THRIVE 4M

SPECIMEN LABEL

ACTIVE INGREDIENT:

 Mefenoxam*:
 45.30%

 OTHER INGREDIENTS:
 54.70%

 TOTAL:
 100.00%

*CAS #70630-17-0 and 69516-34-3

This product is formulated as a soluble concentrate and contains 4.08 pounds active ingredient per gallon (489 grams per liter).

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 booklet for complete First Aid, Precautionary Statements, Directions For Use, Storage and Disposal, and Conditions of Sale and Warranty.

For 24-hour chemical spill, leak, fire, exposure or accident response information, call CHEMTREC toll free at 1-800-424-9300.

FOR CONTROL OF CERTAIN DISEASES IN LISTED CROPS CAUSED BY THE OOMYCETE CLASS OF FUNGI.

Manufactured by: ALBAUGH, LLC 1525 NE 36th Street, Ankeny, IA 50021





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 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. 			
IF SWALLOWED	 Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. DO NOT induce vomiting unless told to do so by the poison control center or doctor. DO NOT give anything by mouth to an unconscious person. 			
IF INHALED	 Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice. 			

HOTLINE NUMBER: Have the product container or label with you when calling a poison control center or doctor or going for treatment. For non-emergency exposure information on this product, call 1-888-347-6732 (7 days/week, 24-hr). For medical emergencies, dial 911.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

WARNING/AVISO: Causes substantial but temporary eye irritation. Harmful if swallowed or absorbed through skin. Do not get in eyes, on skin or on clothing. Avoid contact with skin. Wear appropriate protective eye wear (goggles, face shield or safety glasses). Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are listed below.

Applicators and other handlers must wear:

- 1. Long-sleeved shirt and long pants
- 2. Chemical-resistant gloves made of barrier laminate, butyl rubber ≥14 mils, nitrile rubber ≥14 mils, neoprene rubber ≥14 mils, polyvinyl chloride (PVC) ≥14 mils, or Viton ≥14 mils
- 3. Shoes plus socks

USER SAFETY REQUIREMENTS

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

ENGINEERING CONTROL STATEMENT

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

USER SAFETY RECOMMENDATIONS

Users Should:

- 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, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not apply when weather conditions favor drift from treated areas. Do not contaminate water when disposing of equipment washwater or rinsate.

Groundwater Advisory: Mefenoxam is known to leach through soil into ground water under certain conditions as a result of agricultural use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground water contamination.

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 including 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 forecast to occur within 48 hours.

PHYSICAL OR CHEMICAL HAZARDS

DO NOT store near heat or open flame. Do not mix or allow coming in contact with oxidizing agents. Hazardous chemical reaction may occur.

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 requirement specific to your State or tribe, consult the agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Pan 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry intervals. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

DO NOT enter or allow worker entry into treated areas during the **restricted-entry interval (REI)** of **48 hours**. For crop uses that fall under this REI, see Part 2, Soil-Directed and Other Foliar Applications under Directions for Use of this label.

Exception: If the product is soil-incorporated, or applied by soil drenching, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated. For crop uses that fall under this exemption, see Part 1, Soil-Injected or Soil-Incorporated Applications under Directions for Use of this label.

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, including plants, soil or water is:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of barrier laminate, butyl rubber ≥14 mils, nitrile rubber ≥14 mils, neoprene rubber ≥14 mils, polyvinyl chloride (PVC) ≥14 mils, or Viton ≥14 mils
- Shoes plus socks

FAILURE TO FOLLOW THE DIRECTIONS FOR USE AND RESTRICTIONS 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 diseases caused by members of the Oomycete class of fungi.

PRODUCT USE RESTRICTIONS

DO NOT use this product in greenhouses or other structures including lath houses, float houses, and hydroponic facilities unless specified on this label.

DO NOT use this product for disease control in bedding plants, transplant trays, or nurseries except where specifically allowed in certain crop sections.

DO NOT USE THIS PRODUCT AS A FOLIAR APPLICATION UNLESS SPECIFIED ON THIS LABEL.

DO NOT dip plants or roots, spray bare roots, or use a transplant water treatment with solutions containing this product except where specifically allowed in certain crop sections.

Under conditions conducive to severe disease pressure, additional fungicide applications may be applied using an alternate fungicide registered for the crop/disease appearing on this label.

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

Where mefenoxam/metalaxyl products used allow the same maximum poundage of active ingredient per acre per calendar year:

• If more than one product containing mefenoxam/metalaxyl active ingredient is used on an acre during the same calendar year and the mefenoxam/metalaxyl products used allow the same maximum poundage of active ingredient per acre per calendar year, then the total poundage of all such mefenoxam/metalaxyl products used must not exceed any of the specified individual mefenoxam/metalaxyl product maximum poundage of active ingredient allowed per acre per calendar year.

Where mefenoxam/metalaxyl products used allow different maximum poundage of active ingredient per acre per calendar year:

• If more than one product containing an mefenoxam/metalaxyl active ingredient is used on an acre during the same calendar year and the mefenoxam/metalaxyl products used allow different maximum poundage of active ingredient per acre per calendar year, then the total poundage of all such mefenoxam/metalaxyl products used must not exceed the lowest specified individual mefenoxam/metalaxyl product maximum poundage of active ingredient allowed per acre per calendar year.

PRODUCT USE INSTRUCTIONS

Application: 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 gal per acre for ground applications and 3 gal per acre by air. Refer to the Directions for Use for specific crop application directions. Refer to Application Instructions for band and in-furrow calculations.

Moving this product 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. Follow the specific crop directions. Placement in the seed or root zone includes in-furrow sprays, soil injections, crown dips. Incorporation includes preplant incorporated applications, soil drenches, or shank applications. For soil surface sprays, rainfall will move the fungicide into the seed or root zone, but if rain is not expected within 24 hours after application, mechanically incorporate (before planting) or sprinkler irrigate (after planting) with 1/2 to 1 inch of water.

Efficacy: Under certain conditions conducive to extended infection periods, use another registered fungicide for additional applications if maximum amount of this product has been used. If resistant isolates to Group 4 fungicides are present, efficacy can be reduced. Under high disease pressure, use the highest specified rate and shortest specified interval when needed.

Crop Tolerance: Plant tolerance has been found acceptable for all crops on the label, however, not all possible tank-mix combinations have been tested under all conditions. When possible, test the combinations on a small portion of the crop to ensure a phytotoxic response will not occur as a result of application.

SPRAY DRIFT ADVISORIES

THE APPLICATOR IS RESPONSIBLE FOR AVOIDING OFF-SITE SPRAY DRIFT.
BE AWARE OF NEARBY NONTARGET 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 directed 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 manufacturer's directions for setting up nozzles. Generally, to reduce fine droplets, orient nozzles 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 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.

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.

Rotation Crop	Planting time from last application of this product
Alfalfa (birdsfoot trefoil)	
Apple	
Artichoke, Globe	
Asparagus	
Avocados	
Brassica (Cole) Leafy Vegetables (e.g., broccoli, cabbage, cauliflower)	
Bushberry Subgroup 13-07B (e.g., blueberries, cranberries)	
Cacao	
Caneberry Subgroup 13-07A (e.g. blackberry and raspberry)	
Carrots	
Citrus	
Clover	
Corn	
Cotton	
Cucurbit Vegetables (e.g., cucumber, melons, squash)	
Fruiting Vegetables (e.g., tomatoes, peppers, eggplant)	
Ginseng	
Grapes	0 days
Grass, Forage, Fodder and Hay	0 days
Herbs (fresh and dried)	
Hops	
Leafy Vegetables, except Brassica (e.g., lettuce, spinach, celery)	
Legume Vegetables (e.g., beans and peas, succulent and dried)	
Onions (dry bulb, garlic, and green)	
Peanuts	
Pineapples	
Root and Tuber Vegetables (e.g. potatoes, carrots, sugar beets)	
Soybeans	
Stone fruits	
Strawberries	
Sunflower	
Tobacco	
Tomato	
Tree nuts	
Tropical fruits (e.g. papaya, mango, kiwifruit)	
Wasabi	
Cereal Grains (except Corn)	14 days
Crops Not Intended for Food or Feed	0 days
All Other Crops Intended for Food or Feed	365 days

RESISTANCE MANAGEMENT RECOMMENDATIONS

MEFENOXAM	GROUP	4	FUNGICIDE

For resistance management, this product contains a Group 4 fungicide. Any fungal population may contain individuals naturally resistant to this product 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. Follow appropriate resistance-management strategies.

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

- 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 fungicide from a different group that are equally effective on the target pest when such use is permitted. Use at least the minimum application rate as labeled by the manufacturer.
- Adopt an integrated disease management program for fungicide use that includes scouting, uses historical information related to pesticide use, and crop rotation, and which considers host plant resistance, impact of environmental conditions on disease development, disease thresholds, as well as cultural, biological and other chemical control practices.
- Where possible, make use of predictive disease models to effectively time fungicide applications. Note that using predictive models alone is not sufficient to manage resistance. Monitor treated fungal populations for resistance development.
- Contact your local extension specialist or certified crop advisor for any additional pesticide resistance-management and/or IPM directions for specific crop and pathogens.
- For further information or to report suspected resistance contact Albaugh, LLC. 1-800-247-8013. You can also contact your pesticide distributor or university extension specialist to report resistance.

SPRAY EQUIPMENT

Nozzles

- Equip sprayers with nozzles that provide accurate and uniform application.
- Use nozzles the same size and uniformly spaced across the boom.
- Calibrate sprayer before use.
- It is suggested that screens be used to protect the pump and to prevent nozzles from clogging.
- Screens placed on suction side of pump should be 16-mesh or coarser.
- DO NOT place a screen in the recirculation line.
- Use 50-mesh or coarser screens between the pump and boom, and where required, at the nozzles.
- Check nozzle manufacturer's directions.

Pump

- Use a pump with capacity to:
 - (1) Maintain 35-40 psi at nozzles
 - (2) Provide sufficient agitation in tank to keep mixture in suspension this requires recirculation of 10% of tank volume per minute.
- Use a jet agitator or liquid sparge tube for agitation.
- **DO NOT** air sparge.
- For more information on spray equipment and calibration, consult sprayer manufacturers and state directions.
- For specific local directions and spray schedules, consult the current state agricultural recommendations.

MIXING INSTRUCTIONS

- Prepare no more spray mixture than is required for the immediate operation.
- Thoroughly clean spray equipment before using this product.
- Agitate the spray solution before and during application.
- Rinse spray tank thoroughly with clean water after each day's use and dispose of pesticide rinsate by application to an already treated area.

This product alone (no tank mix):

- Add 1/4 1/2 of the required amount of water to the spray or mixing tank.
- With the agitator running, add this product to the tank.
- Continue agitation while adding the remainder of the water.
- Begin application of the spray solution after this product has completely dispersed into the mix water.
- Maintain agitation until all the mixture has been sprayed.

This product + Tank Mixtures: This product is usually compatible with all tank-mix partners listed on this label. To determine the physical compatibility of this product with other products, use a jar test. Using a quart jar, add the proportionate amounts of the products to 1 qt of water. Add wettable powders and water dispersible granular products first, then liquid flowables, and emulsifiable concentrates last. After thoroughly mixing, let stand for at least 20 minutes. If the combination remains mixed or can be remixed readily, it is physically compatible. Once compatibility has been proven, use the same procedure for adding required ingredients to the spray tank.

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

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

Mixing in the Spray Tank:

- Add 1/4 1/2 of the required amount of water to the spray or mixing tank
- With the agitator running, add the tank-mix partner(s) into the tank in the same order as described above.
- Allow the material to completely dissolve and disperse into the mix water. Continue agitation while adding the remainder of the water and this product to the spray tank.
- Allow this product to completely disperse.
- Spray the mixture with the agitator running.
- Observe all directions for use, crops/sites, use rates, dilution ratios, precautions, and limitations which appear on the tank mix product label.
- DO NOT exceed maximum label dosage rates, and the most restrictive label precautions and limitations must be followed.
- DO NOT tank mix this product with any product which prohibits such mixing.

APPLICATION PROCEDURES

Ground Application (Broadcast):

• Apply in a minimum of 20 gal of water per acre, unless specified otherwise.

Ground Application (Banded):

• Application rates in the Directions for Use are generally expressed as an amount per acre which refers to the total crop area to be treated. If using a banded application, use proportionally less product using the formula below:

<u>Band width in inches</u> X broadcast rate per acre = Amount needed per acre of field Row spacings in inches

Ground Applications (In-Furrow):

- Apply this product as an in-furrow spray in 3-7 gal per acre of water at planting.
- Mount the spray nozzle so the spray is directed into the furrow just before the seed are covered.
- The following table provides common row spacings and the amount of this product to apply per acre.

Use Rate (this product)				fl.oz.	(this product) /	Acre			
fl.oz. / 1,000 row feet (oz. Al / 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
0.07 (0.038)	1.96	1.76	1.57	1.37	1.18	1.08	1.08	0.98	0.88
0.15 (0.075)	3.92	3.53	3.14	2.75	2.35	2.25	2.16	1.96	1.86
0.27 (0.14)	6.86	6.57	5.98	4.71	4.51	4.22	3.92	3.73	3.63
0.41 (0.21)	10.78	9.80	8.92	7.22	6.67	6.37	5.98	5.69	5.29
20" = 26,136 row ft./A 30" = 17,424 row ft./A 36" = 14,520 row ft./A			32"	= 23,760 row = 16,315 row = 13,754 row	ft./A	34"	= 21,780 row 1 = 15,374 row 1 = 13,068 row 1	ft./A	

AERIAL APPLICATION

- Apply in a minimum of 3 gals. of water per acre, unless specified otherwise.
- Avoid application under conditions when uniform coverage cannot be obtained or when excessive spray drift may occur.

APPLICATION THROUGH IRRIGATION SYSTEMS (CHEMIGATION)

- Apply this product only through center pivot, solid set, hand move, moving wheel, micro-sprinkler, or drip 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.
- If you have questions about calibration, contact your local State Extension Service specialist, equipment manufacturer, or other experts.
- Do not connect an irrigation system (including greenhouse systems) used for pesticide application 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 the supervision of the responsible person, shall shut the system down and make necessary adjustments if the need arises.
- This product must be applied on the schedule specified in the specific crop use directions, not according to the irrigation schedule.

Note: DO NOT inject this product at full strength or deterioration of valves and seals may occur.

Use a dilution ratio of at least 15 parts water to 1 part this product in the mix tank. This product can affect many seal materials. Leather seals are best. EPDM or silicone rubber seals can be used but replaced once a year. Do not use Viton, Buna-N, Neoprene, or PVC seals.

Operating Instructions

- 1. The system must contain a functional check-valve, vacuum relief valve, and low pressure drain backflow.
- 2. The pesticide injection pipeline must contain a functional, automatic, quick-closing check-valve to prevent the flow of fluid back toward the injection pump.
- 3. 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.
- 4. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- 5. 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.
- 6. Systems must use a metering pump, for example, 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.
- 7. **DO NOT** apply when wind speed favors drift beyond the area intended for treatment.

Specific Instructions for Public Water Systems

- 1. 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 out of the year.
- 2. Chemigation systems connected to public water systems must contain a functional, reduced pressure zone, back-flow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, discharge the water from the public water system 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.
- 3. The pesticide injection pipeline must contain a functional, automatic, guick-closing check valve to prevent the flow of fluid back toward the injection pump.
- 4. 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.
- 5. 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 pesticide distribution is adversely affected.
- 6. Systems must use a metering pump, for example 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.
- 7. **DO NOT** apply when wind speed favors drift beyond the area intended for treatment.

CROP SPECIFIC USE INSTRUCTIONS

ALFALFA (including birds	ALFALFA (including birdsfoot trefoil)			
DISEASES	USE RATE (lb Al)	APPLICATION METHOD		
Damping Off		Apply as a broadcast soil surface spray at planting in a sufficient amount of water for thorough coverage.		
(Pythium spp.)	3.8 – 7.8 fl. oz./A	If alfalfa seed was previously treated with mefenoxam or metalaxyl as a seed dressing, use the 0.25 pt. / A		
Root Rot	(0.12-0.25)	rate at planting.		
(Phytophthora spp.)	·	If inter-seeding alfalfa into existing stands for renovation, apply 0.25 pt. / A as a broadcast spray at planting.		

For additional applications, see Alfalfa in Part 2 of Directions for Use: Soil Directed and Other Foliar Applications.

Use Restrictions:

- DO NOT feed green forage or cut hay for 60 days following application (60-day PHI) .
- Maximum Single Application Rate: 7.8 fl. oz. / A (0.25 lb Al/A/year).
- **DO NOT** apply more than 7.8 fl. oz. / A (0.25 lb Al/A/year).
- DO NOT apply more than one soil application per year. Use reduced rate if mefenoxam treated seed is planted.
- Minimum Application Interval: N/A

APPLES (Bearing and Nonbearing Trees)				
DISEASES	USE RATE (lb Al)	APPLICATION METHOD		
Crown Rot (Phytophthora capsica) Collar Rot (Phytophthora spp.) Root Rot (Phytophthora spp.)	62.7 fl. oz./A (2.0) or 1.47 fl. oz/1,000 ft²	soil Spray (broadcast, band or irrigation): Apply to soil beneath the tree canopy or apply through invater (micro-sprinkler or drip) in the spring before growth begins (established plantings). Apply to the early spring before growth starts and in the fall after harvest but before the ground freezes. The tree is based on the area under the tree canopy or the area of the sprayed row. Use sufficient water volution thorough coverage of the soil. Soil surface sprays of this product will not be effective until the function of the root zone by rainfall or irrigation.		
	Diluted Mixture:		trunk of each tree in the early spring before growth starts freezes. On new plantings, delay the first application until	
	7.8 fl. oz in 100 gallons water	Trunk Diameter 12 Inches Above Soil Line	Quarts of Diluted Mixture Per Tree	
	(0.25)	<1 inch	1 qt.	
		1 – 3 inches	3 qt.	
		>5 inches	4 qt.	

- For best results, use in conjunction with good cultural practices and with rootstocks that are tolerant to 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.
- Maximum Single Application Rate: 62.7 fl. oz. /A (2 lb Al/A)
- DO NOT apply more than 125.5 fl. oz. / A (4 lb Al/A) per year.
- **DO NOT** make more than 2 applications /A/year at reduced rates.
- Minimum Application Interval: 90 days.
- Pre-harvest interval (PHI): NA

ARTICHOKE, GLOBE	-		
DISEASES	USE RATE (lb Al)	APPLICATION METHOD	
Damping Off (Pythium spp.) Root Rot (Phytophthora spp.)	15.7 – 31.4 fl. oz./A (0.50- 1.0)	Apply as a broadcast soil spray at planting in a sufficient amount of water to provide thorough coverage. Soil surface sprays of this product will not be effective until the fungicide is moved into the root zone by rainfall or irrigation.	
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- DO NOT apply within 200 days of harvest (200-day PHI).
- Maximum Single Application Rate: 31.4 fl. oz.(1 lb Al/A)
- DO NOT apply more than 31.4 fl.oz. / A (1 lb Al/A) per year.
- **DO NOT** apply more than one soil application per year. Use reduced rate if mefenoxam treated seed is planted.
- Minimum Application Interval: NA

ASPARAGUS		
DISEASES	USE RATE (lb Al)	APPLICATION METHOD
Crown Rot (Phytophthora capsica) Spear Rot (Phytophthora spp.)	15.7 fl.oz./A (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 within 1 day of harvest (PHI=1 day).
- Maximum Single Application Rate: 15.7 fl.oz./A (0.5 lb Al/A).
- DO NOT apply more than 31.4 fl.oz. / A (1.0 lb Al/A) per year.
- **DO NOT** make more than 2 applications /A/year at reduced rates.
- Minimum application interval: 30 days

AVOCADOS		
DISEASES	USE RATE (lb Al)	APPLICATION METHOD
	Diluted Mixture: 0.3 fl. oz. in 18 gal. water (0.01)	Sleeve drench: At transplanting, drench the roots inside the sleeve with 1 qt of the diluted mixture per tree. Sleeve drench does not replace other soil applications for long-term control of root rot.
Root Rot	31.4 – 62.7 fl.oz./A (1.0-2.0) or 0.50 - 1.0 fl. oz./ 1,000 gal. water (3.9-7.8 ppm)	Injection (drip irrigation): Inject this product into the irrigation water at the start of the growing season or at transplanting and as soon as soil tests indicate the presence of <i>Phytophthora</i> . Two additional applications may be made at 3-month intervals. Applications are not needed during the winter months of November through February. For new plantings, use Phytophthora-resistant rootstocks. Mature trees in moderate to advanced stages of decline cannot be cured with this product.
(Phytophthora cinnamomi)	15.7 – 62.7 fl.oz./A (0.5 – 2.0)	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 1 pint/A. For trees with a canopy diameter of 15 ft or more, use 4 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 within 28 days of harvest (PHI=28 days)
- Maximum Single Application Rate: 62.7 fl.oz./A (2.0 lb Al/A).
- DO NOT apply more than 188.2 fl.oz. / A (6.0 lb Al/A) per year.
- **DO NOT** make more than 3 applications /A/year at reduced rates.
- Minimum Application Interval: 90 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

DISEASES	USE RATE (lb Al)	APPLICATION METHOD
Root Rot	56.5 fl.oz./A (1.8)	New Plantings: Apply as a band or broadcast spray to the soil at planting. 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. Soil surface sprays of this product will not be effective until the fungicide is moved into the root zone by rainfall or irrigation.
(Phytophthora spp.)	or 3.92 fl.oz./1,000 row ft.	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.

Use Restrictions:

- This product may be applied on the day of harvest (PHI=0 days).
- Maximum Single Application Rate: 56.5 fl.oz/A (1.8 lb ai/A).
- DO NOT apply more than 112.9 fl.oz. / A (3.6 lb Al/A) per year.
- DO NOT make more than 2 applications /A/year at reduced rates.
- Minimum Application Interval: 90 days.

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**

DISEASES	USE RATE (lb Al)	APPLICATION METHOD
Root Rot (Phytophthora spp.)	00.0 II.0Z./A	New Plantings: Apply as a band or broadcast spray to the soil at planting. 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.
	or	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 use an adjuvant.
- DO NOT apply within 45 days of harvest (PHI=45 days)
- Maximum Single Application Rate: 56.5 fl.oz./A (1.8 lb ai/A).
- DO NOT exceed 112.9 fl.oz. / A (3.6 lb Al/A) per year for soil applications and 6.3 fl.oz. (0.2 lb Al)/A/year for foliar applications.
- **DO NOT** make more than 2 applications /A/year at reduced rates.
- Minimum Application Interval: 90 days.

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

DISEASES	USE RATE (lb Al)	APPLICATION METHOD
	31.4 – 62.7 fl.oz. / A (1.0 – 2.0)	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.
Brown Rot	0.9 – 1.6 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.
Citrus Foot Rot Root Rot Trunk Canker Gummosis	0.9 to 1.6 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.
(Phytophthora spp.)	15.7 – 94.1 fl.oz./A (0.5 to 3.0)	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	31.4 fl.oz. in 3-gal water (1.0)	Trunk Spray: Spray the surface of the trunks using enough spray to thoroughly wet the cankers. Apply up to 3 times per year.
Gummosis	15.7 fl.oz. in 10-gal water (0.5)	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.

- 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 31.4 fl.oz./A.

- DO NOT use on highly susceptible sweet orange rootstock in Florida.
- **DO NOT** apply to bare roots.
- DO NOT apply to citrus in field or greenhouse nurseries.
- DO NOT make trunk gummosis sprays and soil applications to the same tree in the same crop season.
- DO NOT tank mix herbicides with this product and use on trees less than 3 years old. First apply the herbicide, then apply this product 3 to 4 weeks later.
- Maximum Single Application Rate: 94.1 fl.oz./A (3.0 lb Al/A)
- DO NOT apply more than 188.2 fl.oz. / A (6.0 lb Al/A) per year.
- **DO NOT** make more than 3 applications /A/year at reduced rates.
- Minimum Application Interval: 90 days.
- Pre-harvest interval (PHI): 0 days.

CLOVER		
DISEASES	USE RATE (lb Al)	APPLICATION METHOD
Damping Off (<i>Pythium</i> spp.) Root Rot (<i>Phytophthora</i> spp.)	3.9 - 7.9 II.02./A	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 3.9 fl.oz./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 for 90 days following application (90-day PHI).
- Maximum Single Application Rate: 7.9 fl.oz./A (0.25 lb Al/A).
- **DO NOT** apply more than 7.9 fl.oz./ A (0.25 lb Al/A) per year.
- DO NOT apply more than one soil application per year. Use reduced rate if mefenoxam treated seed is planted.

Minimum Application Interval: NA

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).

DISEASES	USE RATE (lb Al)	APPLICATION METHOD
Damping Off (Pythium spp.)	3.9 – 7.9 fl.oz./A (0.125 – 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 advised.
Basal Stem Rot (Phytophthora spp.)	15.7 -31.4 fl.oz./A (0.50 - 1.0)	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 advised.
		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 advised. 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)	1.9 – 3.9 fl.oz./A (0.06 -0.125)	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.
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Use Restrictions:

- Maximum Single Application Rate: 31.4 fl.oz./A (1.0 lb Al/A)
- DO NOT exceed 47.1 fl.oz/A (1.5 lb Al/A) per year: DO NOT exceed 31.4 fl.oz./ A (1.0 lb Al/A) per year for soil applications and 15.7 fl.oz./ A (0.5 lb Al/A) per year for foliar applications
- **DO NOT** make more than 2 applications /A/year at reduced rates.

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 foliar sprays without a labeled tank mix partner.
- DO NOT apply to dual purpose turnip cultivars or varieties which produce a harvestable root.
- **DO NOT** apply this product within 7 days of harvest (PHI=7 days)
- Minimum Application Interval: 14 days.

COTTON		
DISEASES	USE RATE (lb Al)	APPLICATION METHOD
Seed and Root Rot (Pythium ultimum) Seedling Blight (Pythium aphanidermatum)		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.

- Maximum Single Application Rate: 0.16 fl.oz/1000 row ft (0.005 lb Al).
- DO NOT apply more than 3.9 FL. OZ. / A (0.125 lb Al/A) per year (assumes 30" row spacing).
- **DO NOT** apply more than one soil application per year. Use reduced rate if mefenoxam treated seed is planted. **Minimum Application Interval:** NA.
- Pre-harvest Interval (PHI): NA

CRANBERRIES		
DISEASES	USE RATE (lb Al)	APPLICATION METHOD
Phytophthora Root Rot (Phytophthora spp.)	15.7 – 27.6 fl.oz./A (0.5 – 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).
- Maximum Single Application Rate: 27.6 fl.oz./A (0.88 lb Al)
- DO NOT apply more than 83.1 fl.oz./A (2.65 lb Al/A) per year.
- DO NOT make more than 3 applications /A/year at reduced rates.
- Minimum Application Interval: 90 days.

CUCURBIT VEGETABLES: Chayote, Chinese Waxgourd, Citron Melon, Cucumber, Gherkin, Gourd (edible), *Momordica* spp. (Balsam Apple, Balsam Pear, Bitter Melon, Chinese Cucumber), Muskmelon (True 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

DISEASES	USE RATE (lb Al)	APPLICATION METHOD
Damping-off Cottony Leak (<i>Pythium</i> spp.)	15.7 – 31.4 fl.oz./A (0.5 – 1.0)	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 advised.
		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 advised.
		Irrigation (drip): Inject this product into the irrigation water.
Root Rot (Pythium spp.)	4.1 – 6.3 fl.oz./A (0.13 – 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.
		Irrigation (drip): Inject this product into the irrigation water.

Use Restrictions:

- **DO NOT** apply within 5 days of harvest (PHI=5 days).
- Maximum Single Application Rate: 31.4 fl.oz./A (1.0 lb Al).
- DO NOT exceed 47.1 fl.oz./A (1.5 lb Al/A) per year: 31.4 fl.oz./A (1 lb Al/A) per year for soil applications and 15.7 fl.oz. (0.5 lb Al/A) per year for foliar applications.
- **DO NOT** make more than 4 applications /A/year at reduced rates.
- Minimum Application Interval: 14 days.

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).

DISEASES	USE RATE (lb Al)	APPLICATION METHOD	
Damping-off (<i>Pythium</i> spp.) Crown Rot (<i>Phytophthora</i> capsica)	15.7 fl.oz./A (0.5)	To control Crown Rot (<i>Phytophthora capsica</i>), apply before the plants are infected to obtain satisfactory control. Plants already infected with <i>Phytophthora capsici</i> cannot be cured with this product. 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.	
Crown Rot (Phytophthora capsica)		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.

(continued)

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). *(cont.)*

TOMATO			
DISEASES	USE RATE (lb Al)	APPLICATION METHOD	
Damping-off (<i>Pythium</i> spp.)	15.7 – 31.4 fl.oz/A (0.5 – 1.0)	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 advised.	
Root and Fruit Rot (Phytophthora capsica) (Pythium spp.)	15.7 fl.oz./A (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.	

Use Restrictions:

For Tomato:

- Maximum Single Application Rate: 31.4 fl.oz./A (1.0 lb Al).
- **DO NOT** exceed 62.8 fl.oz./A (2.0 lb Al/A) per year: 47.1 fl.oz./A (1.5 lb Al/A) per year for soil applications and 15.7 fl.oz./A (0.5 lb Al/A) per year of foliar-applied mefenoxam product.
- DO NOT make more than 4 applications /A/year at reduced rates.
- Minimum Application Interval: 28 days.
- Pre-harvest interval (PHI): 7 days

For all other Fruiting Vegetables:

- Maximum Single Application Rate: 15.7 fl.oz./A (0.5 lb Al)
- DO NOT exceed 62.8 fl.oz./A (2.0 lb Al/A) per year: 47.1 fl.oz./A (1.5 lb Al/A) per year for soil applications and 15.7 fl.oz. (0.5 lb Al/A) per year for foliar applications.
- **DO NOT** make more than 4 applications /A/year at reduced rates.
- Minimum Application Interval: 30 days.
- Pre-harvest interval (PHI): 7 days.

GINSENG

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DISEASES	USE RATE (lb Al)	APPLICATION METHOD
Phytophthora Root Rot (Phytophthora cactorum)	11.9 fl.oz./A (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 /A/year at reduced rates.
- Maximum Single Application Rate: 11.9 fl.oz./A (0.38 lb Al)
- **DO NOT** apply more than 11.9 fl.oz./A (0.38 lb Al/A) per year.
- Minimum Application Interval: NA
- Pre-harvest Interval: NA

GRAPES		
DISEASES	USE RATE (lb Al)	APPLICATION METHOD
Root Rot (Phytophthora spp.) Crown Rot (Phytophthora capsica)	56.5 fl.oz./A (1.8) 3.9 fl.oz. / 1000 row ft. (0.125)	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).
- Maximum Single Application Rate: 56.5 fl.oz./A (1.8 lb Al).
- DO NOT exceed 181.9 fl.oz. (5.8 lb Al/A) per year: 169.4 fl.oz. / A (5.4 lb Al/A) per year for soil applications and 12.5 fl.oz. (0.4 lb Al)/A per year for foliar applications.
- **DO NOT** make more than 4 applications /A/year at reduced rates.
- Minimum Application Interval: 90 days.

GRASSES, FORAGE, FODDER, HAY*

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

DISEASES	USE RATE (lb Al)	APPLICATION METHOD
Seeding Diseases	l .	Soil Spray (broadcast or band): Apply as a broadcast soil spray at planting. Use 3.9 – 15.7 fl.oz/A if grass
(Pythium spp.)	1 (0.1/5 - 0.5)	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.
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Use Restrictions:

- DO NOT apply to range grasses.
- DO NOT graze, feed green forage, or cut for hay within 60 days of last application (PHI = 60 days). .
- Maximum Single Application Rate: 15.7 fl.oz./A (0.5 lb Al).
- **DO NOT** apply more than 15.7 fl.oz./ A (0.5 lb Al/A) per year.
- DO NOT apply more than one soil application per year. Use reduced rate if mefenoxam treated seed is planted.

Minimum Application Interval: NA

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

DISEASES	USE RATE (lb Al)	APPLICATION METHOD
Damping Off (Pythium spp.)	15.7 – 31.4 fl.oz./A (0.50 - 1.0)	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 advised.
		Surface Application (broadcast or band): Apply in sufficient water or liquid fertilizer to provide uniform coverage. For banded application, a 7-inch band is advised. 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)
- Maximum Single Application Rate: 31.4 fl.oz./A (1.0 lb Al).
- DO NOT exceed 62.7 fl.oz./ A (2.0 lb Al/A) per year.
- **DO NOT** make more than 4 applications /A/year at reduced rates.
- Minimum Application Interval: 28 days.

HOPS			
DISEASES	USE RATE (lb Al)	APPLICATION METHOD	
Downy Mildew (Pseudoperonospora humili)	7.8 fl.oz./A (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.	
Hea Postriotions			

- 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)
- Maximum Single Application Rate: 7.8 fl.oz./A (0.25 lb Al).
- DO NOT exceed 7.8 fl.oz./ A (0.25 lb Al/A) per year for soil and 15.6 fl.oz./A (0.5 lb Al/A) for foliar application.
- **DO NOT** make more than 1 soil and 2 foliar applications /A/year at reduced rates.
- Minimum Application Interval: 14 days.

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

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DISEASES	USE RATE (lb Al)	APPLICATION METHOD		
Damping-off (<i>Pythium</i> spp.)	15.7 – 31.4 fl.oz./A (0.5 – 1.0)	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 advised.		
		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 advised.		
	LETTUCE (Head and Leaf)			
Downy Mildew (Bremia lactucae)	1.9 – 3.9 fl.oz./A (0.06 – 0.125)	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.		

(continued)

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 (cont.)

DISEASES	USE RATE (lb Al)	APPLICATION METHOD
		SPINACH
White Rust (Albugo occidentalis) Downy Mildew (Peronospora effusa)	3.9 fl.oz./A (0.125)	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 insensitivity will destroy the effectiveness of this product in controlling white rust.

Use Restrictions:

For Lettuce:

- 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 applications /A/year at reduced rates.
- Maximum Single Application Rate: 31.4 fl.oz./A (1.0 lb Al).
- DO NOT exceed 43.9 fl.oz./A (1.4 lb Al/A): 31.4 fl.oz. / A (1.0 lb Al/A) per year for soil applications and 12.5 fl.oz. (0.4 lb Al)/A per year for foliar applications.

For Spinach:

- PHI=3 days only if soil applications do not exceed 31.4 fl.oz./ A (1 lb Al/A) per year. Otherwise, the PHI is 21 days.
- Maximum Single Application Rate: 31.4 fl.oz./A (1.0 lb Al).
- DO NOT exceed 39.2 fl.oz./A (1.25 lb Al/A): 31.4 fl.oz./ A (1 lb Al/A) per year for soil application at planting and 7.8 fl.oz./ A (0.25 lb Al/A) per year for post-planting, shanked in soil applications
- DO NOT make more than 3 applications (1 preplant or surface application plus 2 shank applications) /A/year at reduced rates. .
- Minimum Application Interval: 21 days.

For all other Leafy Vegetable Crops:

- DO NOT apply within 7 days of harvest (PHI=7 days).
- Maximum Single Application Rate: 31.4 fl.oz./A (1.0 lb Al).
- DO NOT apply more than 31.4 fl.oz./ A (1.0 lb Al/A) per year.
- DO NOT make more than 1 application 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

DISEASES	USE RATE (lb Al)	APPLICATION METHOD
Damping-off Root Rot	7.8 – 15.7 fl.oz./A	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 advised.
(Pythium spp.)	(0.25 – 0.5)	Surface Application: Apply at planting as a broadcast or banded spray in sufficient water or liquid fertilizer to provide uniform coverage. For banded application, a 7 inch band is advised. Soil surface sprays of this product will not be effective until the fungicide is moved into the root zone by rainfall or irrigation.
		SOYBEANS
Phytophthora Root and	0.08 to 0.28 fl oz per 1,000 row feet	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
Stem Rot	(0.0026 to 0.0088)	occur. Use the higher rate for full season control and 0.16 to 0.28 fl.oz. rate for early- to mid-season control.
(Phytophthora megasprema) Pythium Damping-off (Pythium spp.)	6.0 – 19.8 fl.oz./A (0.19 to 0.63)	Soil Spray (broadcast or band): For full season control, apply 19.8 fl.oz. 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 6.0 to 11.8 fl.oz./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 advised. 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.

- 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.

SUCCULENT SHELLED PEAS and BEANS: Bean (Black-eyed pea, Broad bean, Cowpea, Lima bean, Southern pea); Pea (English pea, garden pea, green pea); Pigeon pea

Downy Mildew (Phytophthora parasitica)	(0.00 +- 0.1)	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 when conditions are favorable for disease development but before infection is established.
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Use Restrictions:

For Soybeans:

- Maximum Single Application Rate: 19.8 fl.oz./A (0.63 lbs Al).
- **DO NOT** apply more than 19.8 fl.oz. / A (0.63 lb ai/A) per year.
- Minimum Application Interval: NA
- **DO NOT** make more than 1 application per year.
- Pre-harvest Interval (PHI): NA

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).
- Maximum Single Application Rate: 3.1 fl.oz./A (0.1 lbs Al).
- DO NOT exceed 15.7 fl.oz./ A (0.5 lb ai/A) per year for soil applications and 12.5 fl.oz. / A (0.4 lb ai/A) per year for foliar applications.
- DO NOT make more than 2 applications /A/year at reduced rates.
- Minimum Application Interval: 14 days.

For all other Legume Vegetables:

- Maximum Single Application Rate: 15.7 fl.oz./A (0.5 lb Al/A).
- **DO NOT** exceed 15.7 fl.oz./ A (0.5 lb Al/A) per year for soil applications.
- DO NOT make more than 2 applications per year.

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

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DISEASES	USE RATE (lb Al)	APPLICATION METHOD
Damping-off (<i>Pythium</i> spp.)	7.8 – 15.7 fl.oz./A (0.25 – 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 advised. 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 advised. Soil surface sprays of this product will not be effective until the fungicide is moved into the root zone by rainfall or irrigation.

Use Restrictions:

- Pre-harvest interval (PHI): NA
- Maximum Single Application Rate: 15.7 fl.oz./A (0.5 lb Al/A).
- Minimum Application Interval: NA
- **DO NOT** make more than 1 application /A/year at reduced rates.

For Bulb onions:

• DO NOT exceed 47.1 fl.oz./A (1.5 lb Al/A): 31.4 fl.oz. / A (1 lb Al/A) per year for soil applications and 15.7 fl.oz. (0.5 lb Al/A) per year for foliar applications.

For Green onions:

• DO NOT exceed 40.8 fl.oz/A (1.3 lb Al/A): 31.4 fl.oz. / A (1 lb Al/A) per year for soil applications and 9.4 fl.oz. (0.3 lb Al/A) per year for foliar applications.

PEANUTS			
DISEASES	USE RATE (lb Al)	APPLICATION METHOD	
Pythium Root Rot (Pythium spp.)	3.9 fl.oz./A (0.125)	Seedling Disease: Apply in-furrow or in a 7-inch band over the row at the time of planting. For the in-furrow 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 (Pythium spp.)	7.8 – 15.7 fl.oz./A (0.25 – 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.	

- Maximum Single Application Rate: 3.9 fl.oz./A (0.125 lb Al/A) at planting and 15.7 fl.oz./A (0.5 lb Al/A) post planting.
- DO NOT exceed 19.6 fl.oz./A (0.625 lb Al/A): 3.9 fl.oz./ A (0.125 lb Al/A) per year at planting and 15.7 fl.oz./A (0.5 lb Al/A) per year for post-planting.
- **DO NOT** make more than 2 applications /A/year at reduced rates.
- Minimum Application Interval: NA
- Pre-harvest interval (PHI): NA

PINEAPPLE		
DISEASES	USE RATE (lb Al)	APPLICATION METHOD
Heart Rot Disease (Phytophthora spp.)	7.8 – 15.7 fl.oz. in 100 gal water (0.25 – 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.
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- If there is a crop failure within 1 year of planting treated crowns, do not harvest plant material for animal feed.
- Apply only once as a crown dip treatment before planting.
- Maximum Single Application Rate: 15.7 fl.oz/A (0.5 lb Al/A).
- **DO NOT** exceed 0.5 lbs ai/A/year of mefenoxam and metalaxyl containing products.
- **DO NOT** make more than 1 application /A/year at reduced rates.
- Minimum Application Interval: NA
- Pre-harvest interval (PHI): NA

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

DISEASES	USE RATE (lb Al)	APPLICATION METHOD
Pythium Root Rot	15.7 – 31.4 fl.oz./A (0.5 – 1.0)	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 advised.
(Pythium spp.) 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 advised. Soil surface sprays of this product will not be effective until the fungicide is moved into the root zone by rainfall or irrigation.
		CARROTS
Cavity Spot Damping-Off Root Dieback (Pythium spp.)	7.8 – 20.4 fl.oz./A (0.25 – 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 advised.
Cavity Spot	3.9 – 15.7 fl.oz./A (0.125 – 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.
Root Dieback (<i>Pythium</i> spp.)		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 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.

(continued)

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 (cont.)

POTATOES		
DISEASES	USE RATE (lb Al)	APPLICATION METHOD
Pythium Leak (Pythium spp.) Pink Rot (Phytophthora erythroseptica) Pythium Seedling Disease (Pythium spp.)	0.4 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: 5.69 fl.oz. / A for 38-inch row spacing (13,754 row feet/acre) 5.98 fl.oz. / A for 36-inch row spacing (14,520 row feet/acre) 6.37 fl.oz. / A 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)	3.1 fl. oz./A (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.

SUGAR BEETS			
(0.5 to 1.0)	Preplant Incorporated (broad or band): Apply in sufficient water or liquid fertilizer to provide uniform coverage and mechanically incorporate in the top two inches of soil.		
	(0.5 to 1.0)	Surface Application (broadcast or band): Apply at planting in sufficient water or liquid fertilizer to provide uniform coverage.	
Use Restrictions:			

For Carrots:

- DO NOT make a preplant or at planting soil application if a seed treatment containing mefenoxam or metalaxyl is used.
- Minimum Application Interval: 14 days.
- **DO NOT** apply within 7 days of harvest (PHI=7 days).
- Maximum Single Application Rate: 20.4 fl.oz/A (0.65 lb Al/A)
- DO NOT exceed a total of 23.5 fl.oz./ A (0.75 lb Al/A) per year for post planting applications and 20.4 fl.oz./ A (0.65 lb Al/A) per year for soil applications.
- **DO NOT** exceed a total of 31.4 fl.oz./ A (1.0 lb Al/A) per year for all applications.
- DO NOT make more than 3 applications /A/year at reduced rates.

For Potatoes:

- **DO NOT** use the "dribble" application method.
- Minimum Application Interval: 14 days.
- Maximum Single Application Rate: 3.1 fl.oz./A (0.1 lb Al).
- **DO NOT** apply within 14 days of harvest (PHI=14 days).
- DO NOT exceed 23.2 fl.oz./A (0.74 lb Al/A): 10.7 fl.oz./A (0.34 lb Al/A) per year for soil applications and 12.5 fl.oz./ A (0.4 lb Al/A) per year for foliar applications.
- **DO NOT** make more than 3 applications /A/year at reduced rates.

For Sugar Beets and all other Root and Tuber Vegetables:

- Maximum Single Application Rate: 31.4 fl.oz./A (1.0 lb Al/A).
- DO NOT apply more than 31.4 fl.oz./ A (1.0 lb Al/A) per year.
- Minimum Application Interval: NA
- DO NOT make more than 2 applications /A/year at reduced rates.
- Pre-harvest interval (PHI): NA

STONE FRUITS: Apricot, Cherry (sweet and tart), Nectarine, Peach, Plum (Chickasaw, Damson, Japanese), Plumcot, Prune (fresh), Hybrids or cultivars of these.		
DISEASES	USE RATE (lb Al)	APPLICATION METHOD
Crown Rot (Phytophthora capsica) Collar Rot (Phytophthora spp.) Root Rot (Phytophthora spp.)	62.7 fl.oz./ A (2.0) Or 1.6 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.

• This product will not revitalize trees showing moderate to severe disease symptoms. Apply before symptoms appear.

Use Restrictions:

- Application of this product may be made on the day of harvest (PHI=0 days)
- **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 may exhibit chlorosis on leaf margins.
- DO NOT graze livestock in treated areas.
- **DO NOT** graze or feed cover crops grown in treated orchards.
- Maximum Single Application Rate: 62.7 fl.oz./A (2.0 lb Al/A)
- DO NOT apply more than 188.2 fl.oz./ A (6 lb Al/A) per year.
- DO NOT make more than 3 applications /A/year at reduced rates.
- Minimum Application Interval: 60 days.

STRAWBERRIES		
DISEASES	USE RATE (lb Al)	APPLICATION METHOD
Red Stele (Phytophthora fragariae) Vascular Collapse (P. cactorum) Leather Rot (P. cactorum)	15.7 fl.oz. /A (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. Apply up to 3 times per crop/year: First application after transplanting. 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.

- 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)
- Maximum Single Application Rate: 15.7 fl.oz/A (0.5 lbs Al/A).
- **DO NOT** apply more than 47.1 fl.oz./ A (1.5 lb Al/A) per year.
- **DO NOT** make more than 3 applications /A/year at reduced rates.
- Minimum Application Interval: 30 days.

TOBACCO		
DISEASES	USE RATE (lb Al)	APPLICATION METHOD
Damping-off (<i>Pythium</i> spp.)	7.8 – 15.7 fl.oz./A (0.25 - 0.5) OR	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.
	0.25 – 0.5 fl.oz./ 150 yd ²	
	(0.008 - 0.016)	
Black Shank (Phytophthora parasitica var. nicotianea)	For conventional till: 15.7 – 47.1 fl.oz./A (0.5 - 1.5)	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
	For no-till tobacco: 7.8 – 15.7 fl.oz/A (0.25 - 0.5)	as possible to transplanting followed by sequential applications.
	For conventional till: 15.7 – 31.4 fl.oz./A (0.5 - 1.0)	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
	For no-till tobacco: 7.8 – 15.7 fl.oz/A (0.25 - 0.5)	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: 7.8 – 15.7 fl.oz/A (0.25 - 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.
	For conventional till: 7.8 fl.oz./A (0.25)	Post-transplant Soil spray (band): If a pretransplant 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.
	For no-till tobacco: 07.8 – 15.7 fl.oz/A (0.25 - 0.5)	

- 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).
- Failure to adequately control nematodes in fields treated with this product may result in poor control of black shank.

- 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.
- Maximum Single Application Rate: 47.1 fl.oz/A (1.5 lb Al/A)
- DO NOT apply more than 47.1 fl.oz./ A (1.5 lb Al/A) per year.
- **DO NOT** make more than 2 applications /A/year at reduced rates.
- Minimum Application Interval: 14 days.
- Pre-harvest interval (PHI): NA

TREE NUTS: Almonds, Walnuts						
DISEASES	USE RATE (lb Al)	APPLICATION METHOD				
Crown Rot (Phytophthora capsica) Collar Rot (Phytophthora spp.) Root Rot (Phytophthora spp.)	62.7 fl.oz./A (2.0) OR 1.6 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.

Use Restrictions:

- **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.
- Maximum Single Application Rate: 62.7 fl.oz./A (2.0 lb Al/A).
- **DO NOT** apply more than 188.2 fl.oz./ A (6 lb Al/A) per year.
- **DO NOT** apply more than 3 applications /A/year at reduced rates.
- Minimum Application Interval: 60 days.
- Pre-harvest interval (PHI): 30 days

TROPICAL FRUIT: Atemo Apple, Star Apple, Starfruit	ya, Black Sapote, Canistel,	Chemimoya, Custard Apple, Kiwifruit, Ilama, Mamey Sapote, Mango, Papaya, Sapodilla, Soursop Birida, Sugar			
DISEASES	USE RATE (lb Al)	APPLICATION METHOD			
ATEMOYA, CHERIMOYA, CUSTARD APPLE, LLAMA, SOURSOP BIRIDA, SUGAR APPLE					
Phytophthora Root and Crown Rot (Phytophthora spp.) Pythium Root and Crown Rot Damping-off (Pythium spp.)	23.5 – 47.1 fl.oz./A (0.75 - 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. Make one application in the spring at root growth flush and a second application in the fall.			
BLACK SAPOTE, CANISTEL, MAMEY SAPOTE, MANGO, PAPAYA, SAPODILLA, STAR APPLE					
Root Rot (Phytophthora spp.) Damping-off (Pythium spp.)	23.5 – 47.1 fl.oz./A (0.75 - 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. 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.			

(continued)

Apple, Star Apple, Starfruit (APPLICATION METHOD
DISEASES	USE RATE (lb Al)	
		KIWIFRUIT
Root and Crown Rot (<i>Pythium</i> and <i>Phytophthora</i> spp.)	5.6 - 11.0 fl.oz./ 40 gal of water (0.18 - 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 5.6 to 11.2 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.
	11.0 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.
		STARFRUIT
Phytophthora Root and Crown Rot (Phytophthora spp.) Pythium Root and Crown Rot (Pythium spp.)	23.5 – 47.1 fl.oz./A (0.75 - 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. Make one application in the spring when root growth begins and a second application in the fall.

For Kiwifruit:

- DO NOT apply within 7 days of harvest (PHI=7 days).
- Maximum Single Application Rate: 11.0 fl.oz/A (0.35 lb Al/A)
- DO NOT apply more than 54.9 fl.oz./ A (1.75 lb Al/A) per year.
- DO NOT make more than 2 applications /A/year at reduced rates.
- Minimum Application Interval: 30 days.

For all other Tropical Fruit:

- DO NOT apply within 30 days of harvest (PHI=30 days).
- Maximum Single Application Rate: 47.1 fl.oz/A (1.5 lb Al/A).
- **DO NOT** apply more than 94.1 fl.oz./ A (3 lb Al/A) per year.
- **DO NOT** make more than 2 applications /A/year at reduced rates.
- Minimum Application Interval: 90 days.

STORAGE AND DISPOSAL

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

STORAGE: Store in original containers only. Keep container closed when not in use. Do not store near food or feed. In case of spill on floor or paved surfaces, mop and remove to chemical waste storage area until proper disposal can be made if product cannot be used according to label.

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

CONTAINER HANDLING:

Container Handling [less than or equal to 5 gallons]

Non-refillable 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 if available or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

Container Handling [greater than 5 gallons]

Non-refillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. 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. 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.

Container Handling [greater 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 person refilling. To clean container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

CONTAINER IS NOT SAFE FOR FOOD, FEED OR DRINKING WATER.

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