

Chlorothalonil GROUP M05 FUNGICIDE

# ORANIL® 6L

## FUNGICIDE

**ACTIVE INGREDIENT:**

Chlorothalonil (tetrachloroisophthalonitrile)..... 54.0%

**OTHER INGREDIENTS:** ..... 46.0%

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

Contains 6.0 Pounds of Chlorothalonil per Gallon (720 grams per liter).

EPA Reg. No. 70506-262

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

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

FIRST AID	
<b>IF INHALED</b>	<ul style="list-style-type: none"><li>• 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.</li><li>• Call a poison control center or doctor for further treatment advice.</li></ul>
<b>IF ON SKIN</b>	<ul style="list-style-type: none"><li>• Take off contaminated clothing.</li><li>• Rinse skin immediately with plenty of water for 15 - 20 minutes.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>
<b>IF IN EYES</b>	<ul style="list-style-type: none"><li>• Hold eye open and rinse slowly and gently with water for 15 - 20 minutes.</li><li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>
<b>IF SWALLOWED</b>	<ul style="list-style-type: none"><li>• Call a poison control center or doctor immediately for treatment advice. Have affected person sip a glass of water if able to swallow.</li><li>• Do not induce vomiting unless told to do so by a poison control center or doctor.</li><li>• Do not give anything by mouth to an unconscious person.</li></ul>
<b>EMERGENCY PHONE NUMBERS</b>	Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For additional information on this pesticide (including health concerns or medical emergencies), you may contact Rocky Mountain Poison and Drug Safety at 1-866-673-6671, twenty-four (24) hours per day, seven (7) days per week.
NOTES TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage. Persons having a temporary allergic reaction respond to treatment with antihistamines or steroid creams and/or systemic steroids.	

**FOR CHEMICAL EMERGENCY: Spill, leak, fire, exposure, or accident, call CHEMTREC 1-800-424-9300.**

See inside for complete Precautionary Statements and Directions For Use.

**Net Contents: \_\_\_\_\_ Gallons**

FUNGICIDE

UPL NA Inc. • 630 Freedom Business Center, Suite 402  
King of Prussia, PA 19406 U.S.A. • 1-800-438-6071



## PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

### WARNING - AVISO

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

### PERSONAL PROTECTIVE EQUIPMENT (PPE)

Mixers, loaders, applicators and all other handlers must wear:

- Long-sleeved shirt and long pants;
- Shoes plus socks;
- Protective eye wear;
- 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, or viton  $\geq$  14 mils.
- Wear a minimum of a NIOSH-approved elastomeric half mask respirator with organic vapor (OV) cartridges and a combination R, or P filter: OR a NIOSH-approved gas mask with OV canisters; OR a NIOSH-approved powered air-purifying respirator with OV cartridges and combination HE filters.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. DO NOT reuse clothing or other absorbent materials drenched or heavily contaminated with this product's concentrate.

### ENGINEERING CONTROL STATEMENT

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

### USER SAFETY RECOMMENDATIONS

Users should:

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

### ENVIRONMENTAL HAZARDS

This product is toxic to aquatic invertebrates and wildlife. DO NOT apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high-water mark. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. DO NOT contaminate water when disposing of equipment washwater or rinsate.

#### Surface Water Advisory

Chlorothalonil can contaminate surface water through spray drift. DO NOT apply when weather conditions favor drift from treated areas. 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 ground water, areas with in-field canals or ditches that drain to surface water, areas not separated from adjacent surface waters with vegetated filter strips, and areas overlaying tile drainage systems that drain to surface water.

#### Groundwater Advisory

Chlorothalonil degrades are known to leach through soil into ground water under certain conditions as a result of label use. Use of this product in areas where soils are permeable, particularly where the water table is shallow, may result in ground water contamination.

## DIRECTIONS FOR USE

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

DO NOT apply this product in a way that will contact workers or other persons, or pets, either directly or through drift. Only protected handlers may be in the area during applications. 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, and greenhouses and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

DO NOT enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 12 hours.

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

- Coveralls over long-sleeved shirt,
- 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, or viton  $\geq$  14 mils.
- Shoes plus socks,
- Protective eyewear.

Special Eye Irritation Provisions: This product is a severe eye irritant. Although the restricted-entry interval expires after 12 hours, for the next 6 1/2 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.

Workers must be informed, in a manner they can understand:

- That residues in the treated area may be highly irritating to their eyes;
- That they should take precautions, such as refraining from rubbing their eyes, to keep the residues out of their eyes;
- That if they do get residues in their eyes, they should immediately flush their eyes using the eyeflush container that is located at the decontamination site or using other readily available clean water; and
- How to operate the eyeflush container.

### NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170):

DO NOT enter or allow others to enter into treated areas until spray deposits have dried.

### RESTRICTIONS

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

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.

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

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

Do not use on greenhouse-grown crops except as directed in the **ORNAMENTAL PLANTS** section of this label.

## AERIAL DRIFT ADVISORY INFORMATION

### INFORMATION ON DROPLET SIZE

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

### CONTROLLING DROPLET SIZE

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

### BOOM LENGTH

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

### APPLICATION HEIGHT

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

### SWATH ADJUSTMENT

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

### WIND

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

### TEMPERATURE AND HUMIDITY

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

### TEMPERATURE INVERSIONS

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

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

## INTEGRATED PEST MANAGEMENT

ORANIL® 6L is an excellent disease control agent when used according to label directions for control of a broad spectrum of plant diseases. ORANIL 6L is recommended for use in programs that are compatible with the principles of Integrated Pest Management (IPM), including the use of disease resistant crop varieties, cultural practices, pest scouting and disease forecasting systems which reduce unnecessary applications of pesticides.

## FUNGICIDE RESISTANCE MANAGEMENT

For resistance management, ORANIL 6L contains a Group M05 fungicide. Any fungal population may contain individuals naturally resistant to ORANIL 6L and other Group M05 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 ORANIL 6L or other Group M05 fungicides within a growing season sequence with different groups that control the same pathogens.
- Use tank mixtures with fungicides 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.
- When possible, make use of predictive disease models to effectively time fungicide applications. Note that using predictive models alone is no sufficient to manage resistance.
- Monitor treated fungal populations for resistance development.
- Contact you 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 UPL NA Inc. at 1-800-438-6071. You can also contact your pesticide distributor or university extension specialist to report resistance.

## MIXING, LOADING AND APPLYING

ORANIL 6L is intended to be diluted into water, then applied to crops by typical agricultural spraying techniques. **Always apply ORANIL 6L in sufficient water to obtain thorough, uniform coverage of foliage and crop surfaces intended to be protected from disease.** Spray volume to be used will vary with crop and amount of plant growth. Spray volume should normally range from 20 to 150 gallons per acre (200 to 1400 liters per hectare) for dilute sprays and 5 to 10 gallons per acre (50 to 100 liters per hectare) for concentrate ground sprays and aircraft applications. Both ground and aircraft methods of application are recommended unless specific directions are given for a crop.

Slowly invert container several times to assure uniform mixture. Measure the required amount of ORANIL 6L and pour into the spray tank during filling. Keep agitator running when filling spray tank and during spray operations.

DO NOT use on greenhouse-grown crops except as directed in the **ORNAMENTAL PLANTS** section of this label.

## TANK MIXING

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. DO NOT combine ORANIL 6L in sprayer tank

with pesticides, surfactants or fertilizers, unless your prior use has shown the combination physically compatible, effective and non-injurious under your conditions of use. DO NOT combine ORANIL 6L with products containing *Bacillus thuringiensis* (for example, Dipel), Triton AG-98 (surfactant), Triton B-1956 (surfactant) or Latron B-1956 (surfactant), as phytotoxicity may result from the combination when applied to the crops on this label. DO NOT tank mix ORANIL 6L with oil or with any adjuvants which contain oil as their principal ingredient, unless specified in specific crop directions below. DO NOT use with products containing copper diammonia diacetate complex (for example, Copper-Count N) in concentrated spray suspensions.

### **APPLICATIONS THROUGH SPRINKLER IRRIGATION SYSTEMS (CHEMIGATION)**

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

Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water. If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.

DO NOT apply this product through irrigation systems connected to a public water system. 'Public water system' means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days per year.

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

The irrigation water pipeline must be fitted with a functional, automatic, quick-closing check valve to prevent the flow of treated irrigation water back toward the water source.

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

Always inject ORANIL 6L into irrigation water after it discharges from the irrigation pump and after it passes through the check valve. Never inject pesticides into the intake line on the suction side of the pump.

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

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

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

Spray mixture 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.

ORANIL 6L may be used through two basic types of sprinkler irrigation systems as outlined in Sections A and B below. Determine which type of system is in place, then refer to the appropriate directions provided for each type.

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

For injection of pesticides, these continuously moving systems must use a metering pump, such as a positive displacement injection pump of either diaphragm or piston type, constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock, and capable of injection at pressures approximately 2 to 3 times those encountered within the irrigation water line.

Venturi applicator units cannot be used on these systems.

Fill chemical supply tank of injection equipment with water. Operate system for one complete revolution or run across the field, measuring time required, amount of water injected, and acreage covered. Thoroughly mix recommended amount of ORANIL 6L 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 ORANIL 6L has been cleared from last sprinkler head.

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

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

Determine acreage covered by sprinkler. Fill tank of injection equipment with water and adjust flow to use contents over a thirty to forty-five minute period. Mix desired amount of ORANIL 6L for acreage to be covered with water so that the total mixture of ORANIL 6L 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. No agitation should be required. ORANIL 6L 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 ORANIL 6L has been cleared from last sprinkler head.

#### **APPLICATION RATES**

Dosage rates on this label indicate pints of ORANIL 6L per acre, unless otherwise stated. Under conditions favoring disease development, the high rate specified and shortest application interval should be used.

For each listed crop, the maximum total amount of chlorothalonil active ingredient (lbs ai/A) which may be applied per acre of that crop (or crop group) per year is given in bold print within a box beneath the crop name. For each crop use situation listed below, the listed maximum individual and annual application rates must not be exceeded and the listed minimum retreatment intervals must not be decreased.



## CONIFERS

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

### Restrictions:

- DO NOT allow livestock to graze in treated areas.
- **DO NOT apply ORANIL 6L within one week before or after application of oil or an oil-based pesticide.**
- DO NOT apply to forests.
- DO NOT apply more than 2.75 gallons (16.5 lbs ai) per acre per year.
- For conifers, the maximum volume is 100 gallons per acre.
- The minimum volume for application by aircraft to conifer stands and Christmas trees is 10 gallons per acre.

Apply only to conifers in: conifer nursery beds, Christmas trees and bough production plantations, tree seed orchards and non-residential landscape situations.

CROP	PHI (DAYS)	SPRAY VOLUME (GALLONS/ACRE)	RATE PER ACRE (LBS AI/ACRE)	DISEASES	APPLICATION DIRECTIONS
Conifers	N/A	5 to 10 (concentrate ground or aircraft) to 100 (dilute)	2.75 to 5.5 pts/A (2.06 to 4.13 lbs ai/A)	Swiss needlecast	Single application technique: In Christmas tree plantations or conifer stands make one application in the spring when new shoot growth is 1/2 to 2 inches in length.
			1.5 to 2.75 pts/A (1.13 to 2.06 lbs ai/A)	Scleroderris canker (pines), Swiss needle-cast	Make the first application in spring when new shoot growth is 1/2 to 2 inches in length. Make additional applications at 3 - 4 week intervals until conditions no longer favor disease development. For use in nursery beds, apply the highest rate specified on a 3-week schedule.
			2 to 3.5 pts/A (1.5 to 2.63 lbs ai/A)	Sirococcus tip blight	
			5.5 pts/A (4.13 lbs ai/A)	Rhizosphaera needlecast (spruces) Scirrhia brown spot (pines)	
			2.75 to 5.5 pts/A (2.06 to 4.13 lbs ai/A)	Cyclaneusma and Lophodermium needlecasts (pines)	Apply in early spring prior to budbreak. Repeat applications at approximately 6 to 8 week intervals, until spore release ceases in late fall. Apply monthly during periods of frequent rainfall, and where Lophodermium infections occur during dormancy (Pacific Northwest). During drought periods, applications may be suspended, then resumed upon next occurrence of needle wetness.
			1.5 to 2.75 pts/A (1.13 to 2.06 lbs ai/A)	Rhabdocline needlecast (Douglas-fir)	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 - 4 weeks as specified above. In nursery beds, use the high rate on a 3 week schedule.
			2.75 pts/A (2.06 lbs ai/A)	Botrytis seedling blight, Phoma twig blight	Begin applications in nursery beds when seedlings are 4 inches tall and when cool, moist conditions favor disease development. Make additional applications at 7 - 14 day intervals as long as disease favorable conditions persist.
5.5 pts/A (4.13 lbs ai/A)	Autoecious needle rust (Weir's cushion rust) (spruces)	Begin applications when 10% of buds have broken and repeat twice thereafter at 7 - 10 day intervals.			

## DIRECTIONS FOR APPLICATION

### Tree and Orchard Crops

Apply ORANIL 6L 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.

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, ORANIL 6L may be applied with aircraft using at least 20 gallons of spray per acre.

When concentrate sprays are used or when treating non-bearing or immature trees, the lower rate of ORANIL 6L listed may be used.

#### **Restriction:**

DO NOT allow livestock to graze in treated areas.

CROP	DISEASES (Pathogen)	PT PRODUCT PER (lb ai per)		APPLICATION DIRECTIONS	RESTRICTIONS
		Acre	100 gallons		
<b>Almonds</b>	Blossom blight/brown rot scab ( <i>Venturia carpophila</i> ) Shot hole ( <i>Wilsonomyces carpophilus</i> ) Anthracnose ( <i>Colletotrichum acutatum</i> )	4 pts/A (3.0 lbs ai/A)	1.33 pts/100 gal (1.0 lb ai/100 gal)	Use water volumes of 20 - 300 gallons per acre. For blossom blight, begin application at popcorn (pink bud) and follow with an application at full bloom. If weather is still conducive for disease development, another application may be made at petal fall.  For control of shot hole, make an application in the autumn at leaf fall. In the spring, make the first application at budbreak, followed by an application at shuck split to control nut infections and to control scab.  Dormant applications for scab: Apply before bud swell (generally Dec 1 through Jan 10). Apply 4 pints ORANIL 6L with 4 gallons of agricultural spray oil per acre.  For control of anthracnose, apply 4 pints/acre.  Apply by ground or air.	DO NOT apply more than 25 pints of product (18.75 lbs ai) per acre per year (leaf fall through shuck split).  DO NOT apply within 150 days of harvest.
<b>Filberts (Hazelnuts)</b>	Eastern filbert blight ( <i>Anisogramma anomala</i> )	4 pts/A (3.0 lbs ai/A)	1.33 pts/100 gal (1.0 lb ai/100 gal)	Use a water volume of 20 - 300 gallons per acre. Begin applications at the onset of disease or when weather conditions favor disease development. Make applications on a 14 - 28 day schedule, using the shorter interval under heavy disease pressure.	DO NOT apply more than 12 pints of product (9 lbs ai) per acre per year.  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 one week of an oil based pesticide application.  Minimum retreatment interval is 14 days.

(continued)

**DIRECTIONS FOR APPLICATION (continued)**

**Tree and Orchard Crops (continued)**

CROP	DISEASES (Pathogen)	PT PRODUCT PER (lb ai per)		APPLICATION DIRECTIONS	RESTRICTIONS
		Acre	100 gallons		
Peach Nectarine Apricot Cherry Plum Prune	Leaf curl ( <i>Taphrina deformans</i> ) Shot hole ( <i>Wilsonomyces carpophilus</i> )	3.125 - 4.125 pts/A (2.3 - 3.1 lbs ai/A)	1 - 1.375 pts/100 gal (0.75 - 1.0 lb ai/100 gal)	For best control of both diseases, apply at leaf fall in late autumn, using sufficient water and proper sprayer calibration to obtain uniform coverage. When conditions favor high disease levels, use the high rate of application, and apply once or twice more in mid to late winter before budswell. If the leaf fall application is not practical, application of ORANIL 6L for control of leaf curl may be made at any time prior to budswell the following spring. Where shot hole occurs, also apply at budbreak to protect newly emerging leaves and at shuck split to prevent fruit infections. Apply by ground or air.	DO NOT apply more than 20.5 pints of product (15.4 lbs ai) per acre per year. Minimum retreatment interval is 10 days. This product may be applied through shuck split. It may then again be applied after harvest as indicated.
	Brown rot blossom blight ( <i>Monilinia</i> spp.) Lacy (russet) Scab (plum/prune)	3.125 - 4.125 pts/A (2.3 - 3.1 lbs ai/A)	1 - 1.375 pts/100 gal (0.75 - 1.0 lb ai/100 gal)	Make one application at popcorn (pink, red or early white bud) and a second application at full bloom. If weather conditions favor disease development, make an additional application at petal fall.	
	Black knot (cherry, plum) ( <i>Apiosporina morbosa</i> ) Cherry leaf spot ( <i>Blumeriella jaapii</i> ) Scab ( <i>Cladosporium carpophilum</i> )	3.125 - 4.125 pts/A (2.3 - 3.1 lbs ai/A)	1 - 1.375 pts/100 gal (0.75 - 1.0 lb ai/100 gal)	In addition to the bloom application listed above, make one application at shuck split. Do not apply ORANIL 6L after shuck split and before harvest. If additional disease control is needed before harvest, use another registered fungicide.  For control of cherry leaf spot after harvest, make one application to foliage within 7 days after fruit is removed. In orchards with a history of high leaf spot incidence, make a second application 10 - 14 days later. Apply by ground or air.	
Pistachio	Botryosphaeria blight ( <i>B. dothidea</i> ) <b>Suppression:</b> Alternaria late blight ( <i>A. alternata</i> )	6 pts/A (4.5 lbs ai/A)	3 pts/100 gal (2.25 lbs ai/100 gal)	Use a water volume of 20 - 200 gallons per acre. Make the first application at the beginning of the blossom period followed by an application at full bloom. Make additional applications as required on a 28-day schedule. For Septoria and Botrytis, use the higher specified rate if disease pressure is severe.  NOTE: Use of this product may result in speckling or reddening of the fruit hull (epicarp). This effect is superficial and has not resulted in any change in nut quality. Apply by ground or air.	DO NOT apply more than 30 pints of product (22.5 lbs ai) per acre per year. DO NOT apply within 14 days of harvest. DO NOT apply in more than 200 gallons of water per acre. Minimum retreatment interval is 28 days.
	Botrytis blight ( <i>B. cinerea</i> ) Septoria leaf spot ( <i>S. pistacina</i> )	4 - 6 pts/A (3.0 - 4.5 lbs ai/A)	2 - 3 pts/100 gal (1.5 - 2.25 lbs ai/A)		

**DIRECTIONS FOR APPLICATION (continued)**

<b>CROP</b>	<b>DISEASES (Pathogen)</b>	<b>PT PRODUCT/A (lb ai/A)</b>	<b>APPLICATION DIRECTIONS</b>	<b>RESTRICTIONS</b>
Asparagus	Rust ( <i>Puccinia asparagi</i> ) Purple Spot ( <i>Pleospora herbarum</i> ) Cercospora blight ( <i>C. asparagi</i> )	2 - 4 pts/A (1.5 - 3.0 lbs ai/A)	Use water volumes of 25 to 50 gallons per acre. Begin applications following final harvest of spears. Repeat applications at 14 to 28 day intervals, depending on disease pressure. Use the higher rate and shorter interval if disease severity begins to increase during the season or weather conditions are conducive for severe epidemics. Apply by ground.	DO NOT apply more than 12 pints of product (9.0 lbs ai) per acre per year. DO NOT apply within 190 days (120 days in CA and AZ) of the harvest of spears in the following season. Minimum retreatment interval is 14 days.
Beans, snap	Rust ( <i>Uromyces appendiculatus</i> )	1.375 - 3 pts/A (1.0 - 2.25 lbs ai/A)	Use in sufficient water to obtain adequate coverage. Begin applications during early bloom stage or when disease first threatens and repeat at 7 day intervals or as necessary to maintain control. Apply by ground, air or chemigation.	DO NOT apply more than 12 pints (9.0 lbs ai) per acre per year. DO NOT apply within 7 days of harvest. Minimum retreatment interval is 7 days.
	Botrytis blight (gray mold) ( <i>B. cinerea</i> )	3 pts/A (2.25 lbs ai/A)		
Beans (dry) (except soybeans) Bean, adzuki Bean, broad Bean, dry Bean, lablab Bean, navy Bean, kidney Bean, lima Bean, moth Bean, mung Bean, pink Bean, pinto Bean, tepary Bean urd Bean, yardlong Catjang Chickpea (garbanzo) Cowpea Lupin, grain Lupin Bean, rice Bean, runner Bean, jackbean Pea, blackeyed Pea, southern	Rust ( <i>Uromyces appendiculatus</i> ) Anthracnose ( <i>Colletotrichum lindemuthianum</i> ) Downy mildew ( <i>Phytophthora nicotianae</i> ) Cercospora leaf blotch ( <i>C. cruenta</i> ) <i>Ascochyta blight</i> ( <i>A. phaseolorum</i> )	1.375 - 2 pts/A (1.0 - 1.5 lbs ai/A)	Use sufficient water to obtain adequate coverage. Begin applications at first onset of disease, which may occur as early as 2 to 4 weeks before flowering. Repeat applications at 7 - 10 day intervals. For use only on beans to be harvested dry with pods removed. Apply by ground, air or chemigation.	DO NOT apply more than 8 pints (6 lbs ai) per acre per year. DO NOT apply within 14 days of harvest. Minimum retreatment interval is 7 days.

(continued)



**DIRECTIONS FOR APPLICATION (continued)**

<b>CROP</b>	<b>DISEASES (Pathogen)</b>	<b>PT PRODUCT/A (lb ai/A)</b>	<b>APPLICATION DIRECTIONS</b>	<b>RESTRICTIONS</b>
Blueberries	Suppression: Anthracnose (ripe rot) <i>(C. gloeosporioides)</i> Mummy berry <i>(M. vaccinycorymbosi)</i>	3 - 4 pts/A (2.25 - 3.0 lbs ai/A)	This product should be integrated into an overall disease management strategy which includes alternation with a fungicide with a different mode of action. Diseases may only be suppressed and russetting may occur under heavy disease pressure or unfavorable environmental conditions.  Apply in sufficient water to obtain adequate coverage, normally 20 - 100 gallons per acre. Begin applications at budbreak (green tip) and repeat at 10-day intervals through early bloom. Under heavy disease pressure, use the higher specified rate.  Apply by ground or air.	DO NOT apply more than 12 pints (9.0 lbs ai) per acre per year. DO NOT apply after full bloom (except for foliar use after harvest) or within 42 days of harvest.  Minimum retreatment interval is 10 days.
	Septoria leaf spot <i>(Septoria albopunctata)</i> Rust <i>(Pucciniastrum vaccinii)</i>	3 - 4 pts/A (2.25 - 3.0 lbs ai/A)	Foliar Use after harvest: After all berries are harvested. To maintain healthy leaves for the following season, apply in sufficient water to obtain adequate coverage (normally 20 - 100 gallons per acre). Repeat at 10 - 14 day intervals.  Apply by ground or air.	
Brassica, head and stem Broccoli Broccoli, Chinese Brussels sprouts Cabbage Cabbage, Chinese (tight-headed varieties only) Cabbage, Chinese (napa) Cabbage, Chinese mustard Cauliflower Cavalo Broccolo Kohlrabi	Alternaria leaf spot <i>(Alternaria spp.)</i> Downy mildew <i>(Peronospora parasitica)</i>	1.5 pts/A (1.125 lbs ai/A)	Use in sufficient water to obtain adequate coverage. Begin applications after transplants are set in field, or shortly after emergence of field-seeded crop, or when conditions favor disease development. Repeat at 7 - 10 day intervals to maintain control. Apply by ground, air or chemigation.	DO NOT apply more than 11.7 pints of product (8.8 lbs ai) per acre per year.  DO NOT apply within 7 days of harvest.  Minimum retreatment interval is 7 days.
	Ring spot (California only)	2 pts/A (1.5 lbs ai/A)	For field-seeded brussels sprouts, begin applications at time of early sprout development or when conditions favor disease development. Repeat at 7 - 10 day intervals to maintain control.	
Carrot	Alternaria leaf blight <i>(A. dauci)</i> Cercospora leaf spot <i>(C. carotae)</i>	1.5 - 2 pts/A (1.125 - 1.5 lbs ai/A)	Use in sufficient water to obtain adequate coverage. Start applications when disease threatens and repeat at 7 - 10 day intervals to maintain control.  Apply by ground, air or chemigation. May apply this product on the day of harvest.	DO NOT apply more than 20 pints of product (15 lbs ai) per acre per year.  Minimum retreatment interval is 7 days.
Celery	Basal stalk rot <i>(Rhizoctonia solani)</i> Early blight <i>(Cercospora apii)</i> Late blight <i>(Septoria apicola)</i>	2 - 3 pts/A (1.5 - 2.25 lbs ai/A)	Use in sufficient water to obtain adequate coverage. Start applications when transplants are set in the field and repeat at 7 day intervals as needed to maintain control. Apply by ground, air or chemigation.	DO NOT apply more than 24 pints of product (18 lbs ai) per acre per year.  DO NOT apply within 7 days of harvest.  Minimum retreatment interval is 7 days.
	Suppression (7 day schedule): Pink rot <i>(Sclerotinia sclerotiorum)</i>	3 pts/A (2.25 lbs ai/A)		
	Early blight <i>(Cercospora apii)</i> Late blight <i>(Septoria apicola)</i>	1.5 - 2 pts/A (1.125 - 1.5 lbs ai/A)	For celery seedbeds, apply in a spray volume of 125 gallons per acre twice a week or as needed to maintain control. Start applications shortly after crop emergence. Use the higher specified rate under severe disease conditions.	

*(continued)*

**DIRECTIONS FOR APPLICATION (continued)**

<b>CROP</b>	<b>DISEASES (Pathogen)</b>	<b>PT PRODUCT/A (lb ai/A)</b>	<b>APPLICATION DIRECTIONS</b>	<b>RESTRICTIONS</b>
Corn (sweet) Corn (grown for seed)	Helminthosporium leaf blights Rust ( <i>Puccinia</i> spp.)	0.75 - 2 pts/A (0.6 - 1.5 lbs ai/A)	Use in sufficient water to obtain adequate coverage. Begin applications when conditions favor disease development and repeat at a 7-day interval as required to maintain control. Under severe disease pressure, use 1.5 - 2 pints of product per acre. Apply by ground, air or chemigation.	DO NOT apply more than 12 pints of product (9 lbs ai) per acre per year. DO NOT apply within 14 days of harvest. DO NOT apply to sweet corn to be processed. DO NOT allow livestock to graze in treated fields. DO NOT ensile treated corn or use as livestock forage. Minimum retreatment interval is 7 days.
Cranberry	Fruit rots Lophodermium leaf/twig blight ( <i>L. Hypophyllum</i> )	4 - 6.5 pts/A (3.0 - 4.9 lbs ai/A)	Apply at early bloom and repeat at 10 - 14 day intervals. Under severe disease conditions, use the higher specified rate on a 10-day schedule. Apply by ground, air, or chemigation. When applying by chemigation, use 300 gallons of water per acre through solid set systems only.	DO NOT apply more than 20 pints of product (15 lbs ai) 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. The minimum retreatment interval is 10 days.
	Upright dieback ( <i>Phomopsis vaccinii</i> )	4 - 6.5 pts/A (3 - 4.9 lbs ai/A)	Apply in sufficient water to obtain coverage of uprights and runners. Make the first application before bloom, at the time shoots begin growth in the spring. Make additional applications at 10 - 14 day intervals. Apply by ground, air or chemigation. When applying by chemigation, use 300 gallons of water per acre through solid set systems only.	
Cucurbits Cucumber Cantaloupe Honeydew melon Muskmelon Pumpkin Squash Watermelon Zucchini Chayote Chinese waxgourd Gourds <i>Momordica</i> spp. (Bitter melon, Balsam apple) Including cultivars and/or hybrids of these.	Anthracnose ( <i>Colletotrichum</i> spp.) Downy mildew ( <i>Pseudoperonospora cubensis</i> ) Target spot ( <i>Corynespora cassiicola</i> )	1.5 - 2 pts/A (1.125 - 1.5 lbs ai/A)	Use sufficient water to obtain adequate coverage. Begin applications when plants are in first true leaf stage or when conditions are favorable for disease development. Repeat applications at 7-day intervals.  Note: Spraying mature watermelons may result in sunburn of the upper surface of the fruit. DO NOT apply to watermelons when any of the following conditions are present: 1. Intense heat and sunlight. 2. Drought conditions. 3. Poor vine canopy. 4. Other crop and environmental conditions which may be conducive to increased natural sunburn.  DO NOT combine this product with anything except water for application to watermelons unless your prior use has shown the combination to be non-injurious to watermelons under your conditions of use.  This product may be applied on the day of harvest. Apply by ground, air or chemigation.	DO NOT apply more than 21 pints of product (15.75 lbs ai) per acre per year. Minimum retreatment interval is 7 days.
	Alternaria leaf blight ( <i>A. cucumerina</i> ) Alternaria leaf spot ( <i>A. alternate</i> ) Cercospora leaf spot ( <i>C. citrullina</i> ) Gummy stem blight/ vine decline ( <i>Didymelia bryoniae</i> ) Powdery mildew ( <i>Sphaerotheca</i> only) Scab ( <i>Cladosporium cucumerinum</i> )	2 - 3 pts/A (1.5 - 2.25 lbs ai/A)		

(continued)

**DIRECTIONS FOR APPLICATION *(continued)***

<b>CROP</b>	<b>DISEASES (Pathogen)</b>	<b>PT PRODUCT/A (lb ai/A)</b>	<b>APPLICATION DIRECTIONS</b>	<b>RESTRICTIONS</b>
Fruiting vegetables (except tomato) Eggplant Groundcherry Okra Pepino Pepper (bell pepper, chili pepper, cooking pepper, pimento, sweet pepper) Tomatillo	Anthracnose ( <i>Colletotrichum</i> spp.) Botrytis leaf mold ( <i>Botrytis cinerea</i> ) Cercospora leaf spot ( <i>Cercospora</i> spp.) Powdery mildew	1.5 pts/A (1.125 lbs ai/A)	Use in sufficient water to obtain adequate coverage. Begin applications as a foliage, flower, and fruit spray when disease is expected. Repeat applications at 7 - 10 day intervals.  Apply by ground, air, or chemigation.	DO NOT apply more than 12 pints of product (9.0 lbs ai) per acre per year.  DO NOT apply within 3 days of harvest.  Minimum retreatment interval is 7 days.
Ginseng	Alternaria blight ( <i>Alternaria panax</i> ) Gray mold ( <i>Botrytis cinerea</i> )	2 pts/A (1.5 lbs ai/A)	Use in sufficient water to obtain adequate coverage. Begin applications when disease first threatens, and repeat at 7 - 10 day intervals as disease pressure warrants.	DO NOT apply more than 16 pints of product (12 lbs ai) per acre per year.  DO NOT apply within 14 days of harvest.  Minimum retreatment interval is 7 days.
Grasses grown for seed	Bipolaris and Drechslera leaf spots Glume blotch Leaf rust Septoria leaf spot Stem rust Stripe rust	1 - 1.5 pts/A (0.75 - 1.125 lbs ai/A)	Use in sufficient water to obtain adequate coverage. Begin applications during stem elongation when conditions favor disease development. Reapply at flag (top) leaf emergence and repeat applications at 14 day intervals.  Apply by ground, air, or chemigation.	DO NOT apply more than 6 pints of product (4.5 lbs ai) 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.  Minimum retreatment interval is 14 days.
	Selenophoma (eyespot)	1 - 2 pts/A (0.75 - 1.5 lbs ai/A)		
Horseradish	Ramularia stem and leaf spot ( <i>Ramularia armoraciae</i> )	3 pts/A (2.25 lbs ai/A)	Use in sufficient water to obtain adequate coverage. Begin applications when disease first threatens and repeat at 7 - 10 day intervals as disease pressure warrants.	DO NOT apply more than 24 pints of product (18 lbs ai) per acre per year.  DO NOT apply within 14 days of harvest.  Minimum retreatment interval is 7 days.
Lentil	Anthracnose ( <i>Colletotrichum gloeosporioides</i> ) Ascochyta ( <i>Ascochyta pisi</i> )	1 - 1.5 pts/A (0.75 - 1.125 lbs ai/A)	Use in sufficient water to obtain adequate coverage. Begin applications when disease first threatens, and repeat at 7 - 10 day intervals as disease pressure warrants.	DO NOT apply more than 8 pints of product (6 lbs ai) per acre per year.  DO NOT apply within 14 days of harvest.  Minimum retreatment interval is 7 days.

*(continued)*

**DIRECTIONS FOR APPLICATION *(continued)***

CROP	DISEASES (Pathogen)	PT PRODUCT/A (lb ai/A)	APPLICATION DIRECTIONS				RESTRICTIONS
Mango	Anthracnose <i>(Colletotrichum spp.)</i>	2 - 3.5 pts/A (1.5 - 2.6 lbs ai/A)	Use a water volume of 20 - 300 gallons per acre. Begin applications at early bloom and repeat on a 7 - 14 day interval until early fruit development. Begin the season with the 2 pint rate on a 14 day interval. If disease pressure is severe, use the higher specified rate and shorter interval. Use during bloom and fruit set up until fruit reach one-inch diameter. May cause spotting on fruit larger than one inch in diameter. Apply by ground or air.				DO NOT apply more than 32 pints of product (24 lbs ai) per acre per year. DO NOT apply within 21 days of harvest. Minimum retreatment interval is 7 days.
Mint (Indiana, Michigan, and Wisconsin only)	Rust <i>(Puccinia menthae)</i> Septoria leaf spot <i>(S. menthae)</i>	1.375 pts/A (1.0 lb ai/A)	Use in sufficient water to obtain adequate coverage, normally 20 - 150 gallons per acre for dilute sprays and 5 - 10 gallons per acre for concentrate ground and aircraft applications. Begin applications when emerging plants are 4 - 8 inches high. Repeat applications at 7 - 10 day intervals to maintain control.				DO NOT apply more than 4 pints (3 lbs ai) 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. Minimum retreatment interval is 7 days.
Mushrooms	Verticillium brown spot and dry bubble	2.5 - 5.5 fl oz/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 applications as follows: <ul style="list-style-type: none"> <li>• First application - apply 5.5 fl oz of product within two days of top-dressing the spawn-colonized mushroom compost with a casing layer.</li> <li>• Second application apply 2.75 fl oz of product at pinning.</li> </ul>				Make no more than two applications per cropping cycle. DO NOT apply more than 8.25 fl oz of product per 1,000 sq ft per cropping cycle. DO NOT apply within 5 days of first harvest.
Onion (dry bulb) and Garlic	Botrytis leaf blight <i>(Botrytis spp.)</i> Purple blotch <i>(Alternaria porri)</i> Suppression: Botrytis neck rot Downy mildew <i>(Peronospora destructor)</i>	1 - 3 pts/A (0.75 - 2.25 lbs ai/A)	Apply in sufficient water to obtain thorough coverage of tops. The product is recommended for use with disease monitoring systems which adjust fungicide rates and frequency of application according to disease hazard. Apply as follows:				DO NOT apply more than 20 pints of product (15 lbs ai) per acre per year. DO NOT apply within 7 days of harvest. Minimum retreatment interval is 7 days.
				Low disease hazard & prior to infection	Low diseases hazard & some disease present	High disease hazard	
			Rate per acre	1 pt	1 3/8 pts	3 pts	
			Frequency	10 days	7 - 10 days	7 days	
For suppression of neck rot ( <i>Botrytis spp.</i> ) during storage, a minimum of three weekly applications prior to lifting, using 1.375 to 3 pints of product per acre is recommended. Apply by ground, air or chemigation.							

*(continued)*

**DIRECTIONS FOR APPLICATION (continued)**

<b>CROP</b>	<b>DISEASES (Pathogen)</b>	<b>PT PRODUCT/A (lb ai/A)</b>	<b>APPLICATION DIRECTIONS</b>	<b>RESTRICTIONS</b>
Onion (green bunching) Leek Shallots Onion and Garlic (grown for seed)	Botrytis leaf blight ( <i>Botrytis</i> spp.) Purple blotch ( <i>Alternaria porri</i> ) Suppression: Downy mildew ( <i>Peronospora destructor</i> )	1.5 - 3 pts/A (1.125 - 2.25 lbs ai/A)	Use in sufficient water to obtain thorough coverage of tops. Begin applications prior to favorable infection periods, and repeat at 7 - 10 day intervals for as long as conditions favor disease. Use the higher specified rate and a 7 day schedule of applications when heavy dew or rain persist. Apply by ground, air, or chemigation.	DO NOT apply more than 9 pints of product (6.75 lbs ai) per acre per year. DO NOT apply within 7 days of harvest on garlic. DO NOT apply within 14 days of harvest on green bunching onions, leeks or shallots. The minimum retreatment interval is 7 days.
Papaya	Alternaria fruit spot ( <i>A. alternate</i> ) Anthracnose ( <i>Colletotrichum</i> spp.) Stem end rot ( <i>A. alternate</i> , <i>Colletotrichum</i> spp.)	1.5 - 3 pts/A (1.125 - 2.25 lbs ai/A)	Apply with ground equipment only, in sufficient water to obtain adequate coverage of fruit and leaves. Begin treatment when conditions favor development of disease and continue treatments at 14-day intervals until weather conditions no longer favor disease development.	DO NOT apply more than 9 pints of product (6.75 lbs ai) per acre per year. This product may be applied on the day of harvest. Minimum retreatment interval is 14 days.
Parsnip	Alternaria leaf spot ( <i>Alternaria</i> spp.) Anthracnose ( <i>Colletotrichum</i> spp.) Botrytis blight (gray mold) ( <i>B. cinerea</i> ) Bottom rot ( <i>Rhizoctonia</i> ) Downy mildew ( <i>Plasmopara crustose</i> )	1.5 - 2 pts/A (1.125 - 1.5 lbs ai/A)	Apply in sufficient water to obtain adequate coverage. Make the first application at the first sign of disease or when conditions are favorable for infection. Continue applications on a 7 - 10 day schedule. Apply by ground, air or chemigation.	DO NOT apply more than 8 pints of product (6 lbs ai) per acre per year. DO NOT apply within 10 days of harvest. Minimum retreatment interval is 7 days.
Passion Fruit	Alternaria fruit and leaf spot ( <i>Alternaria</i> spp.) Anthracnose ( <i>Colletotrichum</i> spp.) Cercospora fruit spot	2 pts/A (1.5 lbs ai/A)	Apply with ground equipment in sufficient water to obtain adequate coverage of fruit and leaves. Begin applications during late bloom and repeat at 14-day intervals until weather conditions no longer favor disease development.	DO NOT apply more than 10 pints of product (7.5 lbs ai) per acre per year. DO NOT apply within 7 days of harvest. Minimum retreatment interval is 14 days.
Peanut	Early leaf spot ( <i>Cercospora arachidicola</i> ) Late leaf spot ( <i>Cercosporidium personatum</i> ) Pepper spot ( <i>Leptosphaerulina crassiasca</i> )	1 - 1.5 pts/A (0.75 - 1.125 lbs ai/A)	Apply in sufficient water for coverage when leaf wetness first occurs or 30 - 40 days after planting; repeat at 14 day intervals. When conditions favor late leaf spot or when rust or web blotch, occur, apply 1.5 pints of product per acre at 14-day intervals for the remainder of the season. Apply by ground, air or chemigation. If applying by chemigation, use 1.5 pints of product per acre. It is recommended to alternate chemigation applications with ground or aerial applications.	DO NOT apply more than 12 pints of product (9 lbs ai) per acre per year. DO NOT apply within 14 days of harvest. DO NOT allow livestock to graze in treated areas. DO NOT feed hay or threshing from treated fields to livestock. Minimum retreatment interval is 14 days.
Persimmon	Cercospora leaf spot ( <i>Cercospora fuliginosa</i> )	1.25 pts/A (0.94 lb ai/A)	Use in sufficient water to obtain adequate coverage. Begin applications when disease first threatens and repeat at 14-day intervals as disease pressure warrants.	DO NOT apply more than 6.25 pints of product (4.7 lbs ai) per acre per year. DO NOT apply within 14 days of harvest. Only for application in Florida and Hawaii. Aerial applications require the use of a minimum of 10 gallons per acre.



**DIRECTIONS FOR APPLICATION (continued)**

<b>CROP</b>	<b>DISEASES (Pathogen)</b>	<b>PT PRODUCT/A (lb ai/A)</b>	<b>APPLICATION DIRECTIONS</b>	<b>RESTRICTIONS</b>
Potato	Black dot ( <i>Colletotrichum coccodes</i> ) Botrytis vine rot ( <i>B. cinerea</i> ) Early blight ( <i>Alternaria solani</i> ) Late blight ( <i>Phytophthora infestans</i> )	0.75 pt/A (0.6 lb ai/A)  THEN  1 - 1.5 pts/A (0.75 - 1.125 lbs ai/A)	Begin applications at the low rate when vines are first exposed and leaf wetness occurs. Repeat applications at 5 - 10 day intervals. Begin applying the higher labeled rate at 5 - 10 day intervals when any one of the following events occur: <ul style="list-style-type: none"> <li>• Vines close within the rows</li> <li>• Late blight forecasting measures 18 disease severity values (DSV)</li> <li>• The crop reaches 300 P-days</li> </ul> Increase water spray volume as canopy density increases. Use the highest rate and shortest interval when plants are rapidly growing and disease conditions are severe. Apply by ground, air or chemigation. DO NOT exceed a 10-day interval between applications when using chemigation.	DO NOT apply more than 15 pints (11.25 lbs ai) per acre per year. DO NOT apply within 7 days of harvest. Minimum retreatment interval is 5 days.
Rhubarb	Ramularia leaf spot ( <i>Ramularia rhei</i> )	3 pts/A (2.25 lbs ai/A)	Use in sufficient water to obtain adequate coverage. Begin applications when disease first threatens, and repeat at 7 - 10 day intervals as disease pressure warrants.	DO NOT apply more than 18 pints of product (13.5 lbs ai) per acre per year. DO NOT apply within 30 days of harvest. Minimum retreatment interval is 7 days.
Soybean	Anthracnose ( <i>Colletotrichum truncatum</i> ) Cercospora leaf blight ( <i>C. kikuchii</i> ) Diaporthe pod and stem rot ( <i>D. phaseolorum</i> ) Frogeye leaf spot ( <i>Cercospora sojina</i> ) Purple seed stain ( <i>C. kikuchii</i> ) Septoria brown spot ( <i>S. glycines</i> ) Suppression: Rust ( <i>Phakopsora pachyrhizi</i> )	1.5 - 2.25 pts/A (1.125 - 1.7 lbs ai/A)	Apply in sufficient water to obtain complete coverage, using at least five gallons of water per acre for aerial application. Use the three application program in areas having a history of moderate to severe disease intensity. Apply by ground air or chemigation.  Two application program: For determinate varieties, make the first application at R3 stage (early pod set) and the second application at R5 (seed formation). For indeterminate varieties, make the first application when largest pods are 1 - 1.25 inches in length. Make the second application 14 days later.	DO NOT apply more than 6 pints of product (4.5 lbs ai) per acre per year. DO NOT apply within 6 weeks of harvest. DO NOT feed hay or threshing from treated fields to livestock. Minimum retreatment interval is 14 days.
		1 - 2 pts/A (0.75 - 1.5 lbs ai/A)	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 ( <i>Diaporthe phaseolorum</i> )	1 pt/A (0.75 lb ai/A)	Apply in 10 - 20 gallons 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 trifoliolate leaves (V2). If conditions favor stem canker disease make a second and third application. Make all applications at 14-day intervals.	

(continued)

**DIRECTIONS FOR APPLICATION (continued)**

<b>CROP</b>	<b>DISEASES (Pathogen)</b>	<b>PT PRODUCT/A (lb ai/A)</b>	<b>APPLICATION DIRECTIONS</b>	<b>RESTRICTIONS</b>
Strawberries (non-bearing nurseries) California only	Ramularia leaf spot ( <i>Ramularia tulasnei</i> )	1.5 pts/A (1.125 lbs ai/A)	Begin application after a rain or sprinkler irrigation application and when disease threatens. Apply on a 10 to 14-day interval. Use the highest rate and shortest interval specified when disease conditions are severe. Continue application until runners are dug. Apply by ground, air or chemigation.	DO NOT apply more than 20 pints of product (15 lbs ai) per acre per year. DO NOT use on strawberry plants in commercial fruit production. Preharvest interval does not apply.
Tomato	FOLIAGE Early blight ( <i>Alternaria solani</i> ) Gray leaf mold ( <i>Fluvia fluva; Cladosporium</i> ) Gray leaf spot ( <i>Stemphylium botryosum</i> ) Late blight ( <i>Phytophthora infestans</i> ) Septoria leaf spot ( <i>S. lycopersici</i> ) Target spot ( <i>Corynespora cassiicola</i> )	1.375 - 2 pts/A (1.0 - 1.5 lbs ai/A)	Apply in sufficient water to obtain adequate coverage. Begin applications when dew or rain occur and disease threatens. Apply on a 7 to 10 day interval for foliage diseases, begin at fruit set and apply on a 7 - 14 day interval. Use the highest rate and shortest interval specified when disease conditions are severe. Apply by ground, air, or chemigation.	DO NOT apply more than 20 pints of product (15 lbs ai) per acre per year. This product may be applied up until the day of harvest. Minimum retreatment interval is 7 days.
	FRUIT Alternaria fruit rot (black mold) ( <i>A. alternata</i> ) Anthracnose ( <i>Colletotrichum</i> spp.) Botrytis gray mold ( <i>B. cinerea</i> ) Late blight fruit rot ( <i>P. infestans</i> ) Rhizoctonia fruit rot ( <i>R. solani</i> )	2 - 2.75 pts/A (1.5 - 2.1 lbs ai/A)		
Yam	Anthracnose ( <i>Colletotrichum gloeosporioides</i> )	1 - 1.25 pts/A (0.75 - 1.125 lbs ai/A)	Use in sufficient water to obtain adequate coverage. Begin applications when disease first threatens and repeat at 10 - 14 day intervals as disease pressure warrants.	DO NOT apply more than 15 pints of product (11.25 lbs ai) per acre per year. DO NOT apply within 7 days of harvest.

## STORAGE AND DISPOSAL

DO NOT contaminate water, food or feed by storage and disposal. Open dumping is prohibited.

**Pesticide Storage:** Keep this product in its tightly closed original container. Store in a cool, dry (preferably locked) area that is inaccessible to children and animals. Protect from excessive heat.

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

### Container Handling:

For containers less than or equal to 5 gallons: Nonrefillable container. Do not reuse or refill this container. 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 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling, if available or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

For containers greater than 5 gallons: Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple Rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Recap 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. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

## IMPORTANT INFORMATION READ BEFORE USING PRODUCT

### CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

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

The Directions for Use of this product reflect the opinion of experts based on field use and tests, and must be followed carefully. It is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of UPL NA Inc. or Seller. Handling, storage, and use of the product by Buyer or User are beyond the control of UPL NA Inc. and Seller. To the extent consistent with applicable law all such risks shall be assumed by Buyer and User, and Buyer and User agree to hold UPL NA Inc. and Seller harmless for any claims relating to such factors.

**TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, UPL NA INC. AND SELLER MAKE NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ON THIS LABEL.**

To the extent consistent with applicable law, UPL NA Inc. or Seller shall not be liable for any incidental, consequential or special damages resulting from the use or handling of this product and **THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF UPL NA INC. AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF UPL NA INC. OR SELLER, THE REPLACEMENT OF THE PRODUCT.**

UPL NA Inc. and Seller offer this product, and Buyer and User accept it, subject to the foregoing conditions of sale and limitations of warranty and of liability, which may not be modified except by written agreement signed by the duly authorized representative of UPL NA Inc.

UPL, the UPL logo and ORANIL are trademarks of a UPL Corporation Limited Group Company.

®/™ All other products are trademarks of their respective companies.

©2022 UPL Corporation Limited Group Company

ESL101321-10286-060622