zeae, R. cerealis
- Gray Leaf Spot: Pyricularia grisea, P. oryzae
- Red Thread: Laetisaria fuciformis
- Anthracnose: Colletotrichum graminicola
- Copper Spot: Gloeocercospora sorghi
- Stem Rust: Puccinia graminis
- Dichondra Leaf Spot: Alternaria spp.
- Gray Snow Mold: Typhula spp.
- Fusarium (Gerlachia) Patch
- Algae

Gray Snow Mold cause by Typhula spp.:

Group A and B Turf: Apply in sufficient water to obtain adequate coverage (2 to 10 gallons per 1,000 sq. ft.). Apply one application of 15.1 pints/acre (5.5 fl. Oz/1000 sq. ft.) of this product (11.3 lb a.i./acre). Application must be made before snow cover in autumn.

Group B Turf: If snow cover is intermittent or lacking during the winter, a second application of this product at 15.1 pints/acre (5.5 fl oz/1000 sq, ft.) may be applied one month after the first application.

Fusarium (Gerlachia) Patch:

Group A and B Turf: In areas where pink snow mold (Gerlachia or Fusarium patch) is likely to occur, apply this product at 15.1 pints/acre (5.5 fl oz/1000 sq. ft.) (11.3 lb a.i./acre) in combination with products containing iprodione at 88 oz a.i./acre (2 oz a.i./1000 sq. ft.) of turf area. Read and observe all label directions for products containing these active ingredients. For control of Fusarium Patch only in areas where snow coer is intermittent or lacking during the winter, apply 15.1 pints/acre (5.5 fl oz/1000 sq. ft.) of this product (11.3 lb a.i./acre). Make application in late autumn.

Group B Turf: Apply a second application of 15.1 pints/acre (5.5 fl oz/1000 sq. ft.) of this 21 to 28 days after the first application unless conditions favorable for Fusarium Parch no longer prevail.

Algae:

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

^cSee specific use directions below.

When alge is well established, every attempt should be made to dry out the afflicted area. Once dry, spoking or verticutting should be done to enhance turfgrass recovery in conjunction with a this product application at the rate of 11 to 15.1 pints/acre (4.0 to 5.5 fl oz/1000 sq.ft.).

Group B Turf: A second application of this product at the 15.1 pints/acre (5.5 fl oz/1000 sq.ft.) rate may be made 14 days after the first application.

Group A and B Turf: Following application of the 15.1 pints/acre (5.5 fl oz/1000 sq.ft.) rate, several applications of this product at a rate of 5.5 to 9.75 pints/acre (2.0 to 3.6 fl oz/1000 sq.ft.)(4.1 to 7.3 lb a.i./acre) on a 7- to 14-day interval 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.

FRUIT TREES (Apricot, Cherry (Sweet and Tart), Nectarine, Peach, Plum, and Prune Trees) Restrictions

DO NOT allow livestock to graze in treated areas.

Application:

Apply this product in sufficient water (minimum of 10 gallons per acre) 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.

When concentrate sprays are used or when treating non-bearing or immature trees, the lower rate of this product listed may be used.

DIRECTIONS FOR APPLICATION - AGRICULTURAL CROPS

Rust

Use the higher rate and shorter interval if disease severity begins to increase during the season or weather conditions are conducive to severe epidemics.

Crop	Disease (Pathogen)	Pint/A (Ibs ai/A)	Application Directions
Asparagus	Rust (Puccinia asparagi) Purple Spot (Pleospora herbarum) Cercospora blight (C. aperaragi)	2 – 4 (1.5 – 3.0)	Apply in water volumes of 25-50 gallons per A. Begin applications after final harvest of spears. Repeat applications at 14-28 day intervals (the minimum retreatment interval is 14 days), depending on disease pressure. Use the higher rate and shorter interval if disease severity begins to increase or weather conditions favor disease development. Ground applications only.
	more than 12 pt {product} (9 lb ai within 190 days (120 days in CA		year est of spears in the following season.
Beans (Snap)	Rust (Uromyces appendiculatus) Botrytis blight (gray mold) (botrytis cinerea)	1 3/8 – 3 (1.0 – 2.25) 3 (2.25)	Apply with sufficient water to obtain adequate coverage. Begin applications during early bloom stage or when disease first threatens and repeat as necessary (the minimum re-treatment interval is 7 days) to maintain control. Apply by ground, air or chemigation
Restrictions:			1
	more than 12 pt {product} (9 lb ai within 7 days of harvest.) per A per year	

Apply with sufficient water to obtain

D (D)	(11	4.0/00	I at a second part of the control of
Beans (Dry)	(Uromyces appendiculatus)	1 3/8 – 2	adequate coverage. Begin applications
(except soybeans)		(1.0 - 1.5)	at first onset of disease, which may
bean, adzuki	Anthracnose		occur as early as 2 to 4 weeks before
bean, broad	(Colletotrichum		flowering, and repeat at 7 to 10 day
bean, dry	lindemuthianum)		intervals (the minimum re-treatment
bean, lablab			interval is 7 days). For use only on
bean, navy	Downy mildew		beans to be harvested dry with pods
bean, kidney	(Phytophthora nicotianae)		removed.
bean, lima			A set to see a destruction of a second
bean, moth	Cercospora leaf blotch		Apply by ground, air or chemigation.
bean, mung	(C. cruenta)		
bean, pink	,		
bean, pinto	Ascochyta blight		
bean, tepary	(A. phaseolorum)		
bean, urd	, ,		
bean, yardlong			
catjang			
chickpea			
(garbanzo)			
cowpea			
lupin, grain			
lupin			
bean, rice			
bean, runner			
bean, jackbean			
pea, blackeyed			
pea, southern			
Restrictions:			

DO NOT apply more than 8 pt {product} (6.0 lb ai) per A per year

DO NOT apply within 14 days of harvest.

Plueberries	Cumprossion	3 – 4	{product} should be
Blueberries	Suppression: Anthracnose (ripe rot) (C. gloeosporoides) Mummy Berry (M. vacciniicorymbosi)	(2.25 – 3.0)	used as part of an overall disease management strategy which includes alternation with a fungicide with a different mode of action. Diseases may only be suppressed and russetting may occur under heavy disease pressure or unfavorable environmental conditions. Apply with sufficient water to obtain adequate coverage, normally 20-100 gallons per A. Begin applications at budbreak (green tip) and repeat at 10-day intervals through early bloom (the minimum re-treatment interval is 10 days). Under heavy disease pressure, use the higher rate. Ground or air applications only.
	Septoria leaf spot (Septoria albopunctata) Rust (Pucciniastrum vaccinii)	3 – 4 (2.25 – 3.0)	Post-Harvest Foliar Use (after all berries have been harvested): To maintain healthy leaves for the following season, apply with sufficient water to obtain adequate coverage (normally 20-100 gallons per A). Repeat at 10-14 day intervals (the minimum re-treatment interval is 10 days).
			Ground or air applications only.

- DO NOT apply more than 12 pt {product} (9.0 lb ai) per A per year
 DO NOT apply after full bloom (except for foliar use after harvest) or within 42 days of harvest.

•	DO NOT apply	arter full bloom	(except for for	iiai use aitei i	narvest) o	or within 42 days or harvest.
Cabbag	je				1 ½	Apply with sufficient water to obtain

Chinese Cabbage (tight-headed varieties only) Cauliflower Broccoli Chinese Broccoli Brussels Sprouts	Alternaria leaf spot (Alternaria spp.) Downy mildew (Peronospora parasitica)	(1.125)	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 to 10 day intervals (the minimum re-treatment interval is 7 days) or as necessary to maintain control. Apply by ground, air or chemigation. For field-seeded Brussels sprouts,
	Ring spot (California only)	(1.5)	begin applications at time of early sprout development or when conditions favor disease development. Repeat at 7 to 10 day intervals (the minimum retreatment interval is 7 days) maintain control.
	more than 16 pt {product} (12.0 I within 7 days of harvest.	b ai) per A per year	
Carrot	Cercospora leaf spot (C. carotae) Alternaria leaf blight (A. dauci)	1 ½ - 2 (1.125 – 1.5)	Apply with sufficient water to obtain adequate coverage. Start applications when disease threatens and repeat at 7 to 10 day intervals (the minimum retreatment interval is 7 days) to maintain control.
			Apply by ground, air or chemigation
	more than 20 pt {product} (15.0 le applied the day of harvest	b ai) per A per year	Analysish as finish sustants abtain
Celery	Early blight (Cercospora apii) Late blight (Septoria apicola)	(1.5 – 2.25)	Apply with sufficient water to obtain adequate coverage. Start applications when transplants are set in the field and repeat at 7 day interval as needed to maintain control (the minimum retreatment interval is 7 days).
	Basal stalk rot (Rhizoctonia solani)		Apply by ground, air or chemigation.
	Suppression: (7 day schedule)	3 (2.25)	
	Pink rot (Sclerotinia sclerotiorum)		
	Early blight (Cercospora apii)	1 ½ - 2 (1.125 to 1.5) per 100 gal	For celery seedbeds, apply in a spray volume of 125 gallons per A twice weekly or as needed to maintain control. Start applications shortly after crop
	Late blight (Septoria apicola)		emergence. Use the higher rate under severe disease conditions.
	more than 24 pt {product} (18.0 l within 7 days of harvest.	b ai) per A per year	
Corn (Sweet) Corn (grown for seed)	Helminthosporium leaf blights Rust (Puccinia spp.)	³ ⁄ ₄ - 2 (0.6 – 1.5)	Apply with sufficient water to obtain adequate coverage. Begin applications when conditions favor disease development and repeat at 7 day intervals (the minimum re-treatment interval is 7 days). Under severe disease conditions, use 1 ½ to 2 pt Omni Brand Chlorothalonil per A.
Restrictions:			Apply by ground, air or chemigation.
itestrictions.			

- DO NOT apply more than 12 pt {product} (9.0 lb ai) per A per year
- 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.

Cranberry	Fruit Rots Lophodermium leaf/twig blight (L. hypophyllum)	4 - 6 ½ (3.0 - 4.9)	Apply at early bloom and repeat at 10 to 14 day intervals (the minimum retreatment interval is 10 days). Under severe disease conditions, use the 6 ½ pint per A rate on a 10 day schedule. Apply by ground, air or chemigation. When applying by chemigation, apply in 300 gallons of water per A through solid set systems only.
	Upright Dieback (Phomopsis vaccinii)	4 - 6 ½ (3.0 - 4.9)	Apply with sufficient water to obtain coverage of uprights and runners. Make the first application prior to bloom, when shoots begin growth in the spring. Make additional applications at 10-14 day intervals. Apply by ground, air or chemigation. When applying by chemigation, use 300 gallons of water per A through solid set systems only.

Restrictions:

- DO NOT apply more than 20 pt {product} (15.0 lb ai) per A per year
- 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

арріісаціон.			
Cucurbits	Anthracnose (Colletotrichum spp.)	1 ½ - 2 (1.125 – 1.5)	Apply with sufficient water to obtain adequate coverage. Begin applications when plants are
Cucumber Cantaloupe Muskmelon Honeydew melon Watermelon	Downy mildew (Pseudoperonospora cubensis)	(1.125 – 1.5)	in first true leaf stage or when conditions are favorable for disease development. Repeat applications at 7 day intervals (the minimum re-treatment interval is 7 days).
Squash	Target spot		Spraying mature watermelons
Pumpkin	(Corynespora cassiicola)		may result in sunburn of the upper surface of
_	Cercospora leaf spot	2 – 3	the fruit. DO NOT apply
	(C. citrullina)	(1.5 – 2.25)	{product} to watermelons when any of the
			following conditions are present:
	Gummy stem blight/vine		intense heat and sunlight
	decline		drought conditions
	(Didymella bryoniae)		poor vine canopy
	Alternaria leaf blight (A. cucumerina) Alternaria leaf spot (A. alternata)		other crop and environmental conditions which may be conducive to increased natural sunburn. DO NOT combine {product} with anything except water for application to watermelons unless your prior use has shown the
	Scab (Cladosporium cucumerinum)		combination to be non-injurious to watermelons under your conditions of use. Apply by ground, air or chemigation.
- Decided the second	Powdery mildew (Sphaerotheca only)		

Restrictions:

- DO NOT apply more than 21 pt {product} (15.75 lb ai) per A per year
- {product} may be applied the day of harvest.

Grasses Grown for Seed	Stem rust Leaf rust	1 – 1 ½ (0.75 – 1.125)	Apply with sufficient water to obtain adequate coverage. Begin applications during stem elongation when conditions favor disease development.
	Stripe rust Septoria leaf spot Glume blotch		Re-apply at flag (top) leaf emergence and repeat at 14 day intervals (the minimum retreatment interval is 14 days). Apply by ground, air or chemigation.

WASTER LABEL			
	Bipolaris and Drechslera		
	leaf spots Selenophoma (eyespot)	1 – 2	_
	Selenoprioria (eyespot)	(0.75 – 1.5)	
Restrictions:			
DO NOT applyDO NOT allow I	more than 6 pt {product} (4.5 lb a within 14 days of harvest. livestock to graze in treated area		ed before harvest. Feeding of treated plant
parts after harve	est of seed is allowed.	2 – 3 ½	Apply in a water volume of 20 to 300 gallons
Mango	Anthracnose (Colletotrichum spp.)	(1.5 – 2.6)	per A. Begin applications at early bloom and repeat on a 7 - 14 day interval until early fruit development. Begin the season with the 2 pint rate on a 14 day interval (the minimum retreatment interval is 7 days). If disease pressure is severe, use the higher rateand shorter interval.
Destrictions			Ground or air applications only.
	more than 32 pt {product} (24 lb within 21 days of harvest.		
Mint (Indiana, Michigan and Wisconsin only)	Rust (Puccinia menthae) Septoria leaf spot (S. menthae)	1 3/8 (1.0)	Apply with sufficient water to obtain adequate coverage, normally 20 to 150 gallons per A for dilute sprays and 5 to 10 gallons per A for concentrate ground and aircraft applications. Begin applications when emerging plants are 4 to 8 inches high and repeat at 7 to 10 day intervals to maintain control (the minimum re-treatment interval is 7 days).
Restrictions:			
	more than 4 pt {product} (3 lb ai) within 80 days of harvest.	per A per year	
	resh or extracted mint hay from to	reated fields to livest	tock.
Onion (Dry bulb) Garlic	Botrytis leaf blight (Botrytis spp.) Purple blotch (Alternaria porri) Suppression: Botrytis neck rot	1-3 (0.75 - 2.25)	Apply with sufficient water to obtain thorough coverage of tops. Chlorothalonil is recommended for use with disease monitoring systems which adjust fungicide rates and frequency of application according to disease hazard. Apply as follows:
	Downy mildew (Peronospora destructor)		Low Low High Disease Disease Hazard & Hazard & Hazard & Hazard Prior Some Infection Disease Present
			Rate per A 1 pt. 1 3/8 pts. 3 pts. Frequency 10 days 7 to 10 7 days
			For suppression of neck rot (Botrytis spp.) during storage, a minimum of three weekly applications prior to lifting, using 1 3/8 to 3 pt {product} per A is recommended. The minimum re-treatment interval is 7 days. Apply by ground, air or chemigation.
Restrictions:	•	•	
	more than 20 pt {product} (15 lb within 7 days of harvest.		
Onion (green bunching) Leeks Shallots Onion and Garlic	Botrytis leaf blight (Botrytis spp.) Purple blotch (Alternaria porri)	1 ½ - 3 (1.125 – 2.25)	Apply with 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
(grown for seed)	Suppression: Downy mildew (Peronospora destructor)		day schedule of applications when heavy dew or rains persist. Apply by ground, air or chemigation.

Restrictions: DO NOT apply more than 9 pt {product} (6.75 lb ai) per A per year DO NOT apply within 7 days of harvest on garlic. DO NOT apply within 14 days of harvest on green bunching onions, leeks or shallots. Alternaria fruit spot 1 ½ - 3 Apply by ground only, in sufficient (A. alternata) (1.125 - 2.25)water to obtain adequate coverage of fruit and **Papaya** leaves. Begin treatment when conditions favor development of disease and continue Anthracnose (Colletotrichum spp.) treatments at 14 day intervals until weather conditions no longer favor disease Stem end rot development (the minimum retreatment (A. alternata, interval is 14 days.) Colletotrichum spp.) Restrictions: DO NOT apply more than 9 pt {product} (6.75 lb ai) per A per year {this product} may be applied the day of harvest. Alternaria leaf spot Apply with sufficient water to obtain adequate 1 ½ - 2 (Alternaria spp.) (1.125 - 1.5)coverage. Make the first application at the first **Parsnips** sign of disease or when conditions are Downy mildew favorable for infection. Continue applications on a 7 - 10 day schedule (the minimum (Plasmopara crustosa) retreatment interval is 7 days). Anthracnose Apply by ground, air or chemigation. (Colletotrichum spp.) Botrytis blight (gray mold) (B. cinerea) **Bottom** rot (Rhizoctonia) **Restrictions:** DO NOT apply more than 8 pt {product} (6.0 lb ai) per A per year DO NOT apply within 10 days of harvest. Alternaria fruit and leaf spot Apply by ground only in sufficient water to (Alternaria spp.) (1.5)obtain adequate coverage of fruit and leaves. **Passion Fruit** Begin applications during late bloom and (Hawaii only) repeat at 14 day intervals until weather Anthracnose (Colletotrichum spp.) conditions no longer favor disease development (the minimum re-treatment Cercospora fruit spot interval in is 14 days.) **Restrictions:** DO NOT apply more than 10 pt {product} (7.5 lb ai) per A per year DO NOT apply within 7 days of harvest. Peanut Early Leaf Spot 1 – 1 ½ Apply in sufficient water for coverage (Cercospora arachidicola) (1.125 - 1.5)when leaf wetness first occurs or 30 to 40 days after planting. Repeat at 14 day Late leaf spot intervals (the minimum retreatment (Cercosporidium interval is 14 days). When conditions personatum) favor late leaf spot or when rust or web blotch occur. apply 1 ½ pints {product} Pepper Spot per acre at 14 days interval for the (Leptosphaerulina remainder of the season. crassiasca) 1 ½ Rust Apply by ground, air, or chemigation. If (Puccinia arachidis) (1.125)applying by chemigation, use 1 ½ pt {product} per A. It is recommended to Web blotch alternate chemigation applications with (Phoma arachidicola) ground or aerial applications. Restrictions: DO NOT apply more than 12 pt {product} (9 lb ai) per A per year DO NOT apply within 14 days of harvest DO NOT allow livestock to grace in treated area. DO NOT feed hay or threshings for treated fields to livestock. **Potato** Late blight Begin application a the low rate when (Phytophthora infestans) (0.6)vines are first exposed and leaf wetness

	Early Blight (Alternaria solani) Botrytis vine rot (B. cenerea) Black dot (Colletrotrichum coccodes)	Then 1 – 1 ½ (0.75 – 1.125)	occurs. Repeat applications at 5 -10 day intervals (the minimum retreatment interval is 5 days) Begin applying the higher label rates at 5-10 days intervals when any one of the following events occur: • Vinces close within the rows • Late blight forecasting mesures 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. Apply by ground, air, or chemigation. DO NOT exceed a 10 day interval between applications when using chemigation.
	more than 15 pt {product} (11.25	lb ai) per A per year	
Soybean	Anthracnose (Colletotrichum truncatum) Diaprothe pod and stem rot (D. phaseolorum)		Apply with sufficient water to obtain complete coverage, using at least 5 gallons of water per A for aerial application. Use the 3 application program in areas having a history of moderate to severe disease intensity. The minimum retreatment interval is 14 days.
	Frogeye leaf spot (Cercospora sojina) Purple seed stain (C. kikuchii) Cercospora leaf blight (C. kikuchii)	1 ½ - 2 ¼ (1.125 – 1.7)	Apply by ground, air, or chemigation. Two application program: For determinate varieties, make the first application at early pod set stage (R3) and the second application at seed formation (R5). For indeterminate varieties, make the first application when largest pods are 1 – 1 ½ inches in length. Make the second application 14 days later.
	Septoria brown spot (S. glycines) Suppression: Rust (Phakipsora pachyrhizi)	1 – 2 (0.75 – 1.5)	Three application program: For determinate varieties, make the first application at the beginning of flowering (R1), the second at early pod set (R3), and the third at beginning of seed formation (R5). For indeterminate varieties, make the first application one week after first flowering and continue applications at 14 day intervals.
	Stem canker (Diaporthe phaseolorum)	1 (0.75)	Apply with 10 to 20 gallons of water per A, as a band treatment directing spray to provide coverage of entire plant. Make the first 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 14 day intervals.
DO NOT apply	more than 6 pt {product} (4.5 lb a within 6 weeks of harvest.		
	ay or threshings from treated field		I
Tomato	FOLIAGE Early blight (Alternaria solani)	1 3/8 – 2 (1.0 – 1/5)	Apply with sufficient water to obtain adequate coverage. Begin applications when dew or rain occurs and disease

	Late blight (Phytophthora infestans) Gray leaf spot (Stemphyllium botryosum) Gray leaf mold (Fluvia fluva; Cladosporium) Target spot (Corynespora cassiicola)	2.23/	threatens. Apply on a 7 – 10 day interval for foliage diseases. For fruit diseases, begin at fruit set and apply on a 7-14 day interval. Use the highest rate and shortest interval specified when disease conditions are severe. The minimum retreatment interval is 7 days. Apply by ground, air, or chemigation.
	FRUIT	2 -2 ¾ (1.5 – 2.1)	
	Anthracnose (Colletotrichum spp.)		
	Alternaria fruit rot (black mold) (A.alternate)		
	Botrytis gray mold (B. cinerea)		
	Late blight fruit rot (P.infetans)		
Postrictions	Rhizoctonia fruit rot (R. solani)		

Restrictions:

- DO NOT apply more than 20 pt {product} (15 lb ai) per A per year
- {Product} may be applied the day of harvest

DIRECTIONS FOR APPLICATION - TREE AND ORCHARD CROPS

Apply {product} in sufficient water and with proper calibration to obtain uniform coverage of tree canopy. For fruit and nut bearing crops, the maximum volume is 300 gallons per acre unless indicated otherwise in the specific use directions. For conifers, the maximum volume is 100 gallons per acre.

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, {product} may be applied with aircraft using at least 20 gallons of spray per acre. The minimum volume for application by aircraft to conifer stands and Christmas trees is 10 gallons per acre. When concentrated sprays are used or when treating non-bearing or immature trees, the lower rate of {product} may be used.

DO NOT allow livestock to graze in treated areas.

	Disease	Use Rate		Application Instructions
Crop	(Pathogens)	Pt/a (Ib ai/A)	100 Gallons**	Application Instructions
Almonds	Blossom blight/brown ro (Monilinia spp.) Shothole (Wilsonomyces carpophilus) Scab (Vebtyrua caroiohila)	4 (3.0)	1.33 (1.0)	Apply with water volumes of 20 – 300 gal per A. For blossom blight, begin applications at popcorn (pink bud) and follow with an application at full bloom. If weather is still conducive for disease development, another application may be made

				at petal fall.
				For control of shot hole, make an application in the autumn at leaf fall. In the spring, make the first application at budbreak, followed by an application at shuck split to control nut infections and to control scab.
				Ground or air application only.
Restrictions:			•	-
DO NOT apply:	more than 25 pt {product} (18.75 lb ai) per A pe	er year	
	within 150 days of harvest.	,, ,	·	
	Eastern filbert blight	4	1.33	Apply with water volumes of 20 –
Filberts (Hazelnuts)	(Anisogramma anomala)	(3.0)	(1.0)	300 gal per A. Begin applications at the onset of disease or when weather conditions favor disease development. Make applications on a 14 - 28 day schedule, using the shorter interval under heavy disease pressure (the minimum re-treatment interval is 14 days).
Restrictions:				

- DO NOT apply more than 12 pt {product} (9.0 lb ai) per A per year.
 DO NOT apply within 120 days of harvest.
 DO NOT apply through irrigation.
 DO NOT apply with oils, other pesticides, surfactants or fertilizers.

- DO NOT apply within one week of an oil-based pesticide application.

Peach Nectarines Apricots Cherry Plum Prune	Leaf curl (Taphrina deformans) Shot hole (Wilsonomyces carophilus)	3 1/8 to 4 1/8 (2.3 to 3.1)	1 to 1 3/8 (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 bud swell. If the leaf fall application is not practical, application of {product name} for control of leaf curl may be made at any time prior to bud swell the following spring. Where shot hole occurs, also apply at budbreak to protect newly emerging leaves and at shuck split to prevent fruit infections. Apply by ground or air.
	Lacy (russet) scab (Plum / Prume) Brown rot blossom blight	3 1/8 to 4 1/8 (2.3 to 3.1)	1 to 1 3/8 (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

Swiss needlecast (Phaeocryptopus gaeumannii)

Interior needle blight (Mycosphaerella spp. and Phaeocryptopus nudus)

(Pines, Spruces)

fields

longer favor disease development. For use in nursery

beds, apply the highest rate specified on a 3-week schedule.

When using aerial applications

use the highest rate.

MASTER LABEL				
	(Monilinia spp.)			an additional application at petal fall.
	Cherry leaf spot (Blumeriella haapii) Scab (Cladosporium carpophilum) Black knot (cherry) (Spiosporina morbosa)	3 1/8 to 4 1/8 (2.3 to 3.1)	1 TO 1 3/8 (0.75 TO 1.0)	In addition to the bloom applications 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. Ground or air applications only.
Restrictions:				
DO NOT apply{this product} D	more than 20.5 pt {product o Not apply after shuck spl e-treatment interval is 10 da	it.	er year	
Pistachio	Botryosphaeria blight (B. dothidea) Suppression: Alternaria late blight (A. alternata) Septoria leaf spot (S. pistacina) Botrytis blight (B. cinerea)	6 (4.5) 4 - 6 (3.0 - 4.5)	3 (2.25) 2 – 3 (1.50 – 2.25)	Apply with water volumes of 20 – 200 gal per A. Make the first application at the beginning of the blossom period followed by an application at full bloom. Make additional applications as required on a 28 day interval. (The minimum retreatment interval is 28 days). For Septoria and Botrytis, use the higher rate if disease pressure is severe.
				Use of this product may result in speckling or reddening of the fruit hull (epicarp). This effect is superficial and has not resulted in any change in nut quality.
5 (14)				Ground or air applications only.
	more than 30 pt {product} (within 14 days of harvest.	22.5 lb ai) per A pe	r year	
Conifers Nursery beds	Swiss needlecast (Phaeocryptopus gaeumannii)	2 ³ ⁄ ₄ - 5 ¹ ⁄ ₂ (2.1 – 4.125)	2 ¾ - 5 ½ (2.1 – 4.125)	Single application technique: In Christmas tree plantations or conifer stands, make one
Christmas tree and bough production plantations				application in the spring when new shoot growth is ½ to 2 inches in length.
Tree seed orchard				When using aerial applications, use the highest rate.
Conifers in landscapes of golf courses and around non-residential and industrial buildings, and collegiate athletic	Scleroderris canker (Pines) (Gremmeniella abietina) Swiss needlecast (Phaeocryptopus	1 ½ - 2 ¾ (1.125 – 2.1)	1 ½ - 2 ¾ (1.125 – 2.1)	Multiple Applications: Make the first application in spring when new shoot growth is ½ to 2 inches in length. Make additional applications at 3 to 4 week intervals until conditions no longer favor disease

2 – 3 ½

2-3 1/2

Sirococcus tip blight	(1.5 – 2.6)	(1.5 – 2.6)	
(S. conigenus)	(1.3 – 2.0)	(1.3 – 2.0)	
Rhizosphaera	5 ½ (4.125)	5 ½ (4.125)	
needlecast (Spruces) (Rhizosphaera spp.)			
Scirrhia brown spot			
(Pines) (Mycosphaerella dearnessii)			
Cyclaneusma and Lophodermium needlecasts (Pines)	2 ¾ - 5 ½ (2.1 - 4.125)	2 ¾ - 5 ½ (2.1 - 4.125)	Apply in early spring prior to budbreak. 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.
Rhabdocline needlecast (Douglas-fir)	1 ½ - 2 ¾ (1.125 – 2.1)	1 ½ - 2 ¾ (1.125 – 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 to 4 weeks as specified above. In nursery beds, use the high rate on a 3-week schedule.
Botrytis seedling Blight Phoma twig blight	1 ½ - 2 ¾ (1.125 – 2.1)	1 ½ - 2 ¾ (1.125 – 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 ½ (4.125)	5 ½ (4.125)	Begin applications when 10% of buds have broken and twice thereafter at 7 -10 day intervals.
1	1	1	

Restrictions:

- DO NOT apply more than 22 pt {product} (16.5 lb ai) per A per year
- The minimum re-treatment interval is 21 days. The minimum re-treatment interval in nursery beds is 7 days.
- DO NOT use on forests.
- Apply this product in sufficient water (minimum of 10 gallons per acre) 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.
- Aerial application is allowed only for Christmas tree and bough production plantations and tree seed orchards.
- When concentrate sprays are used, or when treating non-bearing or immature trees, the lower rate of their product listed may be used.
- DO NOT allow livestock to graze in treated areas.
- DO NOT apply to blue spruce.

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

Crop	Disease	{Product} Rate fl oz / 1,000 sq ft	- Application Instructions
Mushroom	Verticillium brown spot Dry bubble	2.75 – 5.5	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 {product name} I in the first application and the low rate (2.75 fl oz) of Chlorothalonil in the second application. The first application should be made within two days of topdressing the spawn-colonized mushroom compost with a casing layer. The second application should be made at pinning.

Restrictions:

- DO NOT apply within 5 days of first harvest.
- DO NOT make more than 2 applications per cropping cycle.
- DO NOT apply more than 8.25 fl oz of {product name} per 100 sq ft per cropping cycle.

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE:

Store in a cool place. Protect from excessive heat.

PESTICIDE DISPOSAL:

Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER HANDLING:

{Non-refillable containers >5 gallons or 50 lbs net weight}

Nonrefillable container. Do not refill or reuse container. Triple rinse as follows: Fill container ½ full with water. Tip container on its side and roll it back and forth, ensuring at least one complete revolution for 30 seconds. Stand the container on its end and tip it back and forth several times. Follow Pesticide Disposal instructions for rinsate disposal. Repeat this procedure two more times. Then offer for recycling or reconditioning. If not available, puncture and dispose in a sanitary landfill.

OR

{Non-refillable containers ≤ 5 gallons }

(Nonrefillable container. Do not refill or reuse this container. Triple rinse as follows: Fill container ¼ full with water and recap. Shake for 10 seconds. Drain for 10 seconds after the flow begins to drip. Drain for 10 seconds after the flow begins to drip. Empty the rinsate into the application equipment or mix tank or store rinsate for later use or disposal. Repeat procedure two more times. Then offer for recycling or reconditioning. If not available, puncture and dispose in a sanitary landfill)

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