# DOC ID 559956

# ACCEPTED FOR REGISTRATION

December 19, 2018

New York State Department of Environmental Conservation Division of Materials Management Pesticide Product Registration

# CHLOROTHALONIL GROUP M FUNGICIDE

**FIRST AID** 

Do not induce vomiting unless told to do so by a poison control center or doctor.

· If person is not breathing, call 911 or an ambulance, then give artificial respiration,

Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also call CHEMTREC at 800-424-9300 for

· Call a poison control center or doctor immediately for treatment advice

· Have person sip a glass of water if able to swallow.

· Do not give anything by mouth to an unconscious person.

· Call a poison control center or doctor for further treatment advice

Rinse skin immediately with plenty of water for 15 to 20 minutes.
Call a poison control center or doctor for treatment advice.

Hold eye open and rinse slowly and gently with water for 15 to 20 minutes.
Remove contact lenses, if present, after the first 5 minutes, then continue rinsing

# Chlorothalonil 720

IF SWALLOWED:

**IF INHALED:** 

IF IN EYES:

Move person to fresh air

IF ON SKIN OR CLOTHING:

· Take off contaminated clothing

emergency medical treatment information

preferably mouth-to-mouth, if possible

Drexel

For control of diseases in listed Agricultural, Turf and Ornamental crops. ACTIVE INGREDIENT:

Chlorothalonil	54.0%
OTHER INGREDIENTS:	46.0%
TOTAL:	100.0%
This product contains ( nounds of Chlorothalanil nor college and	unlant to

This product contains 6 pounds of Chlorothalonil per gallon equivalent to 720 grams per liter.

# KEEP OUT OF REACH OF CHILDREN CAUTION

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.)

# SHAKE WELL BEFORE USING



EPA Reg. No. 19713-690 EPA Est. No. 19713-GA-2

Net Content: 2.5 Gals. (9.46 L) 690PF2-0918(0918\*)•G2

The DREXEL logo is a registered trademark of Drexel Chemical Company.

# NOTE TO PHYSICIAN: Persons suffering with temporary allergic skin reactions may respond to treatment with oral antihistamines and topical or oral steroids. Manufactured By: Drexel Chemical Company P.O. Box 13327, Memphis, TN 38113-0327

**SINCE 1972** 

Tear Open Here for Complete Precautionary Statements, Directions For Use and Storage and Disposal Instructions

9/19/2018 8:12:44 AM

690PF2-0918(0918asterisk)bulletG2.indd 2

9/19/2018 8:12:44 AM

# PRECAUTIONARY STATEMENTS

#### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

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

#### PERSONAL PROTECTIVE EQUIPMENT (PPE)

Mixers, loaders, applicators and all others who handle this pesticide must wear: Long-sleeved shirt and long pants, chemical-resistant gloves made out of barrier laminate, butyl rubber  $\geq 14$  mils, nitrile rubber  $\geq 14$  mils, neoprene rubber  $\geq 14$  mils, natural rubber  $\geq 14$  mils, polyethylene, polyvinyl chloride  $\geq 14$  mils, viton  $\geq 14$  mils and shoes plus socks.

For uses in Turf and Ornamentals: Mixers, loaders, applicators and all others who handle this pesticide must wear: Long-sleeved shirt and long pants, chemical-resistant gloves made out of barrier laminate, butyl rubber  $\geq 14$  mils, nitrile rubber  $\geq 14$  mils, neoprene rubber  $\geq 14$  mils, natural rubber  $\geq 14$  mils, polyethylene, polyvinyl chloride  $\geq 14$  mils, viton  $\geq 14$  mils, shoes plus socks and wear a minimum of a NIOSH approved particulate filtering facepiece respirator with any N, R or P filter (TC84A); OR another NIOSH approved particulate respirator with any N, R or P filter; OR a NIOSH approved powered air purifying respirator with an HE filter for applicators and handlers in enclosed areas such as a Greenhouse.

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

#### ENGINEERING CONTROLS

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

#### USER SAFETY RECOMMENDATIONS

Users should: 1) Wash hands thoroughly before eating, drinking, chewing gum, using tobacco or using the toilet. 2) Remove clothing / PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. 3) Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

#### **ENVIRONMENTAL HAZARDS**

This pesticide is toxic to 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.

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 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.

# PRODUCT INFORMATION

CHLOROTHALONIL 720 fungicide is an effective product when used according to label directions to control a broad spectrum of plant diseases. This product is suitable 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 can be used effectively in dilute or concentrate sprays. Thorough uniform coverage is essential for disease control.

# **DIRECTIONS FOR USE**

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

# AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard (WPS), 40 CFR Part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, 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 WPS.

Do not enter or allow worker entry into treated areas during the Restricted Entry Interval (REI) of 12 hours.

PPE required for early entry to treated areas that is permitted under the WPS and that involves contact with anything that has been treated, such as plants, soil or water is: Long-sleeved shirt and long pants, chemical-resistant gloves made of any waterproof material such as nitrile or barrier laminate 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.

- 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:
  - · 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 (WPS), 40 CFR Part 170. The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries and greenhouses.

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

# DISEASE RESISTANCE MANAGEMENT

#### CHLOROTHALONIL GROUP M FUNGICIDE

For resistance management, this product contains a Group M\* fungicide. Any fungal population may contain individuals naturally resistant to this product and other Group M 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 this product or other Group M 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 resistance management and/or IPM recommendations for specific crops and pathogens.
- For further information or to report suspected resistance contact Drexel Chemical Company at (901) 774-4370. You can also contact your pesticide distributor or university extension specialist to report resistance.
- \*The multi-site activity grouping, designated by the symbol "M", comprises a collection of various chemicals that act as general toxophores with several sites of action. These sites may differ between group members.

#### **USE RESTRICTIONS**

- Do not use this product on crops grown in the Greenhouse.
- Do not combine this product in 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.
- Do not combine this product with *Bacillus thuringiensis* (e.g., Dipel<sup>®</sup>) or spreader/ sticker (e.g., Latron B-1956<sup>®</sup> or Latron AG 98<sup>®</sup>) as phytotoxicity may result from the combination when applied to crops listed on this label.
- Do not apply 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.

#### 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 to applications using dry formulations.

- The distance of the outer most nozzles on the boom must not exceed 75% the length of the wingspan or rotor.
- 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 "SPRAY DRIFT MANAGEMENT" section.

#### Spray Drift Management

This section is advisory in nature and does not supersede the mandatory label requirements.

#### Importance of Droplet Size

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

#### Controlling Droplet Size

 Volume: Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with the higher rated flows produce larger droplets.

- Pressure: Use the lower spray pressures listed for the nozzle. Higher pressure reduces droplet size and does not improve canopy penetration. 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 backwards, parallel to the airstream, will produce larger droplets than other orientations. Significant deflection from the 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 larger droplets than other
  nozzle types.

#### Boom Length

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

#### Application Height

Do not make applications 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 the exposure of the droplets to evaporation and wind.

#### Swath Adjustment

When applications are made with a crosswind, the swath will be displaced downwind. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Increase swath adjustment distance increase, with increasing drift potential (higher wind, smaller droplets, etc.).

# Wind

Drift potential is lowest between wind speeds of 2 to 10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given speed. Avoid application below 2 mph due to variable wind direction and high inversion potential. **Important:** Local terrain can influence wind patterns. Every applicator must be familiar with local wind patterns and how they affect drift.

#### Temperature and Humidity

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

#### **Temperature Inversions**

Applications should not occur during a temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable

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

#### Sensitive Areas

Apply this product when the potential for drift to adjacent sensitive areas (e.g., residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops) is minimal (e.g., when wind is blowing away from the sensitive areas).

#### APPLICATION INSTRUCTIONS

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

Important: Slowly invert container several times to assure uniform mixture.

#### TANK-MIXING

This product may be used in tank-mixture with other pesticide product(s), surfactants or fertilizers, however, if compatibility, effectiveness, phytotoxicity or prior use is not known, test the tank-mix combination on a small scale prior to use.

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 limitations 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.

Add slowly the required amount of this product 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.

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 to 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 otherwise stated in the specific use directions. For Conifers, the maximum volume is 100 gallons per acre.

#### 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 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 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 regularly serves an average of at least 25 individuals daily at least 60 days per year.

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

The irrigation water pipeline must be fitted with a functional automatic quick closing check valve to prevent the flow of treated irrigation water back toward the water source. The pipeline must also be fitted with a vacuum relief valve and low pressure dram 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 solenoidoperated valve located on the intake side of the injection pump. Interlock this valve to the power system so as to prevent fluid from being withdrawn from the chemical supply tank when the irrigation system is either automatically or manually turned off.

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

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

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

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

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 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 to 3 times those encountered within the irrigation water line. Venturi applicator units cannot be used on these systems.

Thoroughly mix specified 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 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 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.

# APPLICATION DIRECTIONS ASPARAGUS

Disease(s) / Fungus	This Product / Ac.	Use Instructions
Cercospora blight (Cercospora asparagi)	2 to 4 pts. (1.5 to 3.0 lbs. a.i.)	By ground applications only. Apply in water volumes of 25 to 50 gals. / Ac. Begin applications after final harvest of spears. Repeat at 14 to 28 day
Purple spot (Pleospora herbarum)		intervals. Minimum retreatment interval is 14 days depending on disease pressure. Use the higher rate in the range and
Rust <i>(Puccinia asparagi)</i>		shorter interval if disease severity begins to increase or weather conditions favor disease development.

#### USE RESTRICTIONS:

- Do not apply more than 12 pts. of this product (9 lbs. a.i.) per acre per year.
- Do not apply within 190 days (120 days in AZ and CA) of harvest of spears in the following year.

# **BEANS (DRY)**

Adzuki, Blackeyed pea, Broad, Catjang, Chickpea (Garbanzo), Cowpea, Dry, Jackbean, Kidney, Lablab, Lima, Lupin, Lupin grain, Moth, Mungbean, Navy, Pink, Pinto, Rice, Runner, Southern pea, Tepary, Urd, Yardlong (Except Soybeans)

Disease(s) / Fungus	This Product / Ac.	Use Instructions
Anthracnose (Colletotrichum lindemuthianum)	1.37 to 2 pts. (1 to 1.5 lbs. a.i.)	By ground, air or chemigation applications. Apply in sufficient water to obtain adequate coverage. Begin applications at first onset
Ascochyta blight (Ascochyta phaseolorum)	í í	of disease which may occur as early as 2 to 4 weeks before flowering. Repeat at 7 to 10 day intervals. Use the higher rate in the range and shorter interval if disease
Cercospora leaf blotch (Cercospora cruenta)		severity begins to increase or weather conditions favor disease development. For use only on Beans to be harvested dry with pods removed.
Downy mildew (Phytophthora nicotianae)		
Rust (Uromyces appendiculatus)		
USE RESTRICTIONS		

USE RESTRICTIONS:

• Do not apply more than 8 pts. of this product (6 lbs. a.i.) per acre per year.

· Do not apply within 14 days of harvest.

# **BEANS (SNAP)**

Disease(s) / Fungus	This Product / Ac.	Use Instructions
Botrytis blight (Gray mold) <i>(Botrytis cinerea)</i>	1.37 to 3 pts. (1 to 2.25 lbs. a.i.)	By ground, air or chemigation applications. Apply in sufficient water to obtain adequate coverage. Begin applications during early bloom stage or when disease first threatens. Repeat as necessary. Minimum retreatment
Rust (Uromyces appendiculatus)		interval is 7 days to maintain control. Use the higher rate in the range if disease severity begins to increase or weather conditions favor disease development.

USE RESTRICTIONS:

Do not apply more than 12 pts. of this product (9 lbs. a.i.) per acre per year.
Do not apply within 7 days of harvest.

#### **BLUEBERRIES**

Disease(s) / Fungus	This Product / Ac.	Use Instructions
Suppression: Anthracnose (Ripe rot) (Colletotrichum gloeosporioides)	3 to 4 pts. (2.25 to 3 lbs. a.i.)	By ground or air applications only. Use as part of an overall disease management strategy which includes alternation with a fungicide with a different mode of action.
Suppression: Mummy berry (Monilia vaccinii- corymbosi)		Diseases may only be suppressed an russetting may occur under heavy diseas pressure or unfavorable environmenta conditions. Apply in sufficient water to obtain adequate coverage, normally 20 t 100 gals. / Ac. Begin applications at budbrea (green tip) and repeat at 10 day interval through early bloom. Under heavy diseas pressure, use the higher rate in the range.
Septoria leaf spot (Septoria albopunctata)	3 to 4 pts. (2.25 to 3 lbs. a.i.)	Post-harvest Foliar Use (after all berries have been harvested): To maintain healthy leaves for the following year, apply
Rust (Pucciniastrum vaccinii)		in sufficient water to obtain adequate coverage (normally 20 to 100 gals./Ac.). Repeat at 10 to 14 day intervals. Use the higher rate in the range and shorter interval if disease severity begins to increase or weather conditions favor disease development.

#### USE RESTRICTIONS:

• Do not apply more than 12 pts. of this product (9 lbs. a.i.) per acre per year.

 Do not apply after full bloom (except for foliar use after harvest) or within 42 days of harvest.

# BROCCOLI, BRUSSELS SPROUTS, CABBAGE, CAULIFLOWER, CAVALO (BROCCOLO, KOHLRABI), CHINESE BROCCOLI, CHINESE CABBAGE (Tightheaded Var., Napa), CHINESE MUSTARD

Disease(s) / Fungus	This Product / Ac.	Use Instructions
Alternaria leaf spot <i>(Alternaria</i> spp.)	1.5 pts. (1.125 lbs. a.i.)	By ground, air or chemigation applications. Apply in sufficient water to obtain adequate coverage. Begin applications after
Downy mildew (Peronospora parasitica)		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.
Ringspot (CA only) (Mycosphaerella brassicicola)	2 pts. (1.5 lbs. a.i.)	For field-seeded Brussels sprouts, begin applications at time of early sprout development or when conditions favor disease development. Repeat at 7 to 10 day intervals.

#### USE RESTRICTIONS:

• Do not apply more than 16 pts. of this product (12 lbs. a.i.) per acre per year.

• Do not apply within 7 days of harvest.

# CARROTS

Disease(s) / Fungus	This Product / Ac.	Use Instructions
Cercospora leaf spot (Cercospora carotae)	1.5 to 2 pts. (1.125 to 1.5 lbs. a.i.)	By ground, air or chemigation applications. Apply in sufficient water to obtain adequate coverage. Begin applications when disease
Alternaria leaf blight (Alternaria dauci)		threatens. Repeat at 7 to 10 day intervals. Use the higher rate in the range and shorter interval if disease severity begins to increase or weather conditions favor disease development.

#### USE RESTRICTIONS:

• Do not apply more than 20 pts. of this product (15 lbs. a.i.) per acre per year.

· May be applied to the day of harvest.

# CELERY

Disease(s) / Fungus	This Product / Ac.	Use Instructions
Basal stalk rot (Rhizoctonia solani)	2 to 3 pts. (1.5 to 2.25 lbs. a.i.)	By ground, air or chemigation applications. Apply in sufficient water to obtain adequate coverage. Start applications
Early blight (Cercospora apii)		when transplants are set in the field. Repeat at 7 day intervals as needed to maintain control. Use the higher rate
Late blight (Septoria apicola)		in the range if disease severity begins to increase or weather conditions favor
Suppression (7 day schedule): Pink rot (Sclerotinia sclerotiorum)	3 pts. (2.25 lbs. a.i.)	disease development.
Early blight <i>(Cercospora apii)</i>	1.5 to 2 pts. (1.125 to 1.5 lbs.	For Celery seedbeds, apply in a spray volume of 125 gals./Ac. twice weekly
Late blight (Septoria apicola)	a.i./100 gals.)	or as needed to maintain control. Start applications shortly after crop emergence. Use the higher rate in the range if disease severity begins to increase or weather conditions favor disease development.

#### USE RESTRICTIONS:

• Do not apply more than 24 pts. of this product (18 lbs. a.i.) per acre per year.

Do not apply within 7 days of harvest.

# CORN (Sweet, Grown for Seed)

Disease(s) / Fungus	This Product / Ac.	Use Instructions
Helminthosporium leaf blights <i>(Helminthosporium</i> spp. <i>)</i>	0.75 to 2 pts. (0.6 to 1.5 lbs. a.i.)	By ground, air or chemigation applications. Apply in sufficient water to obtain adequate coverage. Begin applications when conditions favor disease development. Repeat at 7 day intervals. Under severe
Rust <i>(Puccinia</i> spp.)		disease conditions, use 1.5 to 2 pts. of this product per acre.
LISE DESTRICTIONS.		

USE RESTRICTIONS:

6

• 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 areas.

· Do not ensile treated Corn or use as livestock forage.

<sup>•</sup> Do not apply more than 12 pts. of this product (9 lbs. a.i.) per acre per year.

# CRANBERRY

Disease(s) / Fungus	This Product / Ac.	Use Instructions
Fruit rots Lophodermium leaf/twig blight (Lophodermium hypophyllum)	4 to 6.5 pts. (3 to 4.9 lbs. a.i.)	By ground, air or chemigation applications. Apply at early bloom. Repeat at 10 to 14 day intervals. Under severe disease conditions, use the 6.5 pts./Ac. on a 10 day schedule. When applying by chemigation, apply in 300 gals. of water per acre through solid set systems only.
Upright dieback (Phomopsis vaccinii)	4 to 6.5 pts. (3 to 4.9 lbs. a.i.)	By ground, air or chemigation applications. Apply in 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 to 14 day intervals. When applying by chemigation, apply in 300 gals. of water per acre through solid set systems only. Use the higher rate in the range and shorter interval if disease severity begins to increase or weather conditions favor disease development.

USE RESTRICTIONS:

• Do not apply more than 20 pts. of this product (15 lbs. a.i.) per acre 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.

# CUCURBITS: CANTALOUPE, CHAYOTE, CHINESE WAXGOURD (CHINESE PRESERVING MELONS), CUCUMBER, HONEYDEW MELON, *MOMORDICA* SPP. (INCLUDES BALSAM APPLE, BITTER MELON), MUSKMELON, PUMPKIN, SQUASH, WATERMELON, ZUCCHINI INCLUDING CULTIVARS AND/OR HYBRIDS OF THESE

Disease(s) / Fungus	This Product / Ac.	Use Instructions
Anthracnose (Colletotrichum spp.)	1.5 to 2 pts. (1.125 to	By ground, air or chemigation applications. Apply in sufficient water to obtain
Downy mildew (Peronospora parasitica)	1.5 lbs. a.i.)	adequate coverage. Begin applications when plants are in first true leaf stage or when conditions are favorable for disease development. Use the higher rate
Target spot (Cornynespora cassiicola)		in the range if disease severity begins to increase or weather conditions favor disease development. Repeat applications
Alternaria leaf blight (Alternaria cucumerina)	2 to 3 pts. (1.5 to	at 7 day intervals. Important: Spraying mature Watermelons
Alternaria leaf spot (Alternaria alternata)		may result in sunburn of the upper surface of the fruit. DO NOT apply this product to Watermelons when any of the following
Cercospora leaf spot (Cercospora citrullina)		conditions are present:
Gummy stem blight / Stem decline (Didymella bryoniae)		<ul> <li>drought conditions</li> <li>poor vine canopy</li> <li>other crop and environmental conditions</li> </ul>
Powdery mildew (Sphaerotheca spp.)		which may be conducive to increased natural sunburn DO NOT combine this product with
Scab (Cladosporium cucumerinum)		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.
USE RESTRICTIONS:		

USE RESTRICTIONS:

- Do not apply more than 21 pts. of this product (15.75 lbs. a.i.) per acre per year.

• May be applied to the day of harvest.

# FRUITING VEGETABLES (EXCEPT TOMATO): EGGPLANT, GROUNDCHERRY, OKRA, PEPINO, PEPPERS (INCLUDES BELL, CHILI, COOKING, PIMENTO, SWEET), TOMATILLO

Disease(s) / Fungus	This Product / Ac.	Use Instructions
Anthracnose (Colletotrichum spp.)	1.5 pts. (1.125 lbs. a.i.)	By ground, air or chemigation applications. Begin application as foliage, flower and fruit
Botrytis leaf mold (Botrytis cinerea)		spray when disease is anticipated. Repeat at 7 to 10 day intervals.
Cercospora leaf spot (Cercospora spp.)		
Powdery mildew (Leveillula taurica)		

#### USE RESTRICTIONS:

• Do not apply more than 12 pts. of this product (9 lbs. a.i.) per acre per year.

· Do not apply within 3 days of harvest.

# GINSENG

Disease(s) / Fungus	This Product / Ac.	Use Instructions
Alternaria blight (Alternaria panax)	2 pts. (1.5 lbs. a.i.)	Use sufficient water to obtain adequate coverage. Begin applications when disease threatens.
Grey mold (Botrytis cinerea)		Repeat on a 7 to 10 day intervals as disease pressure warrants.

USE RESTRICTIONS:

Do not apply more than 16 pts. of this product (12 lbs. a.i.) per acre per year.
Do not apply within 14 days of harvest.

# **GRASSES GROWN FOR SEED**

Disease(s) / Fungus	This Product / Ac.	Use Instructions
Bipolaris and Dreschlera leaf spots	1 to 1.5 pts. (0.75 to	By ground, air or chemigation applications. Apply in sufficient water to obtain adequate
Glume blotch	1.125 lbs. a.i.) 1 to 2 pts. (0.75 to 1.5 lbs. a.i.)	coverage. Begin applications during stem elongation when conditions favor disease
Rust (Leaf, Stem, Stripe)		development. Re-apply at flag (top) leaf emergence. Use the higher rate in
Septoria leaf spot <i>(Septoria</i> spp. <i>)</i>		the range if disease severity begins to increase or weather conditions favor disease development. Repeat at 14 day
Selenophoma (Eyespot)		intervals.

#### USE RESTRICTIONS:

• Do not apply more than 6 pts. of this product (4.5 lbs. a.i.) per acre per year.

· Do not apply within 14 days of harvest.

 Do not allow livestock to graze in treated areas or feed hay produced before harvest. Feeding of treated plant parts after harvest of seed is allowed.

# HORSERADISH

Disease(s) / Fungus	This Product / Ac.	Use Instructions
Ramularia stem and leaf spots <i>(Ramularia armoraciae)</i>	3 pts. (2.25 lbs. a.i.)	Use sufficient water to obtain adequate coverage. Begin applications when disease threatens. Repeat at 7 to 10 day intervals as disease pressure warrants.

#### USE RESTRICTIONS:

• Do not apply more than 24 pts. of this product (18 lbs. a.i.) per acre per year.

Do not apply within 14 days of harvest.

#### LEEK

Disease(s) / Fungus	This Product / Ac.	Use Instructions
Botrytis leaf blight (Botrytis spp.)	1.5 to 3 pts. (1.125 to	By ground, air or chemigation applications. Apply in sufficient water to obtain thorough
Purple blotch (Alternaria porii)	2.25 lbs. a.i.)	coverage of tops. Begin applications prior to favorable infection periods and repeat at 7 to 10 day intervals for as long as conditions
Suppression: Downy mildew (Peronospora destructor)		favor disease. Use the higher rate in the range and a 7 day schedule of applications when heavy dew or rain persists.

## USE RESTRICTIONS:

• Do not apply more than 9 pts. of this product (6.75 lbs. a.i.) per acre per year.

Do not apply within 14 days of harvest.

#### MANGO

2.6 lbs. a.i.) Ac. Begin applications at early bloom Begin the season with the 2 pt. rate o a 14 day interval. Repeat at 7 to 14 da	Disease(s) / Fungus	This Product / Ac.	Use Instructions
disease pressure is severe, use the higher rate in the range and shorter interval.		(1.5 to	Apply in a water volume of 20 to 300 gals./ Ac. Begin applications at early bloom. Begin the season with the 2 pt. rate on a 14 day interval. Repeat at 7 to 14 day intervals until early fruit development. If disease pressure is severe, use the higher

#### USE RESTRICTIONS:

8

• Do not apply more than 32 pts. of this product (24 lbs. a.i.) per acre per year.

• Do not apply within 21 days of harvest.

# MINT

Disease(s) / Fungus	This Product / Ac.	Use Instructions
Rust (Puccinia menthae)	1.37 pts. (1 lb. a.i.)	By ground or air applications only. Apply in sufficient water to obtain adequate coverage, normally 20 to 150 gals./Ac. for dilute sprays and 5 to 10 gals./Ac. for concentrate ground and aircraft applications. Begin applications when
Septoria leaf spot (Septoria menthae)		emerging plants are 4 to 8 inches high. Repeat at 7 to 10 day intervals to maintain control.

#### USE RESTRICTIONS:

• Do not apply more than 4 pts. of this product (3 lbs. a.i.) per acre per year.

· Do not apply within 80 days of harvest.

• Do not feed fresh or extracted Mint hay from treated fields to livestock.

#### **MUSHROOM**

Disease(s) / Fungus	This Product / Ac.	Use Instructions
Verticillium brown spot <i>(Verticillium</i> spp. <i>)</i>	2.75 to 5.5 fl. ozs. / 1,000 sq. ft.	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
Dry bubble		applications. Apply the high rate (5.5 fl. ozs.) of this product in the first application and the low rate (2.75 fl. ozs.) of this product in the second application. Make the first application within two days of top dressing the spawn colonized Mushroom compost with a casing layer. Make the second application at pinning.

USE RESTRICTIONS:

- Do not apply more than 8.25 fl. ozs. of this product per 1,000 sq. ft. per cropping cycle.
- Do not make more than 2 applications per cropping cycle.
- Do not apply within 5 days of harvest.

# **ONIONS (Dry Bulb) & GARLIC**

Disease(s) / Fungus	This Product / Ac.	Use Instructions
Botrytis leaf blight <i>(Botrytis</i> spp.)	1 to 3 pts. (0.75 to	By ground, air or chemigation applications. Minimum retreatment interval is 7 days.
Purple blotch <i>(Alternaria porii)</i>	2.25 lbs. a.i.)	Apply in sufficient water to obtain thorough coverage of tops. This product can be used with disease monitoring systems
Supression: Botrytis neck rot <i>(Botrytis</i> spp.)		which adjust fungicide rates and frequency of application according to disease hazard. Apply as follows:
Suppression: Downy mildew <i>(Peronospora</i> <i>destructor)</i>		<ul> <li>Low disease hazard and before infection: 1 pt. /Ac. at 10 day intervals</li> <li>Low disease hazard and some disease present: 1.37 pts. /Ac. at 7 to 10 day intervals</li> <li>High disease hazard: 3 pts. /Ac. at 7 day intervals</li> <li>For suppression of Neck rot (<i>Botrytis</i> spp.) during storage, apply a minimum of 3 weekly applications prior to lifting using 1.37 to 3 pts. /Ac</li> </ul>

USE RESTRICTIONS:

Do not apply more than 20 pts. of this product (15 lbs. a.i.) per acre per year.
Do not apply within 7 days of harvest.

# ONIONS (Green Bunching, Grown for Seed), GARLIC (Grown for Seed), SHALLOTS

(Botrytis spp.)(1.125 to 2.25 lbs. a.i.)Apply in sufficient water to obtain thorough coverage of tops. Begin applications prior to favorable infection periods. Repeat at 7 to 10 day intervals for as long as conditions favor disease. Use the higher rate in the range and a 7	Disease(s) / Fungus	This Product / Ac.	Use Instructions
Particle bloch       applications prior to favorable infection periods. Repeat at 7 to 10 day intervals for as long as conditions favor disease.         Downy mildew       Use the higher rate in the range and a 7 day schedule of applications when heavy		(1.125 to	By ground, air or chemigation applications. Apply in sufficient water to obtain
Suppression:as long as conditions favor disease.Downy mildewUse the higher rate in the range and a 7(Peronosporaday schedule of applications when heavy		2.25 lbs. a.i.)	applications prior to favorable infection
	Downy mildew (Peronospora		as long as conditions favor disease. Use the higher rate in the range and a 7 day schedule of applications when heavy

USE RESTRICTIONS:

Do not apply more than 9 pts. of this product (6.75 lbs. a.i.) per acre per year.
Do not apply within 7 days of harvest of Garlic.

• Do not apply within 14 days of harvest of green bunching Onions or Shallots.

# ΡΑΡΑΥΑ

Disease(s) / Fungus	This Product / Ac.	Use Instructions
Alternaria fruit spot <i>(Alternaria alternata)</i>	1.5 to 3 pts. (1.125 to	By ground applications only. Apply in sufficient water to obtain
Anthracnose (Colletotrichum spp.)	2.25 lbs. a.i.)	adequate coverage of fruit and leave Begin applications when conditions favo development of disease. Use the high
Stem end rot (Colletotrichum spp.)		rate in the range if disease severity begins to increase or weather conditions favor disease development. Continue treatments at 14 day intervals until weather conditions no longer favor disease development.

# USE RESTRICTIONS:

• Do not apply more than 9 pts. of this product (6.75 lbs. a.i.) per acre per year.

· May be applied to the day of harvest.

## PARSNIP

Disease(s) / Fungus	This Product / Ac.	Use Instructions	
Alternaria leaf spot <i>(Alternaria</i> spp.)	1.5 to 2 pts. (1.125 to	By ground, air or chemigation applications. Apply in sufficient water to obtain adequate	
Anthracnose (Colletotrichum spp.)	1.5 lbs. a.i.)	coverage. Begin applications at the first sign of disease or when conditions are favorable for infection. Use the higher rate	
Botrytis blight (Gray mold) <i>(Botrytis cinerea)</i>		in the range and shorter interval if d severity begins to increase or w	in the range and shorter interval if disease severity begins to increase or weather conditions favor disease development.
Bottom rot (Rhizoctonia spp.)		Continue treatments at 7 to 10 day intervals.	
Down mildew (Plasmopara crustosa)			

**USE RESTRICTIONS:** 

Do not apply more than 8 pts. of this product (6 lbs. a.i.) per acre per year.
Do not apply within 10 days of harvest.

#### PFANUTS

PEANUIS		
Disease(s) / Fungus	This Product / Ac.	Use Instructions
Early leaf spots (Cercospora arachidicola)	1 to 1.5 pts. (0.75 to 1.125 lbs. a.i.)	By ground, air or chemigation applications. Apply in sufficient water to obtain adequate coverage when leaf wetness first occurs
Late leaf spot (Cercosporidium personatum)	-	or 30 to 40 days after planting of frui and leaves. Repeat at 14 days intervals When conditions favor Late leaf spot o
Pepper spot (Leptosphaerulina crassiasca)		when Rust or Web blotch occur, apply 1.5 pts. /Ac. of this product at 14 day intervals for the remainder of the season.
Rust (Puccinia arachidis)	1.5 pts. (1.125 lbs. a.i.)	-
Web blotch (Phoma arachidicola)		
		(Continued)

10

# PEANUTS (Cont.)

**USE RESTRICTIONS:** 

- Do not apply more than 12 pts. of this product (9 lbs. a.i.) per acre per year.
- Do not apply within 14 days of harvest.
- · Do not allow livestock to graze treated areas.
- · Do not feed hay or threshings from treated fields to livestock.

# POTATOES

Disease(s) / Fungus	This Product / Ac.	Use Instructions
Black dot (Colletotrichum coccodes)	0.75 pt. (0.6 lb. a.i.)	By ground, air or chemigation applications. Begin applications at the low rate (0.75 pt. / Ac.) when vines are first exposed and
Botrytis vine rot (Botrytis cinerea)	-Then - 1 to 1.5 pts.	leaf wetness occurs. Repeat applications at 5 to 10 day intervals. Then begin applying the higher label rates
Early blight <i>(Alternaria solani)</i>	(0.75 to 1.125 lbs. a.i.)	(1 to 1.5 pts. / Ac.) at 5 to 10 days intervals when any one of the following events
Late blight (Phytophthora infestans)		occur: • 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 exceed a 10 day interval between applications when using chemigation.

• Do not apply more than 15 pts. of this product (11.25 lbs. a.i.) per acre per year. · Do not apply within 7 days of harvest.

#### RHUBARB

Disease(s) / Fungus	This Product / Ac.	Use Instructions
Ascochyta (Ascochyta rhei)	3 pts. (2.25 lbs. a.i.)	Use sufficient water to obtain adequate coverage.
Ramularia leaf spot (Ramularia rhei)		Begin applications when disease threatens. Repeat at 7 to 10 day intervals as disease pressure warrants.

#### USE RESTRICTIONS:

• Do not apply more than 18 pts. of this product (13.5 lbs. a.i.) per acre per year. • Do not apply within 30 days of harvest.

# **SOYBEANS**

Disease(s) / Fungus	This Product / Ac.	Use Instructions
Anthracnose (Colletotrichum truncatum) Diaprothe pod and stem rot (Diaprothe phaseolorum) Frogeye leaf spot (Cercospora sojina) Purple seed stain (Cercospora kikuchii) Cercospora leaf blight (Cercospora kikuchii) Septoria brown spot (Septoria glycines) Suppression:	1.5 to 2.25 pts. (1.125 to 1.7 lbs. a.i.)	By ground, air or chemigation applications. Apply in sufficient water to obtain complete coverage using at least 5 gals. of water per acre for aerial application. Use the higher rate in the range if disease severity begins to increase or weather conditions favor disease development. Minimum retreatment interval is 14 days. <b>Two application program</b> : 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 to 1.25 inches in length. Make the second application 14 days later.
Rust (Phakopsora pachyrhizi)	1 to 2 pts. (0.75 to 1.5 lbs. a.i.)	By ground, air or chemigation applications. Apply in sufficient water to obtain complete coverage using at least 5 gals. of water per acre for aerial application. Use the higher rate in the range if disease severity begins to increase or weather conditions favor disease development. Use the three application program in areas having a history of moderate to severe disease intensity. Minimum retreatment interval is 14 days. 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 pt. (0.75 lb. a.i.)	Apply in 10 to 20 gals. of water per acre 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.

#### USE RESTRICTIONS:

• Do not apply more than 6 pts. of this product (4.5 lbs. a.i.) per acre per year.

• Do not apply within 6 weeks of harvest.

· Do not feed hay or threshing from treated fields to livestock.

# **STRAWBERRIES**

Disease(s) / Fungus	This Product / Ac.	Use Instructions
Ramularia leaf spot <i>(Ramularia tulasnei)</i>	1.5 pts. / Ac. (1.125 lbs. a.i.)	Begin application after a rain or sprinkler irrigation application and when disease threatens. Repeat at 10 to 14 day intervals. Use the shortest specified interval when disease conditions are severe. Continue applications until runners are dug. Pre-Harvest Interval is not applicable.

#### USE RESTRICTIONS:

Do not apply more than 20 pts. of this product (15 lbs. a.i.) per acre per year.
Only for nursery seedlings for pre-transplant.

#### **TOMATOES**

Disease(s) / Fungus	This Product / Ac.	Use Instructions
Foliage: Early blight (Alternaria solani) Foliage: Gray leaf mold (Fluvia fluva; Cladosporium)	1.37 to 2 pts. (1 to 1.5 lbs. a.i.)	By ground, air or chemigation applications. Apply in sufficient water to obtain adequate coverage. Begin applications when dew or rain occurs and disease threatens. Apply on a 7 to 10 day intervals for foliage diseases. For fruit diseases, begin at fruit set and
Foliage: Gray leaf spot (Stemphylllium botryosum)		apply on a 7 to 14 day intervals. Use the highest rate in the range and shorter interval when disease conditions are severe.
Foliage: Late blight (Phytophthora infestans)		
Foliage: Septoria leaf spot <i>(Septoria</i> <i>lycopersici)</i>		
Foliage: Target spot (Corynespora cassiicola)		
		(Continued)

#### TOMATOES (Cont.)

Disease(s) / Fungus	This Product / Ac.	Use Instructions
Fruit: Alternaria fruit rot (Black mold) ( <i>Alternaria alternata</i> )	2 to 3 pts. (1.5 to 2.25 Ibs. a.i.)	By ground, air or chemigation applications. Apply in sufficient water to obtain adequate coverage. Begin applications when dew or rain occurs and disease threatens. Apply on a 7 to 10 day intervals for foliage
Fruit: Anthracnose <i>(Colletotrichum</i> spp.)		diseases. For fruit diseases, begin at fruit set and
Fruit: Botrytis gray mold <i>(Botrytis cinerea)</i>		apply on a 7 to 14 day intervals. Use the highest rate in the range and shorter interval when disease conditions are severe.
Fruit: Late blight fruit rot (Phytophthora infestans)		
Fruit: Rhizoctonia fruit rot ( <i>Rhizoctonia solani</i> )		

USE RESTRICTIONS:

• Do not apply more than 20 pts. of this product (15 lbs. a.i.) per acre per year.

May be applied to the day of harvest.

# YAM

Disease(s) / Fungus	This Product / Ac.	Use Instructions
Anthracnose (Colletotrichum gloeosporioides)	1 to 1.25 pts. (0.75 to 1.125 lbs. a.i.)	Use sufficient water to obtain adequate coverage. Begin applications when disease threatens. Use the higher rate in the range and shorter interval if disease severity begins to increase or weather conditions favor disease development. Repeat at 10 to 14 day intervals as disease pressure warrants.

#### USE RESTRICTIONS:

• Do not apply more than 15 pts. of this product (11.25 lbs. a.i.) per acre per year.

· Do not apply within 7 days of harvest.

#### **TREES 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.

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 gallons of spray per acre. The minimum volume for application by aircraft to Conifer stands and Christmas trees is 10 gallons per acre.

When concentrate sprays are used or when treating non-bearing or immature trees, the lower rate specified may be used. The following spray volumes may be used.

TREES AND	Spray Volume (Gals. / Ac.)			
ORCHARD CROPS	Concentrate	Dilute		
Apricot Cherry (Tart) Nectarine Peach Plum Prune	20	300		
Cherry (Sweet)	20	400		
Conifer stands	10 to 20	Not used		
Christmas trees	10 to 50 (By air or ground)	100		
Nursery beds	5 to 10 (By ground only)	100		

USE RESTRICTION

Do not allow livestock to graze in treated areas.

#### **ALMONDS**

Disease(s) /	This Product		Llos Instructions
Fungus	Per Acre	Per 100 Gals*	Use Instructions
Anthracnose (Colletotrichum acutatum)	4 pts. (3 lbs. a.i.)	1.33 pts. (1 lb. a.i.)	By ground or air applications only. Apply with water volumes of 20 to 300 gals./Ac. For Brown rot
Brown rot blossom and twig blight <i>(Monilinia</i> spp.)			blossom and twig blight, begin application at popcorn (pink bud) and at full bloom. If weather is still conducive for disease development, another application may be made at petal fall.
Shot hole (Wilsonomyces carpophilus)			For control of Shothole, make an application in Autumn at leaf fall. In the Spring, make the first application at budbreak followed
Scab (Venturia carpophila)			by an application at shuck split to control nut infections and to control Scab. *To be used only with full dilute spray volume.

USE RESTRICTIONS:

• Do not apply more than 25 pts. of this product (18.75 lbs. a.i.) per acre per year

(leaf fall through shuck split).

· Do not apply within 150 days of harvest.

# APRICOT, CHERRY, NECTARINE, PEACH, PLUM, PRUNE

Disease(s) / Fungus	This Product		Use Instructions
i ungus	Per Acre	Per 100 Gals*	Use instructions
Leaf curl ( <i>Taphrina</i> <i>deformans</i> ) Shot hole (Coryneum blight) ( <i>Thyrostroma</i> <i>carpophilum</i> )	3.12 to 4.12 pts. (2.3 to 3.1 lbs. a.i.)	1 to 1.37 pts. (0.75 to 1 lb. a.i.)	By ground or air applications only. For best control, 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. Apply once or twice more in mid to late Winter before bud swell. If leaf fall application is not practical, application of this product for control of Leaf curl may be made at any time prior to bud swell the following Spring. Where Shothole occurs, also apply at budbreak to protect newly emerging leaves and at shuck split to prevent fruit infections. Minimum retreatment interval is 10 days. * Volumetric rates to be used only with full dilute spray volume.
Lacy (russet) scab (Plums / Prunes) Brown rot blossom blight <i>(Monilinia</i> spp.)	3.12 to 4.12 pts. (2.3 to 3.1 lbs. a.i.)	1 to 1.37 pts. (0.75 to 1 lb. a.i.)	Make one application at popcorn (pink, red or early white bud) and a second application at full bloom. Use the higher rate in the range and an additional application at petal fall if disease severity begins to increase or weather conditions favor disease development. Minimum retreatment interval is 10 days. * Volumetric rates to be used only with full dilute spray volume.
Black knot (Apiosporina morbosa) (Cherries / Plums) Cherry leaf spot (Blumeriella jaapii) Scab (Cladosporium carpophilum)	3.12 to 4.12 pts. (2.3 to 3.1 lbs. a.i.)	1 to 1.37 pts. (0.75 to 1 lb. a.i.)	By ground or air applications only. In addition to the bloom application listed above, make one application at shuck split. Use the higher rate in the range if disease severity begins to increase or weather conditions favor disease development. 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 to 14 days later. Minimum retreatment interval is 10 days. * Volumetric rates to be used only with full dilute spray volume. (Continued)

# APRICOT, CHERRY, NECTARINE, PEACH, PLUM, PRUNE (Cont.)

Disease(s) /	This Product		Use Instructions
Fungus	Per Acre	Per 100 Gals*	
Suppression: Constriction canker (Phomopsis amygdali)	3 to 4 pts. (2.25 to 3 lbs. a.i.)	0.96 to 1.33 pts. (0.73 to 1 lb. a.i.)	By ground or air application only. Apply after fruit is harvested when leaf drop starts. Apply in sufficient spray volume for thorough coverage (recommend 50 to 100 gals. / Ac.) to adequately cover exposed leaf scars. Use the higher rate in the range and shorter interval if disease severity begins to increase or weather conditions favor disease development. Repeat on 10 to 14 day intervals until leaf drop is complete. Use in conjunction with cultural practices to reduce inoculum. * Volumetric rates to be used only with full dilute spray volume.

USE RESTRICTIONS:

Do not apply more than 20.5 pts. of this product (15.4 lbs. a.i.) per acre per year.
May be applied to the day of harvest.

# **FILBERTS (HAZELNUTS)**

Disease(s) /	This Product		Use Instructions
Fungus	Per Acre	Per 100 Gals*	
Eastern Filbert blight (Anisogramma anomata)	4 pts. (3 lbs. a.i.)	1.33 pts. (1 lb. a.i.)	By ground or air applications only. Apply with water volumes of 20 to 300 gals. / Ac. Begin applications at the onset of disease or when weather conditions favor disease development. Make applications on a 14 to 28 day schedule using the shorter interval under heavy disease pressure. * Volumetric rates to be used only with full dilute spray volume.

#### USE RESTRICTIONS:

• Do not apply more than 12 pts. of this product (9 lbs. a.i.) per acre per year (leaf fall through shuck split).

• Do not apply within 120 days of harvest.

Do not apply through irrigation.

• Do not apply with oils, surfactants or fertilizers.

Do not apply within 1 week of an oil-based pesticide application.

# **PASSION FRUIT**

Disease(s) / Fungus	This Product / Ac.	Use Instructions
Alternaria fruit and leaf spots <i>(Alternaria</i> spp.)	2 pts. (1.5 lbs. a.i.)	By ground applications only. Apply in sufficient water to obtain adequate coverage of fruit and leaves.
Anthracnose (Colletotrichum spp.)		Begin applications when conditions favor development of disease. Continue treatments
Cercospora fruit spot (Cercospora spp.)		at 14 day intervals until weather conditions no longer favor disease development.

USE RESTRICTIONS:

• Do not apply more than 10 pts. of this product (7.5 lbs. a.i.) per acre per year.

Do not apply within 7 days of harvest.

# PERSIMMON (FL & HI Only)

Disease(s) / Fungus	This Product / Ac.	Use Instructions
Cercospora (Cercospora fuliginosa)	1.25 pts. (0.94 lb. a.i.)	Use sufficient water to obtain adequate coverage. Begin applications when disease threatens. Repeat at 14 day intervals as disease pressure warrants.
LICE DECEDICTIONS.	-	

USE RESTRICTIONS:

· Do not apply within 14 days of harvest.

Aerial applications require the use of a minimum of 10 gals. / Ac.

# **PISTACHIO**

Disease(s) /	This Product		Lies Instructions
Fungus	Per Acre	Per 100 Gals*	Use Instructions
Suppression: Alternaria late blight <i>(Alternaria alternata)</i>	6 pts. (4.5 lbs. a.i.)	3 pts. (2.25 lbs. a.i.)	By ground or air applications only. Apply with water volumes of 20 to 200 gals./Ac. Make the first application at the beginning of the blossom period followed by
Botryosphaera blight (Botryosphaera dothidea)			an application at full bloom. Make additional applications as required at 28 day intervals. For Septoria and Botrytis, use the bisher rate if disease procurse
Botrytis blight (Botrytis cinerea)	4 to 6 pts. (3 to 4.5 lbs. a.i.)	2 to 3 pts. (1.5 to 2.25 lbs. a.i.)	the higher rate if disease pressure is severe. Important: Use of this product may result in speckling or reddening of
Septoria leaf spot (Septoria pistacina)			the fruit hull (epicarp). This effect is superficial and has not resulted in change in nut quality. * Volumetric rates to be used only with full dilute spray volume.

#### USE RESTRICTIONS:

• Do not apply more than 30 pts. of this product (22.5 lbs. a.i.) per acre per year.

· Do not apply within 14 days of harvest.

# **CONIFERS (INCLUDING CHRISTMAS TREES)**

For use in: 1) Conifer nursery beds; 2) Christmas tree and bough production plantations; and 3) Tree seed orchards. Use Restrictions: Do not apply more than 22 pints of this product (16.5 lbs. a.i.) per acre per year. Do not use on Forests.

Apply by ground or air in sufficient water and with proper calibration to obtain uniform coverage of Tree canopy. The minimum volume for application by aircraft to Conifer stands and Christmas trees is 10 gallons per acre. The maximum volume is 100 gallons per acre.

Disease(s) / Fungus	This Product / Ac.	Use Instructions
Autoecious needle rust (Weir's cushion rust) <i>(Chrysomyxa weirii)</i>	5.5 pts. (4.12 lbs. a.i.)	Begin applications when 10% of buds have broken and twice thereafter at 7 to 10 day intervals.
Botrytis seedling blight, Phoma twig blight	1.5 to 2.75 pts. (1.12 to 2.1 lbs. a.i.)	Begin applications in nursery beds when seedlings are 4 inches tall and when cool moist conditions favor disease development. Use the higher rate in the range if disease severity begins to increase or weather conditions favor disease development. Make additional applications at 7 to 14 day intervals as long as disease favorable conditions persist.
Cyclaneusma and Lophodermium needlecasts	2.75 to 5.5 pts. (2.1 to 4.12 lbs. a.i.)	Apply in early Spring prior to budbreak. Repeat applications at approximately 6 to 8 week intervals until spore release ceases in late Fall. Use the higher rate in the range and shorter interval if disease severity begins to increase or weather conditions favor disease development. 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.
		(Continued)

# **CONIFERS (INCLUDING CHRISTMAS TREES)**

(Cont.)

Disease(s) / Fungus	This Product / Ac.	Use Instructions
Interior needle blight ( <i>Mycosphaerella</i> spp. and <i>Phaeocryptopus</i> <i>nudus</i> )	2.75 to 5.5 pts. (2.1 to 4.12 lbs. a.i.)	One or two applications: In Christmas tree plantations or Conifer stands, make one application in the Spring when new shoot growth is 0.5 to 2 inches in length. Under high disease pressure, a second application may be made 10 to 14 days after the first application. Use the higher rate in the range and shorter interval if disease severity begins to increase or weather conditions favor disease development. When using aerial applications, use the highest specified rate.
	1.5 to 2.75 pts. (1.12 to 2.1 lbs. a.i.)	Multiple applications: Make the first application in Spring when new shoot growth is 0.5 to 2 inches in length. Make additional applications at 3 to 4 week intervals until conditions no longer favor disease development. For use in nursery beds, apply the highest specified rate on a 3 week schedule. Use the higher rate in the range and shorter interval if disease severity begins to increase or weather conditions favor disease development. When using aerial applications, use the highest specified rate.
Rhabdocline needlecast	1.5 to 2.75 pts. (1.12 to 2.1 lbs. a.i.)	Apply at budbreak and repeat at 3 to 4 week intervals until needles are fully elongated and conditions no longer favor disease development. In plantations of mixed provenance or when irregular budbreak occurs, apply weekly until all trees have broken bud then every 3 to 4 weeks as specified above. Use the higher rate in the range and shorter interval if disease severity begins to increase or weather conditions favor disease development. In nursery beds, use the high rate on a 3 week schedule. (Continued)

#### **CONIFERS (INCLUDING CHRISTMAS TREES)** (Cont.)

Disease(s) / Fungus	This Product / Ac.	Use Instructions
Rhizosphaera needlecast <i>(Rhizosphaera</i> spp.)	5.5 pts. (4.12 lbs. a.i.)	Multiple applications: Make the first application in Spring when new shoot growth is 0.5 to 2 inches in length.
Scirrhia brown spot (Mycosphaerella deamessii)		Make additional applications at 3 to 4 week intervals until conditions no longer favor disease development. Use the higher rate in the range and shorter interval if disease
Scleroderris canker (Gremmeniella abietina)	1.5 to 2.75 pts. (1.12 to 2.1 lbs. a.i.)	severity begins to increase or weather conditions favor disease development. For use in nursery beds, apply the highest
Sirococcus tip blight (Sirococcus conigenus)	2 to 3.5 pts. (1.5 to 2.6 lbs. a.i.)	specified rate on a 3 week schedule. When using aerial applications, use the highest specified rate.
Swiss needlecast (Phaeocryptopus gaeumannii)	2.75 to 5.5 pts. (2.1 to 4.12 lbs. a.i.)	One or two applications: In Christmas tree plantations or Conifer stands, make one application in the Spring when new shoot growth is 0.5 to 2 inches in length. Under high disease pressure, a second application may be made 10 to 14 days after the first application. Use the higher rate in the range and shorter interval if disease severity begins to increase or weather conditions favor disease development. When using aerial applications, use the highest specified rate.
	1.5 to 2.75 pts. (1.12 to 2.1 lbs. a.i.)	Multiple applications: Make the first application in Spring when new shoot growth is 0.5 to 2 inches in length. Make additional applications at 3 to 4 week intervals until conditions no longer favor disease development. Use the higher rate in the range and shorter interval if disease severity begins to increase or weather conditions 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 specified rate.

(Continued)

15

## **TURF AND ORNAMENTALS**

This product can be used to control diseases on Turf on Golf courses and Sod farms. USE RESTRICTIONS

- Do not use on home lawns and Turf sites associated with apartment buildings, day care centers, playgrounds play fields, recreational 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 Only (Sod farms, Golf courses, Nurseries and Greenhouses): This product must not be applied within 150 feet (for aerial applications) or 25 feet (for ground applications) of marine / estuarine water bodies unless there is an untreated buffer area of that width between the area to be treated and the water body.

#### APPLICATION DIRECTIONS

#### Golf Course Fairways and Roughs, Lawns Around Commercial and Industrial Buildings and Professional and Collegiate Athletic Fields Turf

Apply this product in sufficient 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.

Do not mow or water after treatment until spray deposited on Turfgrass is thoroughly dry. Use this product in conjunction with good Turf management practices.

#### Use Restrictions:

- Do not apply more than 34.7 pints of this product per acre (12.7 fl. ozs. / 1,000 sq. ft.) (26 lbs. a.i. / Ac.) per year.
- Minimum retreatment interval for single application rates of up to 9.75 pints of this product per acre (3.6 fl. ozs. / 1,000 sq. ft.) (7.3 lbs. a.i. / Ac.) is 7 days.
- Do not apply more than one application of a rate greater than 9.75 pints of this product per acre (3.6 fl. ozs. / 1,000 sq. ft.) (7.3 lbs. a.i. / Ac.) per year.
- Maximum single application rate is 15.1 pints of this product per acre (5.5 fl. ozs. / 1,000 sq. ft.) (11.3 lbs. a.i. / Ac.).

#### Golf Course Greens and Tees

Apply this product in sufficient 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 specified rate and shortest interval corresponding with the application schedule selected from the table below.

Do not mow or water after treatment until spray deposited on Turfgrass is thoroughly dry. Use this product in conjunction with good Turf management practices.

#### Use Restrictions - Golf Course Greens:

- Do not apply more than 97.3 pints of this product per acre (35.7 fl. ozs. / 1,000 sq. ft.) (73 lbs. a.i. / Ac.) per year.
- Minimum retreatment interval for single application rates of up to 9.75 pints of this product per acre (3.6 fl. ozs. / 1,000 sq. ft.) (7.3 lbs. a.i. / Ac.) is 7 days.
- Minimum retreatment interval after an application of a rate greater than 9.75 pints of this product per acre (3.6 fl. ozs. / 1,000 sq. ft.) (7.3 lbs. a.i. / Ac.) is 14 days.
- Do not apply more than two application of a rate greater than 9.75 pints of this product per acre (3.6 fl. ozs. / 1,000 sq. ft.) (7.3 lbs. a.i. / Ac.) per year.
- Maximum single application rate is 15.1 pints of this product per acre (5.5 fl. ozs. / 1,000 sq. ft.) (11.3 lbs. a.i. / Ac.).
- Use Restrictions Golf Course Tees:
- Do not apply more than 69.3 pints of this product per acre (25.4 fl. ozs. / 1,000 sq. ft.) (52 lbs. a.i. / Ac.) per year.
- Minimum retreatment interval for single application rates of up to 9.75 pints of this product per acre (3.6 fl. ozs. / 1,000 sq. ft.) (7.3 lbs. a.i. / Ac.) is 7 days.
- Minimum retreatment interval after an application of a rate greater than 9.75 pints of this product per acre (3.6 fl. ozs. / 1,000 sq. ft.) (7.3 lbs. a.i. / Ac.) is 14 days.

- Do not apply more than one application of a rate greater than 9.75 pints of this product per acre (3.6 fl. ozs. / 1,000 sq. ft.) (7.3 lbs. a.i. / Ac.) per year.
- Maximum single application rate is 15.1 pints of this product per acre (5.5 fl. ozs. / 1,000 sq. ft.) (11.3 lbs. a.i. /Ac.).

#### Sod Farms

Apply this product in 30 to 450 gallons of water per acre. Do not mow or water after treatment until spray deposited on Turfgrass is thoroughly dry. Use this product in conjunction with good Turf management practices.

# Use Restrictions:

- Sod farm Turf treated with Chlorothalonil prior to harvest must be mechanically cut rolled and harvested.
- Do not use this product on Sod farms at application rates greater than 17.3 pints (13 lbs. a.i.) per acre per year.
- Do not apply more than 17 pints of this product per acre (6.4 fl. ozs. / 1,000 sq. ft.) (13 lbs. a.i. / Ac.) per year.
- The minimum retreatment interval for single application rates of up to 9.7 pints of this product per acre (3.5 fl. ozs. / 1,000 sq. ft.) (7.3 lbs. a.i. / Ac.) is 7 days.
- Do not apply more than one application of a rate greater than 9.75 pints of this product per acre (3.6 fl. ozs. / 1,000 sq. ft.) (7.3 lbs. a.i. / Ac.) per year.
- Maximum single application rate is 15.1 pints of this product per acre (5.5 fl. ozs. / 1,000 sq. ft.) (11.3 lbs. a.i. / Ac.).

## APPLICATION TIMING (ALL TURF)

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

Disease(s) / Fungus Controlled	Application Interval (Days)	Pre-Disease Rates			Post-Disease Rates*		
		Fl. Oz. / 1,000 Sq. Ft.	Pts./Ac.	Lbs. A.I. / Ac.	Fl. Oz. / 1,000 Sq. Ft.	Pts./Ac.	Lbs. A.I. / Ac.
Algae***	7 to 14	2 to 3.6	5.5 to 9.75	4.1 to 7.3	2 to 3.6	5.5 to 9.75	4.1 to 7.3
	14	_	_	_	4 to 5.5	11 to 15.1	8.25 to 11.3
Anthracnose	7 to 14	3 to 3.6	8.3 to 9.75	6.2 to 7.3	_	—	_
(Colletotrichum graminicola)	14	3.6 to 5.5	9.9 to 15.1	7.4 to 11.3	_	—	_
Brown patch	7 to 14	2 to 3.6	5.5 to 9.75	4.1 to 7.3	_	_	_
(Rhizoctonia solani, R. zeae, R. cerealis)	14	—	—	_	4 to 5.5	11 to 15.1	8.25 to 11.3
Copper spot (Gloeocercospora sorghi)	14	4 to 5.5	11 to 15.1	8.25 to 11.3	5.5	15.1	11.3
Dichondra leaf spot (CA only) <i>(Alternaria</i> spp.)	14	4 to 5.5	11 to 15.1	8.25 to 11.3	5.5	15.1	11.3
Dollar spot	7 to 10	1.0** to 2	2.8** to 5	2.1** to 4.1	_	_	_
(Sclerotinia homeocarpa, Lanzia	7 to 21	2 to 3.6	5.5 to 9.75	4.1 to 7.3	_	_	—
or <i>Moellerodiscus</i> spp.)	14	_	_	—	4 to 5.5	11 to 15.1	8.25 to 11.3
Fusarium patch*** (Geriachia) (Micordochium nivale)	21 to 28	5.5	15.1	11.3	_	—	_
Gray leaf spot	7 to 10	2 to 3.6	5.5 to 9.75	4.1 to 7.3	_	—	_
(Pyricularia grisea, Pyricularia oryzae)	—	—	—	—	4 to 5.5	11 to 15.1	8.25 to 11.3
Gray snow mold*** <i>(Typhula</i> spp. <i>)</i>	30	5.5	15.1	11.3	_	—	_
Leaf spot, Melting out, Brown blight	7 to 10	2	5.5	4.1	_	_	—
(Bipolaris sorokiniana; Drechslera spp. including D. poae, D. siccans; Curvularia spp.)	7 to 21	2 to 3.6	5.5 to 9.75	4.1 to 7.3	_	_	_
	14	_	_	_	4 to 5.5	11 to 15.1	8.25 to 11.3
Red thread	7 to 10	2 to 3.6	5.5 to 9.75	4.1 to 7.3	-	—	—
(Laetisana fuciformis)	14	3.6 to 5.5	9.9 to 15.1	7.4 to 11.3	5.5	15.1	11.3
Stem rust (Bluegrass) (Puccinia graminis)	14	4 to 5.5	11 to 15.1	8.25 to 11.3	5.5	15.1	11.3

\*For Golf course fairways and roughs, Lawns around commercial and industrial buildings and Professional and Collegiate athletic fields turf: Limit to one application per year at rates greater than 7.3 lbs. a.i. / Ac. (9.75 pts. / Ac. or 3.6 fl. ozs. / 1,000 sq. ft.) of this product.

For Golf course greens and tees: Limit to two applications per year at rates greater than 7.3 lbs. a.i. / Ac. (9.75 pts. / Ac. or 3.6 fl. ozs. / 1,000 sq. ft.) of this product.

\*\*Low rate is not effective on intensively mowed Turfgrass such as Golf course greens and tees.

\*\*\*See specific use directions below.

#### ALGAE

Golf Course Fairways and Roughs, Lawns Around Commercial and Industrial Buildings and Professional and Collegiate Athletic Fields Turf AND/OR Golf Course Greens and Tees: For prevention of Algae on Turfgrasses, apply this product at the rate of 5.5 to 9.75 pints per acre (2 to 3.6 fl. ozs. / 1,000 sq. ft.) (4.1 to 7.3 lbs. a.i. / Ac.) on a 7 to 14 day schedule. Under severe Algae conditions, use the 9.75 pints per acre (3.6 fl. ozs. / 1,000 sq. ft.) rate and apply on a 7 day schedule.

Make every attempt to dry out the afflicted area when Algae is well established. Once dry, spiking or verticutting should be done to enhance Turfgrass recovery in conjunction with an application of this product at the rate of 11 to 15.1 pints per acre (4 to 5.5 fl. ozs. / 1,000 sq. ft.). On Golf Course Greens and Tees: A second application of this product at the rate of 15.1 pints per acre (5.5 fl. ozs. / 1,000 sq. ft.) may be made 14 days after the first application.

On Golf Course Fairways and Roughs, Lawns Around Commercial and Industrial Buildings and Professional and Collegiate Athletic Fields Turf AND/OR Golf Course Greens and Tees: Following application of the 15.1 pints per acre (5.5 fl. ozs. / 1,000 sq. fl.) rate, several applications of this product at the rate of 5.5 to 9.75 pints per acre (2.0 to 3.6 fl. ozs. / 1,000 sq. ft.) (4.1 to 7.3 lbs. a.i. /Ac.) on a 7 to 14 day intervals may be necessary for Turfgrass recovery. Only a preventive spray program with this product will prevent recurrence of the Algae when environmental conditions are favorable.

#### FUSARIUM (GERLACHIA) PATCH

Golf Course Fairways and Roughs, Lawns Around Commercial and Industrial Buildings and Professional and Collegiate Athletic Fields Turf AND/OR Golf Course Greens and Tees: In areas where Pink snow mold (Gerlachia or Fusarium patch) is likely to occur, apply this product at 15.1 pints per acre (5.5 fl. ozs. / 1,000 sq. ft.) (11.3 lbs. a.i. /Ac.) in combination with products containing Iprodione at 88 ounces a.i. per acre (2 ozs. a.i. / 1,000 sq. ft.) of Turf area.

For control of Fusarium patch only in areas where snow cover is intermittent or lacking during the Winter, apply 15.1 pints per acre (5.5 fl. ozs. / 1,000 sq. ft.) of this product (11.3 lbs. a.i. / Ac.). Make application in late Autumn.

Golf Course Greens and Tees: Apply a second application of 15.1 pints per acre (5.5 fl. ozs. / 1,000 sq. ft.) of this product 21 to 28 days after the first application unless conditions favorable for Fusarium patch no longer prevail.

#### GRAY SNOW MOLD CAUSED BY TYPHULA SPP.

Golf Course Fairways and Roughs, Lawns Around Commercial and Industrial Buildings, and Professional and Collegiate Athletic Fields Turf AND/OR Golf Course Greens and Tees: Apply in sufficient water to obtain adequate coverage (2 to 10 gals. / 1,000 sq. ft.). Apply one application of 15.1 pints per acre (5.5 fl. ozs. / 1,000 sq. ft.) of this product (11.3 lbs. a.i. / Ac.). Application must be made before snow cover in Autumn.

Golf Course Greens and Tees: If snow cover is intermittent or lacking during the Winter, a second application of this product at 15.1 pints per acre (5.5 fl. ozs. / 1,000 sq. ft.) may be applied one month after the first application.

#### **Ornamental Plants**

The following Ornamental plants can be treated by this product. This product may be used in Greenhouses (see *"Use Restrictions"* below regarding use of this product in Greenhouses).

Apply this product at the rate of 1.33 pints (1.0 lb. a.i.) per 100 gallons of water unless other directions are given in the tables below. Apply in a spray to the point of drip 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. The minimum retreatment interval is 7 days. Apply this product to plants when both foliage and flowers are dry or nearly dry.

#### Use Precautions:

This product may be used to control 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 label specified rates. If plant response is not known, test for possible phytotoxic responses using label specified rates on a small area prior to commercial use. Applications made during bloom may damage flowers and/or fruits.

#### Use Restrictions:

- Do not apply more than 48.5 pints of this product (36.4 lbs. a.i.) per acre per growing season to field grown Ornamentals.
- · Do not eat treated plants and fruits from treated plants.
- Do not use mist blowers or high pressure spray equipment when applying this product in Greenhouses.

#### Broadleaf Shrubs and Trees

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

#### DISEASES CONTROLLED BY THIS PRODUCT: <sup>1</sup>Phytophthora leaf blight/dieback

<sup>2</sup>Leaf spots and Foliar Blights:

Actinopelte leaf spot Alternaria leaf spot / leaf blight Anthracnose blight (Discula) Anthracnose leaf blotch/spot Ascochyta blight Bipolaris leaf spot (Helminthosporium) Black spot on Roses Botrytis leaf spot / leaf blight Cephalosporium leaf spot Cercospora leaf spot Cercosporidium leaf

spot Coryneum blight (Shothole) Curvularia leaf spot Cylindrosporium leaf spot Dactylaria leaf spot Didymellina leaf spot Drechslera leaf spot Fabraea leaf spot (Entomosporium) Gloeosporium black leaf spot Ink spot (Drechslera) Marssonina leaf spot Monilinia blossom blight / twig blight

Corynespora leaf

Mycosphaerella ray blight Myrothecium leaf spot / brown rot Nematostoma leaf blight Phyllosticta leaf spot Ramularia leaf spot Rhizoctonia web blight Septoria leaf spot Sphaeropsis leaf spot Stagonospora leaf scorch Tan leaf spot (Curvularia) Volutella leaf blight

spot <sup>3</sup>Flower Spots and Blight: Botrytis flower spot / flower blight Curvularia flower spot Monilinia blossom blight Ovulinia flower blight Rhizopus blossom blight Sclerotinia flower blight 4 Rusts: Gymnosporangium spp Pucciniastrum hydrangeae Puccinia spp. 5 Scab <sup>6</sup>Cylindrocladium stem canker <sup>7</sup> Powdery mildew: Erysiphe cichoracearum Microsphaera spp. <sup>8</sup> Taphrina blister

18

Flowering Plants* ar	nd Bulbs	
Arabian Violet <sup>1</sup> Begonia <sup>2</sup> Camellia <sup>2</sup> Carnation <sup>1,2</sup> Chrysanthemum <sup>1,2</sup> Crocus <sup>2</sup> Daffodil <sup>2</sup> Daisy <sup>2</sup>	Geranium <sup>2.3</sup> Gladiolus <sup>1, 2</sup> Hollyhock <sup>3</sup> Hydrangea (Foliage only) <sup>2.3</sup> Iris <sup>1.2</sup> Lily <sup>2</sup> Marigold <sup>2</sup> Narcissus <sup>2</sup>	Pansy <sup>2</sup> Petunia <sup>2.5</sup> Phlox <sup>2</sup> Poinsettia <sup>2.**</sup> Rose <sup>2.***</sup> Statice <sup>2</sup> Tulip <sup>2</sup> Zinnia <sup>2.6</sup>
DISEASES CONTROI 'Flower Spots and Bligh Botrytis flower spot / flow Curvularia flower spot Monilinia blossom blight 'Leaf spots and Foliar B	er blight	
Actinopelte leaf spot Alternaria leaf spot / leaf blight Anthracnose blight ( <i>Discula</i> ) Anthracnose leaf blotch / spot Ascochyta blight Bipolaris leaf spot ( <i>Helminthosporium</i> ) Black spot on Roses Botrytis leaf spot / leaf blight Cephalosporium leaf spot Cercospora leaf spot Cercosporidium leaf spot	Corynespora leaf spot Coryneum blight (Shothole) Curvularia leaf spot Cylindrosporium leaf spot Dactylaria leaf spot Didymellina leaf spot Drechslera leaf spot Fabraea leaf spot <i>(Entomosporium)</i> Gloeosporium black leaf spot Ink spot <i>(Drechslera)</i> Marssonina leaf spot Monilinia blossom blight / twig blight	Mycosphaerella ray blight Myrothecium leaf spot / brown rot Nematostoma leaf blight Phyllosticta leaf spot Ramularia leaf spot Rhizoctonia web blight Septoria leaf spot Sphaeropsis leaf spot Stagonospora leaf scorch Tan leaf spot <i>(Curvularia)</i> Volutella leaf blight
<ul> <li><sup>3</sup> Rusts: Gymnosporangium spp. Pucciniastrum hydrange Puccinia spp.</li> <li><sup>4</sup> Cylindrocladium stem o <sup>5</sup> Phytophthora leaf bligh <sup>6</sup> Powdery mildew: Erysiphe cichoracearum Microsphaera spp.     </li> </ul>	eae canker	

\*\*Discontinue applications prior to bract formation as phytotoxicity is possible on bracts.

\*\*\*Use 1 pt. of this product per 100 gals. of water.

#### Foliage Plants Aglaonema<sup>1</sup> Florida ruffle fern1 Peperomia<sup>1</sup> Philodendron<sup>1,2</sup> Areca palm<sup>1</sup> Leatherleaf fern<sup>1</sup> Artemesia<sup>1</sup> Lipstick plant<sup>1</sup> Prayer plant Boston fern<sup>1</sup> Ming aralia<sup>1</sup> (Maranta)<sup>1</sup> Dumbcane Oyster plant Syngonium<sup>1</sup> (Dieffenbachia)1 (Rhoeo)1 Zebra plant (Aphelandra)<sup>1</sup> Dracaena1 Pachysandra<sup>1,\*</sup> Fatsia (Aralia)1 Parlor palm Ficus<sup>1</sup> (Chamaedorea)1 DISEASES CONTROLLED BY THIS PRODUCT: <sup>1</sup>Leaf spots and Foliar Blights: Actinopelte leaf spot Corynespora leaf spot Myrothecium leaf Alternaria leaf Coryneum blight (Shothole) spot / brown rot spot / leaf blight Curvularia leaf spot Nematostoma leaf blight Anthracnose blight Cylindrosporium leaf spot Phyllosticta leaf spot Dactylaria leaf spot Ramularia leaf spot (Discula) Didymellina leaf spot Rhizoctonia web blight Anthracnose leaf blotch/spot Drechslera leaf spot Septoria leaf spot Sphaeropsis leaf spot Ascochyta blight Fabraea leaf spot Bipolaris leaf spot (Entomosporium) Stagonospora leaf scorch (Helminthosporium) Gloeosporium black Tan leaf spot (Curvularia) Black spot on Roses leaf spot Volutella leaf blight Botrytis leaf Ink spot (Drechslera) spot / leaf blight Marssonina leaf spot Cephalosporium leaf spot Monilinia blossom Cercospora leaf spot blight / twig blight Cercosporidium leaf spot Mycosphaerella ray blight <sup>2</sup>Phytophthora leaf blight / dieback \*Use 2.75 pts. of this product per 100 gals. of water. STORAGE AND DISPOSAL Do not contaminate water, food or feed by storage or disposal.

**PESTICIDE STORAGE:** Store in original container. Keep container tightly closed. Keep away from heat and flame.

**PESTICIDE DISPOSAL:** To avoid waste, use all materials in this container by application according to label directions. If wastes cannot be avoided, offer remaining product to a waste disposal facility or pesticide disposal program (often, such programs are run by State or local governments or by industry). **CONTAINER HANDLING:** 

Nonrefillable Container (rigid material; ≤ 5 gallons): Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container one-fourth full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Dispose of empty container in a sanitary landfill or by incineration. *(Continued)* 

# STORAGE AND DISPOSAL (Cont.)

Nonrefillable Container (rigid material; > 5 gallons up to < 250 gallons): Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container onefourth full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Dispose of empty container in a sanitary landfill or by incineration.

**Refillable Container** ( $\geq$  250 gallons & Bulk): Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10% full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Then offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

#### WARRANTY—CONDITIONS OF SALE

OUR DIRECTIONS FOR USE of this product are based upon tests believed reliable. Follow directions carefully. Timing and method of application, weather and crop conditions, mixture with other chemicals not specifically directed and other influencing factors in the use of this product are beyond the control of the Seller. To the extent consistent with applicable laws, Buyer assumes all risks of use, storage and handling of this material not in strict accordance with directions given herewith. To the extent consistent with applicable laws, in no case shall the Manufacturer or the Seller be liable for consequential, special or indirect damages resulting from the use or handling of this product when such use and/or handling is not in strict accordance with directions given herewith. The foregoing is a condition of sale by the Seller and is accepted as such by the Buyer.

The DREXEL logo is a registered trademark of Drexel Chemical Company. All other brand names, product names or trademarks belong to their respective holders.

- NOTES -

CHLOROTHALONIL GROUP M FUNGICIDE Drexel. Chlorothalonil 720

# Fungicide

For control of diseases in listed Agricultural, Turf and Ornamental crops. ACTIVE INGREDIENT:

Chlorothalonil	54.0%
OTHER INGREDIENTS:	46.0%
TOTAL:	100.0%

This product contains 6 pounds of Chlorothalonil per gallon equivalent to 720 grams per liter.

# KEEP OUT OF REACH OF CHILDREN CAUTION

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.)

# SHAKE WELL BEFORE USING See Booklet for Full Use Instructions

EPA Reg. No. 19713-690 EPA Est. No. 19713-GA-2 Net Content: 2.5 Gals. (9.46 L) 690PF2-0918(0918\*)•G2

# FIRST AID

#### IF SWALLOWED:

- Call a poison control center or doctor immediately for treatment advice.
- Have person sip a glass of water if able to swallow.
- Do not induce vomiting unless told to do so by a poison control center or doctor.
- Do not give anything by mouth to an unconscious person.

#### IF INHALED:

- · Move person to fresh air.
- If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.
- · Call a poison control center or doctor for further treatment advice.

#### IF IN EYES:

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

#### IF ON SKIN OR CLOTHING:

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

Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also call CHEMTREC at 800-424-9300 for emergency medical treatment information.

#### NOTE TO PHYSICIAN:

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

#### PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**CAUTION:** Harmful if swallowed, absorbed through skin or inhaled. Causes moderate eye irritation. Avoid contact with skin eyes or clothing. Avoid breathing spray mist. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. (See Booklet for full Precautionary Statements.)

# USER SAFETY RECOMMENDATIONS

Users should: 1) Wash hands thoroughly before eating, drinking, chewing gum, using tobacco or using the toilet. 2) Remove clothing / PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. 3) Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

# ENVIRONMENTAL HAZARDS

This pesticide is toxic to 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.

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 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 over-laying tile drainage systems that drain to surface water.

# STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal. **PESTICIDE STORAGE:** Store in original container. Keep container tightly closed. Keep away from heat and flame.

**PESTICIDE DISPOSAL:** To avoid waste, use all materials in this container by application according to label directions. If wastes cannot be avoided, offer remaining product to a waste disposal facility or pesticide disposal program (often, such programs are run by State or local governments or by industry).

**CONTAINER HANDLING**: Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container one-fourth full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Dispose of empty container in a sanitary landfill or by incineration.



Manufactured By: Drexel Chemical Company P.O. Box 13327, Memphis, TN 38113-0327 SINCE 1972

The DREXEL logo is a registered trademark of Drexel Chemical Company.

690PF2-0918(0918asterisk)bulletG2.indd 22