

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

September 13, 2019

Danielle Larochelle Regulatory Manager Nufarm Americas Inc. 4020 Aerial Center Parkway, Suite 101 Morrisville, NC 27560

Subject: Registration Review Label Mitigation for Mefenoxam

Product Name: ULTRA FLOURISH® Agricultural Fungicide

EPA Registration Number: 55146-73

Application Date: July 6, 2018 Decision Number: 554310

Dear Danielle Larochelle:

The Agency, in accordance with the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended, has completed reviewing all of the information submitted with your application to support the Registration Review of the above referenced product in connection with the Mefenoxam Interim Decision, and has concluded that your submission is acceptable. The label referred to above, submitted in connection with registration under FIFRA, as amended, is acceptable.

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

A copy of your label stamped "Accepted" is enclosed. Products shipped after 12 months from the date of this amendment must bear the new revised label. Your release for shipment of the product bearing the amended label constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6.

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If you have any questions about this letter, please contact Darius Stanton by phone at 703-347-0433, or via email at Stanton.darius@epa.gov.

Sincerely,

Linda Arrington, Branch Chief

Risk Management and Implementation Branch 4

Pesticide Re-Evaluation Division

Office of Pesticide Programs

Enclosure

Sep 13, 2019

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 55146-73

MEFENOXAM

GROUP

4

FUNGICIDE

ULTRA FLOURISH®

AGRICULTURAL FUNGICIDE

For the control of certain diseases in various crops caused by the Oomycete class of fungi

ACTIVE	INGREDIENT:
ACTIVE	INGREDIENT

Mefenoxam: D-Alanine, N-(2,6-dimethylphenyl)-N-(methoxyacetyl)-, methyl ester	25.1%
OTHER INGREDIENTS:	74.9%
TOTAL:	100.0%

Contains Petroleum Distillates
Contains 2 pounds mefenoxam per gallon

WARNING / AVISO

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

SEE INSIDE LABEL BOOKLET FOR FIRST AID AND PRECAUTIONARY STATEMENTS

For Chemical Spill, Leak, Fire, or Exposure, Call CHEMTREC (800) 424-9300 For Medical Emergencies Only, Call (877) 325-1840

EPA	REG. NO	. 55146-73
EPA	EST. NO.	

Manufactured For Nufarm Americas Inc. AGT Division 11901 S. Austin Avenue Alsip, IL 60803



NET CONTENTS: _	Gallons(_ L)		
[Designation as "N	ONREFII I ARI	F" or "REFILL AR	I F" for containers >	5 GAI 1

[Grow a better tomorrow.]

FIRST AID					
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 SWALLOWED	 Immediately call a poison control center or doctor. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give any liquid to the person. Do not give anything by mouth to an unconscious person. 				
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. 				

HOTLINE NUMBER

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-877-325-1840 for emergency medical treatment information.

NOTE TO PHYSICIAN

If this product is ingested, lavage stomach. A slurry of activated charcoal in water can be left in the stomach. Contains petroleum distillates – vomiting may cause aspiration pneumonia.

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS WARNING / AVISO

Causes substantial but temporary eye injury. Harmful if swallowed or absorbed through skin. Do not get in eyes or on clothing. Avoid contact with skin.

PERSONAL PROTECTIVE EQUIPMENT (PPE):

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves such as barrier laminate or viton
- Shoes plus socks
- Protective eyewear

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow the 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, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

USER SAFETY RECOMMENDATIONS

Users Should:

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

ENVIRONMENTAL HAZARDS

Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Apply only as specified on this label. Do not apply when weather conditions favor drift from treated areas. Do not contaminate water when disposing of equipment washwater or rinsate.

Groundwater Advisory

This chemical has properties and characteristics associated with chemicals detected in groundwater. This chemical may leach into groundwater if used in areas where soils are permeable, particularly where the water table is shallow.

Surface Water Advisory

This product may contaminate water through drift of spray in wind. This product has a high potential for runoff for several months or more after application. Poorly draining soils and soils with shallow water tables are more prone to produce runoff that contains this product. A level, well maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential for contamination of water from rainfall-runoff. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours.

PHYSICAL OR CHEMICAL HAZARDS

Do not use or store near heat or open flame.

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, 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 statement of this label about personal protective equipment (PPE) and restricted-entry interval (REI). The requirements in this box only apply to users of this product that are covered by the WPS.

Do not enter or allow worker entry into treated areas during the REI of 48 hours.

Exception: If the product is soil-injected or soil-incorporated, the WPS, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil or water is: Coveralls, chemical-resistant gloves such as barrier laminate or viton, shoes plus socks, and protective eyewear.

Failure to follow the directions for use and precautions on this label may result in crop injury, poor disease control, or illegal residues.

PRODUCT INFORMATION

This product is a systemic fungicide for use on selected crops to control certain disease caused by members of the Oomycete class of fungi. Other fungicides must be used to control diseases caused by other classes of fungi.

Where rate ranges are specified on this label, use the higher rate when heavy disease pressure is expected and the lower rate when disease pressure is expected to be light unless otherwise noted.

Under conditions of severe disease pressure when more than the label specified number of applications of this product may be required, make additional fungicide treatments with other fungicides registered for the crop/disease found on this label.

USE RESTRICTIONS

- Do not use this product in foliar applications unless specified on this label.
- Do not use this product in greenhouses, lath houses, float houses, and hydroponic facilities.
- Do not use this product for disease control in bedding plants, transplant trays or nurseries.

- Do not dip plants or roots, spray bare roots, or use a transplant water treatment with solutions of this product.
- Maximum usage when applying both metalaxyl- and mefenoxam-containing products to the same crop within the same season: Do not apply more than the maximum yearly total application rate for the active ingredient as stated on the label of the product containing the lowest yearly total on that crop.

ROTATION (PLANTBACK) RESTRICTIONS

Replanting

If replanting is necessary, additional applications of this product may be made, provided that the total amount of mefenoxam applied does not exceed the maximum application rate allowed for the specific crop.

Rotation (Plantback) Restrictions

Do not plant any crop that is not registered for use with mefenoxam in mefenoxam-treated soil for a period of 12 months unless a shorter interval is specified on the following list.

ROTATIONAL CROP	PLANTING TIME FROM LAST APPLICATION
Alfalfa (including birdsfoot trefoil)	
Artichoke, Globe	
Asparagus	
Avocado	
Brassica (Cole Crops) Vegetables	
Bushberry Subgroup 13-07B	
Caneberry Subgroup 13-07A	
Clover	
Corn	
Cotton	
Cucurbit Vegetables	
Fruiting Vegetables (except Cucurbits)	
Ginseng	
Grapes	
Grass, Forage, Fodder and Hay	0 days
Herbs (fresh and dried)	
Hops	
Leafy Vegetables except Brassica	
Legume Vegetables (succulent and dried)	
Onions (dry bulb, green)	
Peanuts	
Pineapples	
Root and Tuber Vegetables	
Soybeans	
Strawberries	
Sunflower	
Tobacco	
Tropical Fruit	
Any other crops specified on this label	
Cereal Grains (other than Corn)	14 days
Crops Not Intended for Food or Feed	0 days
All Other Crops Intended for Food or Feed	12 months

RESISTANCE MANAGEMENT RECOMMENDATIONS

For resistance management, Ultra Flourish Agricultural Fungicide contains mefenoxam, a Group 4 fungicide. Any fungal population may contain individuals naturally resistant to Ultra Flourish and other Group 4 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.

The following steps may delay the development of fungicide resistance:

- Rotate the use of this product or other Group 4 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 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 Nufarm Americas Inc. at (855) 280-6609. You can also contact your pesticide distributor or university extension specialist to report resistance.

SPRAY DRIFT ADVISORIES

THE APPLICATOR IS RESPONSIBLE FOR AVOIDING OFF-SITE SPRAY DRIFT.

BE AWARE OF NEARBY NON-TARGET SITES AND ENVIRONMENTAL CONDITIONS.

IMPORTANCE OF DROPLET SIZE

An effective way to reduce spray drift is to apply large droplets. Use the largest droplets that provide target pest control. While applying larger droplets will reduce spray drift, the potential for drift will be greater if applications are made improperly or under unfavorable environmental conditions.

Controlling Droplet Size - Ground Boom

- Volume Increasing the spray volume so that larger droplets are produced will reduce spray drift. Use the highest practical spray volume for the application. If a greater spray volume is needed, consider using a nozzle with a higher flow rate.
- Pressure Use the lowest spray pressure recommended for the nozzle to produce the target spray volume and droplet size.
- Spray Nozzle Use a spray nozzle that is designed for the intended application. Consider using nozzles designed to reduce drift.

Controlling Droplet Size - Aircraft

• Adjust Nozzles - Follow nozzle manufacturers recommendations for setting up nozzles. Generally, to reduce fine droplets, nozzles should be oriented parallel with the airflow in flight.

BOOM HEIGHT - Ground Boom

Use the lowest boom height that is compatible with the spray nozzles that will provide uniform coverage. For ground equipment, the boom should remain level with the crop and have minimal bounce.

RELEASE HEIGHT- Aircraft

Higher release heights increase the potential for spray drift. When applying aerially to crops, do not release spray at a height greater than 10 ft above the crop canopy, unless a greater application height is necessary for pilot safety.

SHIELDED SPRAYERS

Shielding the boom or individual nozzles can reduce spray drift. Consider using shielded sprayers. Verify that the shields are not interfering with the uniform deposition of the spray on the target area.

TEMPERATURE AND HUMIDITY

When making applications in hot and dry conditions, use larger droplets to reduce effects of evaporation.

TEMPERATURE INVERSIONS

Drift potential is high during a temperature inversion. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. The presence of an inversion can be indicated by ground fog or 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. Avoid applications during temperature inversions.

WIND

Drift potential generally increases with wind speed. AVOID APPLICATIONS DURING GUSTY WIND CONDITIONS.

Applicators need to be familiar with local wind patterns and terrain that could affect spray drift.

MIXING PROCEDURES

Add 1/4 to 1/2 of the required amount of water to the spray tank, add the proper amount of this product, then add the rest of the water. When tank mixing other products with this product, follow the proper sequence for adding products to the spray tank. Wettable powders or water dispersible granules should be added to the water in the tank first, followed by flowable products, with emusifiable concentrates, such as this product, added last. Provide sufficient agitation during mixing and application to maintain a uniform emulsion.

Unless otherwise prohibited on this label or the label of an intended tank mix partner, this product may be applied in combination with any pesticide registered for the same crop, timing, and method of application.

It is the pesticide user's responsibility to ensure that all products included in the tank mix 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.

IMPORTANT: PESTICIDE TANK MIXES MAY INCREASE THE RISK OF MIXING INCOMPATIBILITIES, REDUCED EFFECTIVENESS AND/OR CAUSE CROP INJURY OR LOSS.

COMPATIBILITY

Before full-scale mixing of this product with other pesticides, fertilizers, secondary plant nutrients, adjuvants, surfactants or oils, you must determine the compatibility of the proposed mixture. Use proportionate quantities of each ingredient and mix in a small container. Always mix one product thoroughly with the diluent before adding another product. If no incompatibility is evident after 30 minutes, the mixture is generally compatible for spraying. To evaluate potential short term effects of applying the mixture, test the tank mix combination on a few plants or a small area before larger-scale treatments. Wait at least 2 to 3 days for problems to become apparent.

PRODUCT APPLICATION INSTRUCTIONS

Apply this product by ground or air in sufficient water or liquid fertilizer to provide uniform coverage of the soil surface. Apply in a minimum of 20 gallons per acre for ground applications and 5 gallons per acre by air. Refer to the Crop Specific Application Information section for use instructions.

Banded Applications: For banded applications, the area actually is the area covered by the band, not total cropland area planted. Some row-crop directions are based on treating in-the-row and these rates generally are specified as amounts (fluid ounces) of product per certain row length (often 1,000 feet). Others express rates as amount per treated acre, which means the total area treated with the pesticide. If rates are expressed as amount per treated acre and banded applications are used, the amount of pesticide used per acre will be proportionately less. The following formula can be used to calculate the amount of this product needed per acre of crop when banded applications are made:

Band width in inches
Row spacing in inches

X
Broadcast rate per acre

= Amount needed per acre of field

In-Furrow Applications: For in-furrow applications, apply this product as an in-furrow spray in 3 to 7 gallons of water per acre at planting. Mount the spray nozzle so the spray is directed into the furrow just before the seeds are covered. Following is a table of the common row spacings and the amount of this product applied per acre.

Product Use Rate					RA FLOUI Dunces pe				
fl oz / 1,000 row feet (oz ai / 1,000 row feet)	20 inch rows	22 inch rows	24 inch rows	30 inch rows	32 inch rows	34 inch rows	36 inch rows	38 inch rows	40 inch rows
0.15 (0.038)	4.0	3.6	3.2	2.6	2.5	2.3	2.2	2.1	2.0
0.3 (0.075)	7.8	7.0	6.5	5.2	5.0	4.6	4.3	4.1	4.0
0.56 (0.14)	14.5	13.3	12.2	9.8	9.1	8.5	8.1	7.7	7.3
0.84 (0.21)	22.0	20.0	18.3	14.5	13.7	13.0	12.2	11.6	11.0
30" = 17	17,424 row ft./acre 32" = 16,315 row ft./acre 3			34"	= 15,374	row ft./ac row ft./ac row ft./ac	re		

Instructions for Moving Ultra Flourish into the Root or Seed Zone

To ensure maximum activity on soilborne pathogens, this product must be moved into the seed or root zone of the plant. Some crop directions specify incorporating the product to move it to the seed or root zone (preplant incorporated application, soil drenches, shank applications) while others place the fungicide into the seed or root zone (in-furrow sprays, soil injections, crown dips). For applications made to the soil surface, rainfall will move the fungicide to the seed or root zone. However, if rainfall is not expected within 24 hours after application, mechanically incorporate before planting or sprinkler-irrigate after planting with ½ to 1 inch of water.

APPLICATION THROUGH IRRIGATION SYSTEMS

This product alone or in combination with other pesticides, which are registered for application through irrigation systems, may be applied through irrigation systems. Apply this product only through center pivot, solid set, hand move, moving wheel, micro-sprinkler, pressurized drench (flood) or drip (trickle), micro-irrigation such as a spaghetti-tube or individual tube irrigation, hand-held calibrated irrigation equipment such as the hand-held wand with injector, calibrated overhead watering booms, ebb and flow or bench flooding sub-irrigation systems. 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.

Dilute this product with water on a 1/10 basis prior to injection into an irrigation system. Proper tank-mix agitation is required during this mixing procedure.

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

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

A person knowledgeable of the chemigation system and responsible for its operation, or under supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

OPERATING INSTRUCTIONS

The system must contain a functional check valve, vacuum relief valve and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.

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

The pesticide injection pipeline must contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.

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

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

Do not apply when wind speed favors drift beyond the area intended for treatment.

APPLICATION INSTRUCTIONS FOR IRRIGATION SYSTEMS

This product must be applied on the schedule specified in the specific crop use directions, not according to the irrigation schedule.

With the exception of citrus, this product has not been sufficiently tested when applied through irrigation systems to assure consistent product performance for all labeled uses. The following calibration and application techniques are provided for user reference, but do not constitute a warranty of fitness for application through sprinkler or drip irrigation equipment. Users must check with state and local regulatory agencies for potential use restrictions before applying any agricultural chemical through sprinkler or drip irrigation equipment.

NOTE: Do not inject this product at full strength or deterioration of valves and seals may occur. Use a dilution ratio of at least 10 parts water to 1 part of this product in the mix tank. This product is corrosive to many seal materials. Leather seals are best. EPDM or silicone rubber seals can be used, but should be replaced once a year. Do not use Viton, Buna-N, Neoprene or PVC seals.

CENTER PIVOT IRRIGATION EQUIPMENT

Use only with drive systems which provide uniform water distribution. Determine the size of the area to be treated. Determine the time required to apply 1/2 to 1 inch of water over the area to be treated when the system and injection equipment are operated at normal pressures recommended by the equipment manufacturer. Run the system at 80 to 95% of the manufacturer's rated capacity. Using water, determine the injection pump output when operated at normal line pressure. Determine the amount of this product required to treat the area covered by the irrigation system. Add the required amount of this product and sufficient water to the solution (mix) tank to meet the injection time requirements. Maintain constant solution tank agitation during the injection period. Continue to operate the system until all of the product solution has cleared the most distant sprinkler head.

SOLID SET, HAND MOVE, AND MOVING WHEEL IRRIGATION EQUIPMENT

Determine the acreage covered by the sprinklers. Fill injector solution tank with water and adjust flow rate to use the contents over a 20- to 30-minute interval. Determine the amount of this product required to treat the area covered by the irrigation system. Add the required amount of this product into the same quantity of water used to calibrate the injection period. Operate the system at the same pressure and time interval established during the calibration. Inject this product at the end of the irrigation cycle in 1/2 to 1 inch of water or as separate application to maximize the effectiveness of the fungicide. Stop injection equipment after treatment is completed. Continue to operate the system until all of the product solution has cleared the last sprinkler head.

MICRO SPRINKLER, DRIP IRRIGATION SYSTEMS, OVERHEAD WATERING BOOMS

Each run of the irrigation system must be calibrated separately to determine the time it takes water to move through the system and to make sure all emitters in the system are putting out the same amount of water. Only pressure injection or venturi equipment is recommended. Determine the area to be treated in each irrigation run. Measure the output of each of the emitters or drip tubes closest to and farthest from the injector site. For calibration, substitute a concentrated detergent (such as Wisk) or a soluble fertilizer for this product in the injector tank. The detergent will bubble as it leaves the emitters. The time period over which bubbles occur should be checked for both the closest and farthest emitters. If these times are not within 2 minutes of each other, adjust the dilution ratio and/or the injection rate. If a soluble fertilizer is used, measure the time intervals with a salt bridge. If a drip system is being calibrated, substitute soluble fertilizer for this product in the injector and measure the time intervals with a salt bridge. (Step by step instructions) Before starting to calibrate, operate the system until all the emitters are putting out equal flow rates or until the system is operating at full pressure. Make up an indicator solution of detergent or fertilizer, using the same ratio to be used when mixing this product. Set the injector to apply the indicator solution at the injection rate to be used in the actual product application. Attach a 5 inch length of flexible tubing over the emitter closest to the injection point, another length over the emitter farthest away. Both emitters should be

monitored to determine the time intervals that the indicator solutions are observed. Begin injecting the indicator solution. Direct the flow from the tubes at the emitters into a small container. Begin timing when the indicator solution is first detected, stop timing when the indicator solutions are no longer detected. If the period of detection of the indicator solution between the 2 emitters is within 2 minutes of each other, comparable coverage will be obtained. If they are not, make adjustments by increasing the dilution ratio, using more water per part of product, or adjust the injector to a slower flow rate. Once the system is calibrated, dilute the needed amount of this product with water using a minimum of 10 parts of water to 1 part this product. Do not begin to inject this product into the system until all emitters are producing equal flow rates, or until the system is at full pressure. Inject this product into the system at the end of the irrigation set in 1/2 to 1 inch of irrigation water.

CHEMIGATION SYSTEMS CONNECTED TO PUBLIC WATER SYSTEMS

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 of the year.

Chemigation systems connected to public water systems must contain a functional, reduced pressure zone, backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water systems should be discharged into a reservoir tank prior to pesticide introduction.

There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.

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

The pesticide injection pipeline must also contain a functional, normally closed solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where the pesticide distribution is adversely affected.

Systems must use a metering pump, 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.

Do not apply when wind speed favors drift beyond the area intended for treatment.

CROP SPECIFIC APPLICATION INFORMATION

Use of this product on the crops listed below is for field use only.

Soil surface sprays of this product will not be effective until the fungicide is moved into the root zone by rainfall or irrigation.

For banded applications, use the formula in the PRODUCT APPLICATION INSTRUCTIONS section of this label to calculate the amount of this product needed per acre for the band width actually used.

Equivalents: 1 quart = 2 pints.

ALFALFA (Including birdsfoot trefoil)					
DISEASE	PRODUCT USE RATE (lb ai)	USE INSTRUCTIONS			
Damping-off (<i>Pythium</i> spp.)	0.5 to 1 pint (pt) / Acre (0.13 to 0.25)	Apply as a broadcast surface spray at planting in a sufficient amount of water for thorough coverage.			
Root Rot (<i>Phytophthora</i> spp.)		If alfalfa seed was previously treated with a metalaxyl or mefenoxam seed treatment product, use this product at 0.5 pt/A at planting.			
		If inter-seeding alfalfa into existing stands for renovation, apply 0.5 pt/A as a broadcast spray at planting.			

- Do not feed green forage or cut hay for 60 days following application.
- Do not apply more than 1 pint/A (0.25 lb ai/A) per year.

APPLES (Bearing and Nonbearing Trees)					
DISEASE	PRODUCT USE RATE (Ib ai)	USE INST	RUCTIONS		
Crown Rot Collar Rot Root Rot (<i>Phytophthora</i> spp.)	8 pt/Acre (2) or 3 fl oz/1,000 ft ² (0.05)	Soil Spray (Broadcast or Banded): Apply sufficient water to obtain thorough coverage. Apply early spring before growth starts and in the fall af harvest but before the ground freezes. Treated ar is based on the area under the tree canopy or t area of the sprayed row.			
	, ,		product will not be effective ved into the root zone by		
	1 pt in 100 gal water (0.25)	early spring before growth harvest but before the	nd the trunk of each tree in h starts and in the fall after ground freezes. For new application until 2 weeks		
		Trunk Diameter 12 Inches Above Soil Line	Pints of Diluted Mixture Per Tree		
		<1 inch	2		
		1 to 3 inches	6		
		>5 inches	8		

- For best results, use in conjunction with good cultural practices and with rootstocks that are tolerant to the disease.
- Apply this product before symptoms appear especially when conditions are favorable for disease development. This product will not revitalize trees showing moderate to severe disease symptoms.
- Do not graze or feed cover crops in treated orchards.
- Do not apply more than 16 pints/A (4 lb ai/A) per year.

ARTICHOKE, GLOBE		
DISEASE	PRODUCT USE RATE (lb ai)	USE INSTRUCTIONS
Damping-off (<i>Pythium</i> spp.)	2 to 4 pt/Acre (0.5 to 1)	Apply as a broadcast soil spray at planting in a sufficient amount of water to provide thorough coverage.
Root Rot (Phytophthora spp.)		Soil surface sprays of this product will not be effective until the fungicide is moved into the root zone by rainfall or irrigation.

- Do not apply this product within 200 days of harvest (PHI=200 days).
- Do not apply more than 4 pt/A (1 lb ai/A) per year.

ASPARAGUS					
DISEASE	PRODUCT USE RATE (lb ai)	USE INSTRUCTIONS			
Crown Rot Spear Rot (<i>Phytophthora</i> spp.)	2 pt/Acre (0.5)	Apply as a broadcast or banded spray to soil in a minimum of 10 gallons of water over the beds. Cutting Beds: Apply 30 to 60 days before first cutting. For additional control, make another application just before the beginning of harvest. New Plantings: Apply after planting seedlings or			
		after covering one year old crowns. Soil surface sprays of this product will not be			
		effective until the fungicide is moved into the root zone by rainfall or irrigation.			

- Do not apply this product within 1 day of harvest (PHI=1 day).
- Do not apply more than 4 pt/A (1 lb ai/A) per year.

AVOCADOS		
DISEASE	PRODUCT USE RATE (lb ai)	USE INSTRUCTIONS
Root Rot (Phytophthora cinnamomi)	0.5 fl oz in 18 gal water (0.008)	Sleeve Drench: At the time of transplanting, drench the roots inside the sleeve with 1 quart of diluted mixture per tree. The sleeve drench will not replace the soil surface applications for long-term control of root rot.
	4 to 8 pt/Acre (1 to 2) or 1 to 2 fl oz per 1,000 gal water (3.9 - 7.8 ppm)	Injection (Drip Irrigation): Inject this product into the irrigation water. Time applications to occur at the start of the growing season or at transplanting and as soon as <i>Phytophthora</i> is detected in soils. Make up to two additional applications at 3-month intervals if needed. No treatment is required during the months of November through February.
	2 to 8 pt/Acre (0.5 to 2)	Soil Spray: Apply to the soil under the drip emitter. Irrigate to incorporate residues into the soil. If there is more than one emitter per tree, distribute the total amount of product needed among the emitters. See below for application rates and timing. Sprinkler Irrigation: Apply the specified amount of product to the soil directly under the tree canopy. Application Timing and Rate for Soil Spray and Sprinkler Irrigation: Time applications to begin at the start of the growing
		season or at transplanting or as soon as <i>Phytophthora</i> is detected in soils. Make up to two additional applications at 3-month intervals if needed. No treatment is required during the months of November through February.
		Increase the application rate as the canopy diameter increases. For trees with a canopy diameter of 2 ft, use 2 pints/A. For trees with a canopy diameter of 15 ft or more, use 8 pints/A.

- For best results, use this product as soon as soil tests indicate the presence of *Phytophthora*.
- For new plantings, use *Phytophthora*-resistant rootstocks.
- Mature trees in moderate to advanced stages of decline cannot be cured with this product.
- Do not apply more than 24 pints (3 gallons) per acre (6 lb ai/A) per year.
- Do not apply within 28 days of harvest (PHI=28 days).

BUSHBERRY SUBGROUP (13-07B):

Aronia Berry, Buffalo Currant, Blueberries (highbush and lowbush), Chilean Guava, Cranberry (highbush), Currant (black and red), Elderberry, European Barberry, Gooseberry, Honeysuckle (edible), Huckleberry, Jostaberry, Juneberry, Lingonberry, Native Current, Salal, Sea Buckthorn, Cultivars, Varieties, and/or Hybrids of these

DISEASE	PRODUCT USE RATE (lb ai)	USE INSTRUCTIONS
Root Rot (<i>Phytophthora</i> spp.)	7.2 pt/Acre (1.8)	New Plantings: Apply as a band or broadcast spray to the soil at planting.
	or 0.5 pt / 1,000 row feet (0.13)	For banded applications, use an 18-inch band over the row. Make one additional application if needed to coincide with a period favorable for root rot development.
	(0.10)	Soil surface sprays of this product will not be effective until the fungicide is moved into the root zone by rainfall or irrigation.
		Established Plantings: Apply to soil in a 3-foot band over the row before plant growth starts in the spring. Make one additional application if needed to coincide with a period favorable for root rot development.
		Soil surface sprays of this product will not be effective until the fungicide is moved into the root zone by rainfall or irrigation.

- Use this product in conjunction with good cultural practices to minimize disease problems.
- This product will not revitalize plants showing moderate to severe root rot symptoms.
- This product may be applied on the day of harvest (PHI=0 days).
- Do not apply more than 14.4 pt/A (3.6 lb ai/A) per year.

CANEBERRY Subgroup (13-07A):

Blackberry (including Andean blackberry, arctic blackberry, bingleberry, black satin berry, boysenberry, brombeere, California blackberry, Chesterberry, Cherokee blackberry, Cheyenne blackberry, common blackberry, coryberry, darrowberry, dewberry, Dirksen thornless berry, evergreen blackberry, Himalayaberry, hullberry, lavacaberry, loganberry, lowberry, Lucretiaberry, mammoth blackberry, marionberry, mora, mures deronce, nectarberry, Northern dewberry, olallieberry, Orgeon evergreen berry, phenomenalberry, rangeberry, ravenberry, rossberry, Shawnee blackberry, Southern dewberry, tayberry, youngberry, zarzamora); Loganberry; Raspberry (black and red); Wild Raspberry; and Cultivars, Varieties, and/or Hybrids of these

DISEASE	PRODUCT USE RATE (Ib ai)	USE INSTRUCTIONS
Root Rot (Phytophthora spp.)	7.2 pt/Acre (1.8)	New Plantings: Apply as a band or broadcast spray to the soil at planting.
	or 0.5 pt / 1,000 row feet	For banded applications, use an 18-inch band over the row. Make one additional application to coincide with a period favorable for root rot development.
(0.13)	Established Plantings: Apply to the soil surface towards the base of the plant in a 3-foot band over the row before plant growth starts in the spring. Make 1 application in the spring and another in the fall after harvest.	

- For best results, use this product in conjunction with good cultural practices.
- This product will not revitalize plants showing moderate to severe root rot symptoms.
- Do not apply within 45 days of harvest (PHI=45 days).
- Do not exceed 7.2 pt/A (1.8 lb ai/A) per year for soil applications and the equivalent of 0.2 lb ai/A per year of foliar-applied mefenoxam product for a maximum annual rate of 2.0 lb ai/A.

CITRUS: Calamondin Citrus citron, Citrus hybrids (including chironja, tangelo, tangor), Grapefruit, Kumquat, Lemon, Lime, Mandarin (tangerine), Orange (sour and sweet), Pummelo, Satsuma mandarin

DISEASE	PRODUCT USE RATE (lb ai)	USE INSTRUCTIONS
Brown Rot Citrus Foot Rot Root Rot Trunk Canker Gummosis (Phytophthora spp.)	4 to 8 pt/Acre (1 to 2)	Resets or New Plantings Apply at planting in sufficient water to obtain uniform coverage of the soil. Apply spray to the soil surface beneath the tree canopy or apply through irrigation water (micro-sprinkler or drip). Up to two more applications may be made at 3-month intervals or when root growth flushes occur.
		Florida, Texas and Puerto Rico: Apply 4 pints/A as a soil spray or 1 pint per grove acre via injection. Make a total of 2 to 3 applications per year at one of these schedules: (1) spring & summer, (2) summer & fall, or (3) spring & summer & fall.
	2 to 3 fl oz / 100 gal water (0.03 to 0.05)	Water Ring Drench: Apply 5 gallons of the mixture around the base of each tree within the watering ring of resets or new plantings.
	2 to 3 fl oz / 20 trees (0.03 to 0.05)	Individual Tree Treatment for Resets/New Plantings: Mix desired amount of product in water. Apply the solution as a directed spray to individual trees (generally 8 to 12 fl oz of solution/tree) around the base of the tree and outwards to cover the fibrous root system. Follow with sprinkler irrigation to move product into the root zone. This product may be tank mixed with other pesticides registered for use on citrus.
	2 to 12 pt/Acre (0.5 to 3)	Established Plantings Soil Application: Apply in sufficient water to obtain uniform coverage of the soil. Apply spray to the soil surface beneath the tree canopy or apply through irrigation water (micro-sprinkler or drip). Time applications to begin in the spring at root flush. Up to two more applications may be made when root growth flushes occur using 4 to 8 pt/A (when a total of 3 applications are made) or 12 pt/A (when a total of 2 applications are made).
		Florida, Texas and Puerto Rico: Apply 2 pt/A as a soil spray or 1 pint per grove acre via injection to groves that have a Phytophthora count of 10 to 20 propagules per cubic centimeter of soil. If more than 20 propagules per cubic centimeter are present, use 4 pt/A as a spray or 2 pints per grove acre through injection. Make a total of 2 to 3 applications per year at one of these schedules: (1) spring & summer, (2) summer & fall, or (3) spring & summer & fall.
Gummosis	4 pt in 3 gal water (1)	Trunk Spray: Spray the surface of the trunks using enough spray to thoroughly wet the cankers. Apply up to 3 times per year.
	4 pt in 10 gal water (1)	Trunk Spray (FL only): Spray the surface of the trunks using enough spray to thoroughly wet the cankers. Apply up to 3 times per year.

CITRUS: Calamondin Citrus citron, Citrus hybrids (including chironja, tangelo, tangor), Grapefruit, Kumquat, Lemon, Lime, Mandarin (tangerine), Orange (sour and sweet), Pummelo, Satsuma mandarin

- Additional directions for use are available from local extension agents.
- Where nematodes are a problem, best results can be achieved if effective EPA registered nematicides are used. Nematicides can be used in combination or in sequence with applications of this product.
- In Florida, Texas and Puerto Rico, phytotoxicity to citrus resets or new plantings (plants less than 5 years old) may be prevented by using rates no higher than 4 pt/A.
- Do not use on highly susceptible sweet orange rootstock in Florida.
- Do not apply to bare roots.
- Do not make trunk gummosis sprays and soil applications to the same tree in the same crop season.
- For trees less than 3 years old, do not tank mix herbicides with this product. First apply the herbicide and then apply this product 3 to 4 weeks later.
- Do not apply more than 24 pints (3 gallons) of this product per acre (6 lb ai/A) per year.

CLOVER		
DISEASE	PRODUCT USE RATE (lb ai)	USE INSTRUCTIONS
Damping-off (Pythium spp.) Root Rot (Phytophthora spp.)	0.5 to 1 pt/Acre (0.13 to 0.25)	Soil Spray (broadcast): Apply as a broadcast surface spray at planting. If seed was previously treated with a mefenoxam or metalaxyl seed treatment product, use the 0.5 pt/A rate at planting. Soil surface sprays of this product will not be effective until the fungicide is moved into the root
		zone by rainfall or irrigation.

- Do not feed green forage or cut hay within 90 days of application (PHI=90 days).
- Do not apply more than 1 pt/A (0.25 lb ai/A) per year.

COLE CROPS: Broccoli, Broccoli Raab (rapini), Brussels sprouts, Cabbage, Chinese Broccoli (gai lon), Chinese Cabbage (bok choy and napa), Chinese Mustard Cabbage (gai choy), Cauliflower, Cavalo Broccolo, Collards, Kale, Kohlrabi, Mizuna, Mustard Greens, Mustard Spinach, Turnip Greens (greens only)**, Rape Greens, All hybrids and varieties of these.

**Do not use foliar applications to treat dual purpose turnip cultivars or varieties which produce a harvestable root. Refer to the ROOT AND TUBER VEGETABLES section for use on turnip (root).

DISEASE	PRODUCT USE RATE (Ib ai)	USE INSTRUCTIONS
Damping-off (<i>Pythium</i> spp.)	0.5 to 1 pt/Acre (0.13 to 0.25)	Preplant Incorporated Application: Apply as a broadcast or banded soil application in sufficient water or liquid fertilizer to provide uniform coverage and incorporate into the top 2 inches of soil. For banded applications, a 7-inch band is recommended.
Basal Stem Rot (<i>Phytophthora</i> spp.)		Preplant Incorporated Application: Apply as a broadcast or banded soil application in sufficient water or liquid fertilizer to provide uniform coverage and incorporate into the top 2 inches of soil. For banded applications, a 7-inch band is recommended.
		Surface Application : Apply as a broadcast or banded soil spray at planting in sufficient water or liquid fertilizer to provide uniform coverage. For banded application, a 7-inch band is recommended.
		Soil surface sprays of this product will not be effective until the fungicide is moved into the root zone by rainfall or irrigation.
		Irrigation (drip): Inject this product into the irrigation water.

Downy Mildew (Peronospora parasitica)	Foliar Application (ground or air): Use only in a tank mixture with other fungicides registered for control of downy mildew on cole crops. Apply with the full label rate of the tank mix partner fungicide.
	Begin applications when conditions are favorable for disease development but before infection is established. Continue applications at 14-day intervals.

• Do not exceed 4 pt/A (1 lb ai/A) per year for soil applications and 2 pt/A (0.5 lb ai/A) per year for foliar applications.

For Downy Mildew Control Using Foliar Applications:

- Use this product only when included in a tank mixture with other EPA registered fungicides.
- Do not apply this product in fields where downy mildew is already established.
- Do not apply this product within 7 days of harvest (PHI=7 days)

COTTON		
DISEASE	PRODUCT USE RATE (lb ai)	USE INSTRUCTIONS
Seed and Root Rot (Pythium ultimum) Seedling Blight (Pythium aphanadermatum)	0.15 to 0.30 fl oz / 1,000 row ft (0.002 to 0.005)	In-furrow: Apply in 5 to 15 gallons of water or liquid fertilizer at planting. Mount the spray nozzle so the spray is directed into the furrow over the seed just before the seeds are covered.
♦ Do not apply more than 7.8 fl oz/A (0.125 lb ai/A) per year.		

CRANBERRIES		
DISEASE	PRODUCT USE RATE (lb ai)	USE INSTRUCTIONS
Phytophthora Root Rot (<i>Phytophthora</i> spp.)	2 to 3.5 pt/Acre (0.5 to 0.88)	Soil Spray (Broadcast): Apply 3 times using ground or chemigation equipment. Time applications to occur first in the fall after harvest, then in the spring with a final application up to, but not later than, 45 days prior to harvest. Soil surface sprays of this product will not be effective until the fungicide is moved into the root zone by rainfall or irrigation.

- Do not apply this product to cranberries by air.
- Do not apply within 45 days of harvest (PHI=45 days).
- Do not apply more than 10.5 pt/A (2.65 lb ai/A) per year.

CUCURBIT VEGETABLES: Chayote, Chinese Waxgourd, Citron Melon, Cucumber, Gherkin, Gourd (edible), *Momordica* spp. (Balsam Apple, Balsam Pear, Bitter Melon, Chinese Cucumber), Muskmelon (True Cantaloupe; Cantaloupe; Casaba; Crenshaw, Honeydew, Honey Balls, Mango, Persian, Pineapple, Santa Claus, and Snake Melons), Pumpkin, Summer Squash, Winter Squash, Watermelon, all hybrids and varieties of these

DISEASE	PRODUCT USE RATE (Ib ai)	USE INSTRUCTIONS
Damping-off Cottony Leak (Pythium spp.)	2 to 4 pt/Acre (0.5 to 1)	Pre-plant Incorporated Application: Apply as a broadcast or banded soil application in sufficient water or liquid fertilizer to provide uniform coverage and incorporate in the top 2 inches of soil. For banded application, a 7 inch band is recommended.
		Surface Application: Apply at planting as a broadcast or banded spray in sufficient water or liquid fertilizer to provide uniform coverage. Soil surface sprays of this product will not be effective until the fungicide is moved into the root zone by rainfall or irrigation. For banded application, a 7 inch band is recommended.
		Injection (drip): This product may also be injected into the irrigation water.
Root Rot (<i>Pythium</i> spp.)	0.5 to 0.8 pt/Acre (0.13 to 0.2)	Soil Directed Spray: If a soil application was made at planting, two additional applications may be made at 20 to 30 day intervals during the season.
		Direct the spray to the base of the plants and cover 6-8 inches of the soil on either side of the plants. Incorporate using either mechanical means or through irrigation to move the product into the root zone.
		Injection (drip): This product may also be injected into the irrigation water.

- Do not apply within 5 days of harvest (PHI=5 days).
- Do not exceed 4 pt/A (1 lb ai/A) per year for soil applications and the equivalent of 0.5 lb ai/A per year of foliar-applied mefenoxam product.

FRUITING VEGETABLES (Except Cucurbits): Eggplant, Groundcherry, Pepino, Pepper (bell pepper, chili pepper, cooking pepper, pimento, sweet pepper), Tomatillo, Tomato (see Tomato section below for specific use directions)

DISEASE	PRODUCT USE RATE (lb ai)	USE INSTRUCTIONS
Damping-off (<i>Pythium</i> spp.) Crown Rot	2 pt/Acre (0.5)	To control Crown Rot, apply before the plants are infected to obtain satisfactory control. Plants already infected with <i>Phytophthora capsici</i> cannot be cured with this product.
(Phytophthora capsici)		Soil Spray (broadcast or band): Apply in water or liquid fertilizer preplant or at planting. For direct seeded peppers, apply preplant or prior to emergence.
		For banded applications, use 12 to 16 inch band.
		Soil surface sprays of this product will not be effective until the fungicide is moved into the root zone by rainfall or irrigation.
		Injection (drip irrigation): Inject this product into the irrigation water. Make up to 2 additional applications on a 30-day schedule following initial application at planting.

FRUITING VEGETABLES (Except Cucurbits): Eggplant, Groundcherry, Pepino, Pepper (bell pepper, chili pepper, cooking pepper, pimento, sweet pepper), Tomatillo, Tomato (see Tomato section below for specific use directions)

DISEASE	PRODUCT USE RATE (lb ai)	USE INSTRUCTIONS
Crown Rot (Phytophthora capsici)	2 pt/Acre (0.5)	Banded Spray: Make 2 post-directed applications at 30 day intervals after transplanting. Direct the spray to the base of the plants and cover 6 to 8 inches of the soil on either side of the plants. Incorporate mechanically or sprinkler-irrigate to move the product into the root zone.
		Shank Application: Apply in liquid fertilizer, shanked in as a banded treatment to either side of the plant.

- This product may cause some yellowing of pepper leaves.
- Plants already infected with *Phytophthora* cannot be cured with this product.
- The foliar blight phase of *Phytophthora* cannot be controlled with foliar applications of this product.
- Do not apply within 7 days of harvest (PHI=7 days).
- Do not exceed 6 pt/A (1.5 lb ai/A) of this product per year for soil applications and the equivalent of 0.5 lb ai/A per year of foliar-applied mefenoxam product.

	TOMATO		
Damping-off (<i>Pythium</i> spp.)	2 to 4 pt/Acre (0.5 to 1)	Soil Spray (Broadcast or Band): Apply at planting in water or liquid fertilizer. Move into soil as described in the PRODUCT APPLICATION INSTRUCTIONS section of the label.	
		For banded applications, a 7 inch band is recommended.	
Root and Fruit Rot (Phytophthora spp.) (Pythium spp.)	2 pt/Acre (0.5)	Soil spray (broadcast or band) or soil injection: Apply as a directed soil surface spray under the vines or injected into the beds with water or liquid fertilizer. Move into the soil as described in the PRODUCT APPLICATION INSTRUCTIONS section of this label.	
		Initiate control of Root and Fruit Rot with a soil application at planting as described above. Make subsequent applications through drip irrigation.	
		Injection (drip irrigation): Make the first drip application 4 to 6 weeks after planting. Make the second drip application as needed up to 4 weeks before harvest, but before the last irrigation.	
		For injection applications, base rate calculations on a 7 inch band.	

Do not exceed 6 pt/A (1.5 lb ai/A) per year for soil applications and the equivalent of 0.5 lb ai/A per year
of foliar-applied mefenoxam product.

GINSENG				
DISEASE	PRODUCT USE RATE (lb ai)	USE INSTRUCTIONS		
Phytophthora Root Rot (Phytophthora cactorum)	1.5 pt/Acre (0.38)	Drench: Apply in 100 to 400 gallons of water uniformly to the soil surface in the spring before the plants begin to grow.		

- Do not make more than 1 application of this product.
- ◆ Do not apply more than 1.5 pt/A (0.38 lb ai/A) per year.

GRAPES		
DISEASE	PRODUCT USE RATE (lb ai)	USE INSTRUCTIONS
Root Rot Crown Rot (<i>Phytophthora</i> spp.)	7.2 pt/Acre (1.8) or 0.5 pt /1,000 row ft (0.13)	Soil Spray (broadcast or band): Apply in the spring before the plants begin to grow. Use sufficient water to provide uniform coverage. Two additional applications may be made during periods most favorable for root rot development. For banded applications, apply in a 3-foot band at the base of the plants.

- Do not apply within 60 days of harvest (PHI=60 days).
- Do not exceed 21.6 pt/A (5.4 lb ai/A) per year for soil applications and the equivalent of 0.4 lb ai/A per year of foliar-applied mefenoxam product.

GRASSES, FORAGE, FODDER, HAY*

*Includes any enclosed pasture grasses or grasses grown for hay or silage such as Bermudagrass, bluegrass, bromegrass, or fescue.

DISEASE	PRODUCT USE RATE (lb ai)	USE INSTRUCTIONS
Seeding Diseases (<i>Pythium</i> spp.)	0.5 to 2 pt/Acre (0.13 to 0.5)	Soil Spray (broadcast): Apply as a broadcast soil spray at planting. Use 0.5 to 1 pt/A if grass seed was previously treated with a mefenoxam or metalaxyl seed treatment product.
		Soil surface sprays of this product will not be effective until the fungicide is moved into the root zone by rainfall or irrigation.

- Do not apply to range grasses.
- Do not graze, feed green forage, or cut for hay within 60 days of last application.
- ◆ Do not apply more than 2 pt/A (0.5 lb ai/A) per year.

HERBS (Fresh and Dried): Angelica, Balm, Basil, Borage, Burnet, Chamomile, Catnip, Chervil (dried), Chinese Chive, Chive, Cilantro (leaf), Clary, Coriander (leaf), Costmary, Curry (leaf), Dillweed, Horehound, Hyssop, Lavender, Lemongrass, Lovage (leaf), Marigold, Marjoram, Nasturtium, Parsley (dried), Pennyroyal, Rosemary, Rue, Sage, Savory (summer and winter), Sweet Bay, Tansy, Tarragon, Thyme, Wintergreen, Woodruff, Wormwood

DISEASE	PRODUCT USE RATE (Ib ai)	USE INSTRUCTIONS
	2 to 4 pt/Acre (0.5 to 1)	Pre-plant Incorporated Application: Apply as a broadcast or banded soil application in sufficient water or liquid fertilizer to provide uniform coverage and mechanically incorporate in the top 2 inches of soil. For banded application, a 7-inch band is recommended.
		Surface Application (broadcast or band): Apply in sufficient water or liquid fertilizer to provide uniform coverage. For banded application, a 7-inch band is recommended.
		Soil surface sprays of this product will not be effective until the fungicide is moved into the root zone by rainfall or irrigation.
		Banded Spray: Direct sprays to baseline of plants covering 6-8 inches on each side of plants (12- to 16-inch band width/row). Apply 28 days after planting or after first cutting.

- Do not apply within 21 days of harvest (PHI=21 days).
- Do not exceed 8 pt/A (2 lb ai/A) per year for soil applications.

HOPS				
PRODUCT USE RATE (Ib ai)		USE INSTRUCTIONS		
Downy Mildew (Pseudoperonospora humuli)	1 pt/Acre (0.25)	Soil Drench: Apply in a sufficient amount of water or liquid fertilizer for thorough coverage. Apply to the soil surface over the crowns after pruning but before training. Early application before shoots are 6 inches long provides best protection.		
		Foliar Spray: Apply using ground equipment in a minimum of 50 gallons water per acre. Treat when primary infection (spikes) persists after a soil drench treatment and/or there is evidence of secondary (foliar) infection and apply this product in combination with a contact copper fungicide.		

- Do not apply foliar sprays of this product without a copper fungicide registered for use on hops.
- Do not apply within 45 days of harvest (PHI=45 days).
- Do not exceed 1 pt/A (0.25 lb ai/A) per year for soil applications and 2 pt/A (0.5 lb ai/A) per year for foliar applications.

LEAFY VEGETABLES (Except *Brassica*): Amaranth (leafy amaranth, Chinese spinach, tampala), Arugula (Roquette), Cardoon, Celery, Celtuce, Chervil, Chinese Celery, Chrysanthemum (edible-leaved), Chrysanthemum (garland), Corn salad, Cress (garden), Cress (upland), Dandelion, Dock (Sorrel), Endive (Escarole), Florence Fennel (finochio), Lettuce (head and leaf)**, Orach, Parsley, Purslane (garden), Purslane (winter), Radicchio (red chicory), Rhubarb, Spinach**, Spinach (New Zealand), Spinach (vine), Swiss Chard

**See also Lettuce and Spinach sections below for additional use instructions

DISEASE	PRODUCT USE RATE (lb ai)	USE INSTRUCTIONS	
Damping-off (<i>Pythium</i> spp.)	2 to 4 pt/Acre (0.5 to 1)	Preplant Incorporated (broadcast or band): Apply as a soil application in sufficient water or liquid fertilizer to provide uniform coverage and mechanically incorporate in the top 2 inches of soil. For banded application, a 7-inch band is recommended.	
		Surface Application (broadcast or band): Apply at planting in sufficient water or liquid fertilizer to provide uniform coverage. For banded application, a 7-inch band is recommended.	
		Soil surface sprays of this product will not be effective until the fungicide is moved into the root zone by rainfall or irrigation.	
	LETTUCE (H	ead and Leaf)	
Downy Mildew (<i>Bremia lactucae</i>)	0.25 to 0.5 pt/Acre (0.06 to 0.13)	Foliar Application (ground or air): Use only in a tank mixture with other fungicides registered for control of downy mildew. Apply with the full label rate of the tank mix partner fungicide.	
		Apply at 14-day intervals beginning when conditions are favorable for disease development but before infection is established.	

SPINACH				
White Rust (Albugo occidentalis) Downy Mildew (Peronospora effusa)	0.5 pt/Acre (0.13)	Shank Application: In addition to the preplant incorporated or surface application at planting described above for leafy vegetables, shank-in this product around 21 days after planting or after the first cutting. A second application may be shanked in after the next cutting, but at least 21 days after the last application. If less than the full bed is treated, use the formula in the PRODUCT APPLICATION INSTRUCTIONS section of the label to determine the amount of this product needed per acre. If this product is injected into the beds with liquid fertilizer, base calculations on a 7-inch band. Use sufficient mechanical or bypass agitation to keep this product mixed with the water or fertilizer. The additional shank applications noted above provide continuing control of white rust. However white rust can only be controlled in a preventative disease control program that begins with an application of this product to the soil at planting. If this product is not used at planting, do not use it at any other time throughout the season. Do not use this product in foliar applications or in situations where white rust infections are already established. The use of this product in curative applications greatly increases the risk of the fungus developing insensitivity to mefenoxam. The development of		
		The use of this product in curative applications greatly increases the risk of the fungus developing		

For all Leafy Vegetable Crops Except Lettuce and Spinach

- Do not apply within 7 days of harvest (PHI=7 days).
- Make no more than one soil application per year.
- Do not apply more than 4 pt/A (1 lb ai/A) per year.

For Lettuce only

- Use this product only when included in a tank mixture with other EPA registered fungicides.
- Do not apply this product in fields where downy mildew is already established.
- Do not apply within 7 days of harvest (PHI=7 days).
- Do not make more than 4 foliar applications per year.
- Do not exceed 4 pt/A (1 lb ai/A) per year for soil applications and the equivalent of 0.4 lb ai/A per year of foliar-applied mefenoxam product.

For Spinach only

- PHI=3 days only if soil applications do not exceed 4 pt/A (1 lb ai/A) per year and foliar applications of mefenoxam product do not exceed the equivalent of 0.25 lb ai/A per year. Otherwise, the PHI is 21 days.
- Do not exceed 4 pt/A (1 lb ai/A) per year for soil application at planting and 1 pt/A (0.25 lb ai/A) per year for post-planting, shanked in soil applications <u>OR</u> do not exceed 4 pt/A (1 lb ai/A) per year for soil application at planting and the equivalent of 0.4 lb ai/A per year of foliar-applied mefenoxam product.
- Do not make more than 2 shank applications per year.

LEGUME VEGETABLES (Succulent or Dried)**:

Bean (*Lupinus spp.*) (grain, lupin, sweet lupin, white lupin, white sweet lupin), Bean (*Phaseolus* spp.) (field, kidney, lima, navy, pinto, runner, snap, tepary, wax), Bean (*Vigna spp.*) (adzuki, asparagus, blackeyed pea, catjang, Chinese longbean, cowpea, crowder pea, moth, mung, rice, southern pea, urd, yardlong), Broad Bean (fava bean), Chickpea (garbanzo bean), Guar, Jackbean, Lablab bean (hyacinth bean), Lentil, Pea (*Pisum spp.*) (dwarf, edible-pod, English, field, garden, green, snow, sugar snap), Pigeon pea, Soybean (immature seed)**, Sword bean

**See also specific use directions below for Soybeans and Succulent Shelled Peas and Beans

DISEASE	PRODUCT USE RATE (Ib ai)	USE INSTRUCTIONS
Damping-off Root Rot (<i>Pythium</i> spp.)	1 to 2 pt/Acre (0.25 to 0.5)	Preplant Incorporation (broadcast or band): Apply to soil in sufficient water or liquid fertilizer to provide uniform coverage and mechanically incorporate in the top 2 inches of coil. For banded application, a 7-inch band is recommended.
		Surface Application (broadcast or band): Apply to soil at planting in sufficient water or liquid fertilizer to provide uniform coverage.
		For banded application, a 7-inch band is recommended.
		Soil surface sprays of this product will not be effective until the fungicide is moved into the root zone by rainfall or irrigation.

For Legume Vegetables Except Soybeans and Succulent Shelled Peas and Beans

• Do not exceed 2 pt/A (0.5 lb ai/A) per year for soil applications.

SOYBEANS					
Phytophthora Root and Stem Rot (Phytophthora megasprema) Pythium Damping-off (Pythium spp.)	0.16 to 0.56 fl oz per 1,000 row feet (0.0025 to 0.0088)	In-Furrow: Apply in-furrow with water or liquid fertilizer at planting. Position the spray so the fungicide is mixed with the soil covering the seed. Avoid spraying the seed directly with the spray solution or crop injury may occur. Use the higher rate for full season control and 0.16 to 0.3 fluid ounce rate for early- to mid-season control.			
	0.74 to 2.5 pt/Acre (0.19 to 0.63)	Soil Spray (broadcast or band): For full season control, apply 2.5 pints per treated acre in sufficient water or liquid fertilizer to provide uniform coverage at the time of plantings. For early- to mid-season control, apply 0.74 to 1.5 pt/A. Move product into the seed zone after planting with 0.5 to 1 inch sprinkler irrigation.			
		For banded application, a 7-inch band is recommended. Use the formula in the PRODUCT APPLICATION INSTRUCTIONS section of this label to calculate the amount of this product needed per acre for the band width actually used.			

For Soybeans

- Under heavy late season Phytophthora pressure, this product may not provide complete root and stem rot control.
- Use the higher rate in areas with a history of heavy *Phytophthora* damage.
- For best results, use soybean varieties that have some degree of resistance to the races of *Phytophthora* present in the field.
- Do not apply more than 2.5 pt/A (0.63 lb ai/A) per year.

LEGUME VEGETABLES (Continued) SUCCULENT SHELLED PEAS and BEANS Bean (Blackeyed pea, Broad bean, Cowpea, Lima bean, Southern pea); Pea (English pea, garden pea, green pea); Pigeon pea 0.25 to 0.4 pt/Acre Foliar Application (ground or air): Use only in a Downy Mildew tank mixture with other fungicides registered for (Phytophthora (0.06 to 0.1) control of downy mildew. Apply with the full label parasitica) rate of the tank mix partner fungicide. Apply at 14-day intervals when conditions are favorable for disease development but before infection is established.

For Succulent Shelled Peas and Beans

- For use on succulent beans east of the Mississippi River only.
- Do not apply within 3 days of harvest (PHI=3 days).
- Do not exceed 2 pt/A (0.5 lb ai/A) per year for soil applications and 1.6 pt/A (0.4 lb ai/A) per year for foliar applications.

ONIONS:

Bulb Onion (Subgroup 3-07A): Daylily; Fritillaria; Garlic; Great-headed Garlic; Serpent Garlic; Lily; Onion; Chinese Onion; Pearl Onion; Potato Onion; Shallot; Cultivars, Varieties, and/or Hybrids of these

Green Onion (Subgroup 3-07B): Chive (fresh leaves); Chinese Chive (fresh leaves); Elegans Hosta; Fritillaria (leaves); Kurrat; Lady's Leek; Leek; Wild leek; Beltsville Bunching Onion; Fresh Onion; Green Onion; Macrostem Onion; Tree Onion (tops); Welsh Onion (tops); Shallot (fresh leaves); Cultivars, Varieties, and/or Hybrids of these

DISEASE	PRODUCT USE RATE (lb ai)	USE INSTRUCTIONS
Damping-off (<i>Pythium</i> spp.)	1 to 2 pt/Acre (0.25 to 0.5)	Preplant Incorporated (broadcast or band): Apply in sufficient water or liquid fertilizer to provide uniform coverage and mechanically incorporate in the top 2 inches of soil. For banded application, a 7-inch band is recommended.
		Surface Application (broadcast or band): Apply at planting in sufficient water or liquid fertilizer to provide uniform coverage. For banded application, a 7-inch band is recommended. Soil surface sprays of this product will not be effective until the fungicide is moved into the root zone by rainfall or irrigation.

- Bulb onions: Do not exceed 4 pt/A (1 lb ai/A) per year for soil applications and the equivalent of 0.5 lb ai/A per year of foliar-applied mefenoxam product.
- Green onions: Do not exceed 4 pt/A (1 lb ai/A) per year for soil applications and the equivalent of 0.3 lb ai/A per year of foliar-applied mefenoxam product.

PEANUTS				
DISEASE	PRODUCT USE RATE (lb ai)	USE INSTRUCTIONS		
Pythium Root Rot (<i>Pythium</i> spp.)	0.5 pt/Acre (0.13)	Seedling Disease: Apply in-furrow or in a 7-inch band over the row at the time of planting. For the infurrow applications, position the spray so the fungicide is mixed with the soil covering the seed. Avoid spraying the seed directly with the spray solution or crop injury may occur.		
		Soil surface sprays of this product will not be effective until the fungicide is moved into the root zone by rainfall or irrigation.		
Pod Rot (<i>Pythium</i> spp.)	1 to 2 pt/Acre (0.25 to 0.5)	Apply at early pod set as a soil spray or at pegging through overhead irrigation systems. See the APPLICATION THROUGH IRRIGATION SYSTEMS section of this label for further instructions and precautions when making applications through irrigation systems.		

* [Do not exceed	0.5 pt/A (0.13	lb ai/A) per yeaı	r at planting and	2 pt/A (0.5 lb ai/A	A) per year post-planting.
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PINEAPPLE		
DISEASE	PRODUCT USE RATE (lb ai)	USE INSTRUCTIONS
Heart Rot Disease (<i>Phytophthora</i> spp.)	1 to 2 pt in 100 gal water (0.25 to 0.5)	Crown Dip: Apply before planting. The amount of dip solution per acre will depend upon crown size, planting density, and dipping techniques. For dipping, use 75 to 100 gallons of mixture per acre.

[•] If there is a crop failure within 1 year of planting treated crowns, do not harvest plant material for animal feed.

ROOT AND TUBER VEGETABLES: Arracacha, Arrowroot, Artichoke (Chinese and Jerusalem), Beet (garden), Beet (sugar)**, Burdock (edible), Canna (edible), Cassava (bitter and sweet), Carrots**, Celeriac (celery root), Chayote (root), Chervil (turnip-rooted), Chicory, Chufa, Dasheen (taro), Ginger, Ginseng (see Ginseng section below), Horseradish, Leren, Parsley (turnip-rooted), Parsnip, Potato**, Radish, Oriental Radish (daikon), Rutabaga, Salsify (oyster plant, black, Spanish), Skirret, Sweet potato, Tanier (cocoyam), Turmeric, Turnip, Yam bean (jicama, manioc pea), Yam (true)

**See also crop specific use directions below for Carrots, Potatoes, and Sugar Beets

DISEASE	PRODUCT USE RATE (lb ai)	USE INSTRUCTIONS
Pythium Root Rot (Pythium spp.)	2 to 4 pt/Acre (0.5 to 1)	Preplant Incorporated (broadcast or band): Apply in sufficient water or liquid fertilizer to provide uniform coverage and incorporate in the top 2 inches of soil.
Phytophthora Root Rot (Phytophthora spp.)		Surface Application (broadcast or band): Apply at planting in sufficient water or liquid fertilizer to provide uniform coverage.

- For banded application, a 7-inch band is recommended. Refer to the PRODUCT APPLICATION INSTRUCTIONS
 section of this label to calculate the amount of this product needed per acre for the band width actually
 used.
- Soil surface sprays of this product will not be effective until the fungicide is moved into the root zone by rainfall or irrigation.
- Do not apply more than 4 pt/A (1 lb ai/A) per year.

[•] Apply only once as a crown dip treatment before planting.

CARROTS		
Cavity Spot Damping-off Root Dieback (<i>Pythium</i> spp.)	1.0 to 2.6 pt/Acre (0.25 to 0.65)	Preplant Incorporated (broadcast or band): Apply in a sufficient amount of water or liquid fertilizer to provide uniform coverage and mechanically incorporate in the top 2 inches of soil.
		Surface Application (broadcast or band): Apply to soil at planting or prior to emergence in water or liquid fertilizers. Move into soil as described in the PRODUCT APPLICATION INSTRUCTIONS section of this label.
		For banded applications, a 7-inch band is recommended.
Cavity Spot Root Dieback (<i>Pythium</i> spp.)	0.5 to 2.0 pt/Acre (0.13 to 0.5)	Post Planting Applications: Apply 28-50 days after planting by chemigation, ground equipment with a spray directed to the base of the plants, or shanked in with liquid fertilizer. Repeat at 14- to 21-day intervals.
		Follow all soil surface sprays of this product with the application of one inch of water by irrigation to allow movement of the fungicide into the root zone.
		Directed Spray (Broadcast or band): Apply as a spray directed to the base of the plants. Make a maximum of 4 applications beginning 40-60 days after planting and then continue at 14- to 21-day intervals. Use a sufficient amount of water to provide uniform coverage.
		For banded applications, use a 7-inch band for best results.
		Irrigation: Inject the product into the irrigation water.

For Carrots

- Do not make a preplant or at planting soil application if a seed treatment containing mefenoxam or metalaxyl is used.
- For control of cavity spot, best results are obtained when this product is used in a preventative disease control program that incorporates an application at planting followed by one or more supplemental applications.
- Do not apply within 7 days of harvest (PHI=7 days).
- Do not exceed a total of 3 pt/A (0.75 lb ai/A) per year for post planting applications.
- Do not exceed a total of 5.6 pt/A (1.4 lb ai/A) per year for all applications. The total may be split as follows:
- Do not exceed 2.6 pt/A (0.65 lb ai/A) per year for soil applications and the equivalent of 0.75 lb ai/A per year for foliar applications.

POTATOES		
Pythium Leak (Pythium spp.) Pink Rot (Phytophthora erythroseptica) Pythium Seedling Disease (Pythium spp.)	0.84 fl oz / 1,000 row feet (0.013)	 In-Furrow Application: Apply to row on a 6- to 8-inch band at planting in a minimum of 3 gallons of water per acre. Make application directly over the seed pieces prior to row closure. Use rates for common row spacing: 11.6 fl oz/acre for 38-inch row spacing (13,754 row feet/acre) 12.2 fl oz/acre for 36-inch row spacing (14,520 row feet/acre) 13 fl oz/acre for 34-inch row spacing (15,374 row feet/acre) You may need to follow this in-furrow application with a foliar applied fungicide at tuber initiation: When conditions are conductive to disease development. When variety planted is susceptible or moderately susceptible (pink rot/Pythium leak). In areas with a long growing season. This product may be impregnated on dry fertilizer or applied in combination with liquid fertilizers.
Storage Rots Pythium Leak (Pythium spp.) Pink Rot (Phytophthora erythroseptica)	6.4 fl oz/Acre (0.1)	Control of storage rot: Make foliar applications beginning at flowering and repeat after 14 days. Make a third application 14 days after the second application to fields that have a history of storage rot. Tank mix or premix this product with chlorothalonil or mancozeb when conditions favor foliar disease outbreaks.

For Potatoes

- Do not use the "dribble" application method.
- Do not apply within 14 days of harvest (PHI=14 days).
- Do not exceed 1.36 pt/A (0.34 lb ai/A) per year for soil applications and 1.6 pt/A (0.4 lb ai/A) per year for foliar applications.

SUGAR BEETS			
Pythium Root Rot (Pythium spp.)	2 to 4 pt/Acre (0.5 to 1)	Preplant Incorporated (broadcast or band): Apply in sufficient water or liquid fertilizer to provide uniform coverage and mechanically incorporate in the top two inches of soil.	
		Surface Application (broadcast or band): Apply at planting in sufficient water or liquid fertilizer to provide uniform coverage.	

For Sugar Beets

- For banded application, a 7-inch band is recommended. Use the formula in the PRODUCT APPLICATION INSTRUCTIONS section of this label to calculate the amount of this product needed per acre for the band width actually used.
- Soil surface sprays of this product will not be effective until the fungicide is moved into the root zone by rainfall or irrigation.
- Do not apply more than 4 pt/A (1 lb ai/A) per year.

STONE FRUITS: Apricot, Cherry (sweet and tart), Nectarine, Peach, Plum (Chickasaw, Damson, Japanese), Plumcot, Prune (fresh), Hybrids or cultivars of these

DISEASE	PRODUCT USE RATE (lb ai)	USE INSTRUCTIONS
Crown Rot Collar Rot Root Rot (Phytophthora spp.)	8 pt/Acre (2) or 3 fl oz / 1,000 ft ² (0.05)	Surface Application (broadcast or band): Apply to soil 2 weeks after planting (new plantings) or in the spring before plant growth begins (established plantings). Use sufficient water to obtain thorough coverage of the soil under the canopy of the trees. Treat sufficient surface area to cover the root zone of the plants.
		Make additional applications at 2- to 3-month intervals depending on disease pressure. Up to 3 applications may be made per year.
		For intense plantings (2 to 3 times the normal planting rate) apply on a per area basis (1,000 square feet). Soil surface sprays of this product will not be effective until the fungicide is moved into the root zone by rainfall or irrigation.

- Apply before symptoms appear. This product will not revitalize trees showing moderate to severe disease symptoms.
- Do not concentrate the treatment around the tree trunks or injury may occur.
- Do not apply to trees under stress.
- In California, do not apply this product to newly planted trees within 45 days of planting. Some varieties my exhibit chlorosis on leaf margins.
- Do not graze livestock in treated areas.
- Do not graze or feed cover crops grown in treated orchards.
- Do not make more than 3 applications per year.
- Do not apply more than 24 pints (3 gallons) per acre (6 lb ai/A) per year.

STRAWBERRIES		
DISEASE	PRODUCT USE RATE (Ib ai)	USE INSTRUCTIONS
Red Stele (Phytophthora fragariae)	2 pt/Acre (0.5)	Annual Plantings: Apply in banded sprays or through drip irrigation in sufficient water to move the fungicide into the root zone of the plants.
Vascular Collapse (<i>P. cactorum</i>)		Apply up to 3 times per crop/year: • First application after transplanting.
Leather Rot (P. cactorum)		Second application 30 days before the beginning of harvest or at fruit set
		 Third application during the harvest season depending on environmental conditions and disease pressure.
		Established Plantings: Apply in banded sprays or through drip irrigation in sufficient water to move the fungicide into the root zone of the plants.
		Apply up to 3 times per crop/year:
		First application in the spring after the ground thaws and before first bloom.
		Second application after harvest in the fall.
		• For control of leather rot, make an additional application during the growing season at fruit set.

STRAWBERRIES		
DISEASE	PRODUCT USE RATE (lb ai)	USE INSTRUCTIONS

- For drip irrigation, calculate the use rate as a band application with a band width equal to the root zone width and inject this product into the irrigation water.
- For low annual rainfall areas, surface applications of this product need to be moved into the root zone by rainfall, overhead irrigation, or mechanical incorporation.
- Application of this product may be made on the day of harvest (PHI=0 days).
- Do not apply more than 6 pt/A (1.5 lb ai/A) per year.

TOBACCO		
DISEASE	PRODUCT USE RATE (lb ai)	USE INSTRUCTIONS
Damping-off (<i>Pythium</i> spp.)	1 to 2 pt/Acre (0.25 to 0.5) OR 0.5 to 1 fl oz / 150 sq yd (0.008 to 0.016)	Soil spray (broadcast): Apply in 50 gallons of water (2 gallons water per 150 square yards) as a preplant soil application before or at time of planting. Use the higher application rate on broadleaf tobacco. Move the product into the seed zone after planting as described in the PRODUCT APPLICATION INSTRUCTIONS section of this label.
Black Shank (Phytophthora parasitica var. nicotianea)	For conventional till: 2 to 6 pt/Acre (0.5 to 1.5) For no-till tobacco: 1 to 2 pt/Acre (0.25 to 0.5)	Pre-transplant Soil Spray (broadcast): Apply to the soil within one week of planting. Incorporate in the top 2 to 4 inches of soil. Use the high rate if the disease epidemic is expected to be severe. In FL and GA, use 6 pints per acre where black shank is severe. Apply preventively for effective black shank control. If black shank is expected early in the season, apply as near as possible to transplanting followed by sequential applications.
	For conventional till: 2 to 4 pt/Acre (0.5 to 1) For no-till tobacco: 1 to 2 pt/Acre (0.25 to 0.5)	Soil Spray (broadcast or band): Apply once at layby or make a first application at the first cultivation and a second application at layby. Position the nozzles so the spray is deposited under the plants and covered with soil by the cultivator. Move into soil as described in the PRODUCT APPLICATION INSTRUCTIONS section of this label. Use the high rate if disease pressure is expected to be severe. Apply preventively for effective black shank control. If black shank is expected early in the season, apply as near as possible to transplanting followed by sequential applications.
Blue Mold (Peronospora tabacina)	For conventional till and no-till: 1 to 2 pt/Acre (0.25 to 0.5)	Pre-transplant Soil Spray (broadcast): Apply as a broadcast soil application prior to transplanting and incorporate in the top 2 to 4 inches of soil before forming beds. Under low disease pressure or for early season control, use the lower rate. Use the higher rate for high disease pressure, extended control, and burley and other tobacco types other than flue-cured.

TOBACCO		
DISEASE	PRODUCT USE RATE (lb ai)	USE INSTRUCTIONS
	For conventional till: 1 pt/Acre (0.25) For no-till tobacco: 1 to 2 pt/Acre (0.25 to 0.5)	Post-transplant Soil spray (band): If a pre- transplant application was made, make a supplemental application at layby or the last cultivation. Position the nozzles so that the spray is deposited under the plants and is covered by soil by the cultivator.

- Consult local extension bulletins for additional use directions.
- For best results against black shank, use tobacco varieties that have high resistance to black shank and use crop rotation.
- In fields where there is a history of high black shank incidence, use the highest rate and plant a variety that is resistant to the race of *Phytophthora* present in the field. (Burley L8 hybrids are resistant only to *Phytophthora* Race 0).
- Do not use on highly susceptible flue-cured varieties in areas with high black shank incidence.
- Do not use this product for black shank control in PA.
- Failure to adequately control nematodes in fields treated with this product may result in poor control of black shank.
- Do not apply more than 6 pt/A (1.5 lb ai/A) per year.

TREE NUTS: Almonds, Walnuts		
DISEASE	PRODUCT USE RATE (lb ai)	USE INSTRUCTIONS
Crown Rot Collar Rot Root Rot (<i>Phytophthora</i> spp.)	8 pt/Acre (2) or 3 fl oz / 1,000 ft ² (0.05)	Soil spray (broadcast or band): Apply under the tree canopy to cover the root zone two weeks after planting (new plantings) or in the spring before growth begins (established plantings). Move into soil as described in the PRODUCT APPLICATION INSTRUCTIONS section of this label. Additional applications may be made at 2- to 3-month intervals depending on disease pressure. Make up to 3 applications per year. For intense plantings (2 to 3 times the normal planning rate), apply on a per area basis (1,000 square feet).

- Apply before symptoms appear. This product will not revitalize trees showing moderate to severe disease symptoms.
- Do not graze livestock in treated areas.
- Do not graze or feed cover crops grown in treated orchards.
- Do not concentrate the treatment around the tree trunks or injury may occur.
- Do not apply to trees under stress.
- In California, do not apply this product to newly planted trees within 45 days of planting. Some varieties my exhibit chlorosis on leaf margins.
- Do not apply more than 24 pints (3 gallons) per acre (6 lb ai/A) per year.

TROPICAL FRUIT: Atemoya, Black Sapote, Canistel, Chemimoya, Custard Apple, Kiwifruit, Ilama, Mamey Sapote, Mango, Papaya, Sapodilla, Soursop Birida, Sugar Apple, Star Apple, Starfruit		
DISEASE	PRODUCT USE RATE (lb ai)	USE INSTRUCTIONS
ATEMOYA, CHERII	MOYA, CUSTARD APPL	E, LLAMA, SOURSOP BIRIDA, SUGAR APPLE
Phytophthora Root and Crown Rot (<i>Phytophthora</i> spp.)	3 to 6 pt/Acre (0.75 to 1.5)	Soil Drench: Apply to the soil surface spray in sufficient water or liquid fertilizer to obtain thorough coverage of the soil under the canopy of trees.
Pythium Root and Crown Rot Damping-off (<i>Pythium</i> spp.)		Make one application in the spring at root growth flush and a second application in the fall.
	days of harvest (PHI=30 d	days).
 Do not apply more than 	n 12 pt/A (3 lb ai/A) per ye	ear.
BLACK SAPOTE, CAN	NISTEL, MAMEY SAPOT	E, MANGO, PAPAYA, SAPODILLA, STAR APPLE
Root Rot (Phytophthora spp.) Damping-off (Pythium spp.)	3 to 6 pt/Acre (0.75 to 1.5)	Soil Drench: Apply to the soil surface in sufficient water or liquid fertilizer to obtain thorough coverage of the soil under the canopy of trees. To determine the amount of solution required, measure the amount of water needed to drench an area of 1 square foot around one plant. Multiply that volume by the total number of plants in an acre. Add this product to this amount of water and drench plants.
• Do not apply within 1 d	ay of harvest (PHI=1 day	Two applications may be made per growing season. Make the first application at transplanting or in the spring at root growth flush. Make the second application at least 1 day prior to harvest.
	n 12 pt/A (3 lb ai/A) per ye	
	KIW	/IFRUIT
Root and Crown Rot (<i>Pythium</i> and <i>Phytophthora</i> spp.)	11.2 to 22.4 fl oz / 40 gal of water (0.18 to 0.35)	Soil Drench: Apply 1 quart of solution as a soil drench in a one square foot area around the base of each vine. At the rate of 11.2 to 22.4 fluid ounces, this will apply 0.175 to 0.350 lb ai/A if the planting density is 160 vines per acre.
		Make the first application in the fall after harvest or in February or early March. Make a second application in the spring or approximately 60 days after the February or March application. Move into soil as described in the PRODUCT APPLICATION INSTRUCTIONS section of the label.
	22.4 fl oz/A (0.35)	Soil spray (band): Make up to 5 applications as a soil spray in a 2- to 3-foot band on each side of the row. Begin applications in April and follow with two additional applications at 30-day intervals. Make the fourth application in September and the fifth application approximately 30 days later, which must be no less than 7 days before harvest.
 Do not apply within 7 days of harvest (PHI=7 days). Do not apply more than 7 pt/A (1.75 lb ai/A) per year. 		

STARFRUIT		
Phytophthora Root and Crown Rot (<i>Phytophthora</i> spp.)	3 to 6 pt/Acre (0.75 to 1.5)	Soil Drench: Apply in sufficient water or liquid fertilizer to provide an adequate soil drench. Direct applications to the soil surface under the canopy of the trees.
Pythium Root and Crown Rot (<i>Pythium</i> spp.)		Make one application in the spring when root growth begins and a second application in the fall.

- Do not apply within 30 days of harvest (PHI=30 days).
- Do not apply more than 12 pt/A (3 lb ai/A) per year.

STORAGE AND DISPOSAL

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

STORAGE: Store at temperatures above 40°F. Crystals may form at lower storage temperatures. If this occurs, place the product in a warm room (68°F or above) and roll or shake the container at frequent intervals until all crystals are dissolved.

PESTICIDE DISPOSAL: Open dumping is prohibited. Wastes resulting from the use of this product are acutely toxic. Improper disposal of unused pesticide, spray mixture or rinsate is a violation of federal law. Pesticide, spray mixture or rinsate that cannot be used according to the label instruction must be disposed of according to federal, state or local procedures. For guidance in proper disposal methods, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office.

CONTAINER HANDLING:

[Note to Reviewer: The following statement will be included on all Final Printed Labels bearing multiple Container Handling statements] "NOTE: This product is available in multiple containers. Refer to the Net Contents section of this product's labeling for the applicable "Nonrefillable" or "Refillable" designation. Follow the container handling instructions below that apply to your container type/size."

[Nonrefillable containers 5 gallons or less:] 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 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 or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities. Plastic containers are also disposable by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

[Nonrefillable containers larger than 5 gallons:] Nonrefillable container. Do not reuse or refill this container. Triple rinse or pressure 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. 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. Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip. 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. Plastic containers are also disposable by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

[Refillable containers larger than 5 gallons:] 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 a mix tank. Fill the container about 10% full with water and, if possible, spray all sides while adding water. If practical, agitate vigorously or recirculate water with the pump for two minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

WARRANTY DISCLAIMER

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