UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

February 21, 2022

Nestor Algarin
Regulatory Product Manager
Syngenta Crop Protection, LLC
PO Box 18300
Greensboro, NC 27419

Subject: Registration Review Label Mitigation for Mefenoxam
Product Name: Mefenoxam 2E
EPA Registration Number: 100-1145
Application Date: 12/7/2021
Decision Number: 581960

Dear Mr. Algarin:

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

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

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one copy of the final printed labeling before you release the product for shipment with the new labeling. In accordance with 40 CFR 152.130(c), you may distribute or sell this product under the previously approved labeling for 12 months from the date of this letter. After 12 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR 152.3.

If you have any questions about this letter, please contact Darius Stanton by phone at 202-566-2332, or via email at stanton.darius@epa.gov.

Sincerely,

Linda Arrington, Branch Chief
Risk Management and Implementation Branch 4
Pesticide Re-Evaluation Division
Office of Pesticide Programs

Enclosure

MEFENOXAM	GROUP	4	FUNGICIDE

Mefenoxam 2E

Fungicide

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

Active Ingredient:	
Mefenoxam*.....	25.1%
Other Ingredients:	74.9%
Total:	**100.0%**

*CAS No. 70630-17-0 and 69516-34-3

Contains petroleum distillate

Mefenoxam 2E is formulated as a soluble concentrate and contains 2 lb active ingredient per gallon.

KEEP OUT OF REACH OF CHILDREN.

WARNING/AVISO

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

See additional precautionary statements and directions for use inside booklet.

EPA Reg. No. 100-1145
EPA Est.

_____
Net Contents

[Batch Code: _____] (*For nonrefillables only.)*

ACCEPTED
Feb 21, 2022
Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 100-1145

TABLE OF CONTENTS

DIRECTIONS FOR USE

1.0 FIRST AID

FIRST AID	
If in eyes	• Hold eye open and rinse slowly and gently with water for 15-20 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 15-20 minutes. • Call a poison control center or doctor for treatment advice.
If swallowed	• Call a poison control center or doctor immediately for treatment advice. • Do not give any liquid to the person. • 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.
NOTE TO PHYSICIAN Contains petroleum distillate – vomiting may cause aspiration pneumonia. Treat symptomatically.	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	
HOTLINE NUMBER For 24-Hour Medical Emergency Assistance (Human or Animal) Or Chemical Emergency Assistance (Spill, Leak, Fire or Accident) Call **1-800-888-8372**	

2.0 PRECAUTIONARY STATEMENTS

2.1 Hazards to Humans and Domestic Animals

WARNING/AVISO

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

2.2 Personal Protective Equipment (PPE)

Applicators and other handlers must wear:

- 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
- Protective eyewear

2.2.1 User Safety Requirements

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. 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.

2.2.2 Engineering Controls

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

2.2.3 User Safety Recommendations

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.

2.3 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 contaminate water when disposing of equipment washwater or rinsate.

2.3.1 Groundwater Advisory

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

2.4 Physical or Chemical Hazards

Do not use or store near heat or open flame.

DIRECTIONS FOR USE

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

DO NOT APPLY this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your state or tribe, consult the agency responsible for pesticide regulation.

FAILURE TO FOLLOW DIRECTIONS AND PRECAUTIONS ON THIS LABEL MAY RESULT IN CROP INJURY, POOR DISEASE CONTROL, OR ILLEGAL RESIDUES.

AGRICULTURAL USE REQUIREMENTS

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

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 **Section 8.0**, *Soil-Directed and Other Foliar Applications.*

Exception: If the product is soil-injected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area immediately if there will be no contact with anything that has been treated. For crop uses that fall under this Exception, see **Section 7.0**, *Soil-Injected or Soil-Incorporated Applications.*

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

- Coveralls

- Chemical-resistant gloves 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
- Protective eyewear

3.0 PRODUCT INFORMATION

Mefenoxam 2E is a systemic fungicide for use on selected crops to control certain diseases caused by members of the Oomycete class of fungi.

Apply Mefenoxam 2E by ground or air in sufficient water or liquid fertilizer to provide uniform coverage of the soil surface.

3.1 Integrated Pest Management (IPM)

Mefenoxam 2E should be integrated into an overall disease and pest management strategy (IPM) whenever the use of a fungicide is required. Cultural practices known to reduce disease development should be followed. Consult your local agricultural authorities for additional IPM strategies established for your area.

3.2 Resistance Management Recommendations

For resistance management, Mefenoxam 2E contains a Group 4 fungicide. Any fungal population may contain individuals naturally resistant to Mefenoxam 2E and other Group 4 fungicides. A gradual or total loss of pest control may occur over time if these fungicides are used repeatedly in the same fields. Appropriate resistance-management strategies should be followed.

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

- Rotate the use of Mefenoxam 2E 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 recommendations for specific crops and pathogens.
- For further information or to report suspected resistance, contact Syngenta at 1-866-Syngent(a) (866-796-4368). You can also contact your pesticide distributor or university extension specialist to report resistance.

4.0 APPLICATION DIRECTIONS

4.1 Methods of Application

Applications with Mefenoxam 2E are permitted by ground, by air and via chemigation as specified in **Sections 7.0** and **8.0** unless otherwise restricted in **Section 6.1**. Ground application includes broadcast sprays, soil incorporation, banded and in-furrow applications as well as soil injections and crown dips. Incorporation includes preplant incorporated, soil drenches or shank applications.

For band applications refer to **Section 4.1.1** to calculate the amount of Mefenoxam 2E and water volume needed. For in-furrow applications, refer to Section **4.1.2** for the amount of product to use with common row spacings. Refer to Section **4.5** for details of application by chemigation.

4.1.1 Band Application

Application rates in the **Sections 7.0** and **8.0** are generally expressed as an amount per acre, which refers to the total crop area to be treated. If rates are expressed as amount per acre and banded applications are used, then the correct amount of pesticide used per acre will be proportionately less because the area to be treated is actually the area covered by the band, not the total cropland planted. Use the following formula to calculate the amount of Mefenoxam 2E needed per acre of crop when banded applications are made.

band width in inches row spacing in inches	X	broadcast rate per acre	=	amount needed per acre of field

4.1.2 In-Furrow Application

For in-furrow applications, apply Mefenoxam 2E as an in-furrow spray in 3-7 gals/A of water at planting. Mount the spray nozzle so the spray is directed into the furrow just before the seed is covered. The following table provides common row spacing and the amount of Mefenoxam 2E applied per acre:

Use Rate fl oz/1,000 row feet (oz ai/1,000 row feet)	**Mefenoxam 2E fl oz/A**								
	20 inch rows	**22 inch rows**	**24 inch rows**	**30 inch rows**	**32 inch rows**	**34 inch rows**	**36 inch rows**	**38 inch rows**	**40 inch rows**
0.15 (0.038)	4.0	3.6	3.2	2.6	2.5	2.3	2.2	2.1	2.0
0.3 (0.075)	7.8	7.0	6.5	5.2	5.0	4.6	4.3	4.1	4.0
0.56 (0.14)	14.5	13.3	12.2	9.8	9.1	8.5	8.1	7.7	7.3
0.84 (0.21)	22.0	20.0	18.3	14.5	13.7	13.0	12.2	11.6	11.0
20” = 26,136 row ft/A, 22" = 23,760 row ft/A, 24” = 21,780 row ft/A, 30" = 17,424 row ft/A, 32" = 16,315 row ft/A, 34" = 15,374 row ft/A, 36" = 14,520 row ft/A, 38" = 13,754 row ft/A, 40" = 13,068 row ft/A									

4.2 Application Equipment

- Spray equipment configuration should be arranged to provide accurate application and minimize potential for spray drift.
- To ensure accuracy, calibrate sprayer before each use.
- For information on spray equipment and calibration, consult spray equipment manufacturers and/or state recommendations.
- All ground/aerial/chemigation application equipment must be properly maintained and calibrated using appropriate carriers.

4.2.1 Nozzles

- Equip sprayers with nozzles that provide accurate and uniform application.
- Nozzles should be the same size and uniformly spaced across the boom.
- 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 recommendations.

4.2.2 Pump

- Use a pump with capacity to:
  - Maintain 35-40 psi at nozzles.
  - 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 sparger tube for agitation.
- Do not air sparge.

For more information on spray equipment and calibration, consult sprayer manufacturers and state recommendations. For specific local directions and spray schedules, consult the current state agricultural recommendations.

4.3 Application Volume and Spray Coverage

- To ensure maximum activity on soilborne pathogens, Mefenoxam 2E must be moved into the seed or root zone of the plant.
- Some crop directions recommend incorporating the fungicide to move it to the seed or root zone (preplant incorporated application, soil drenches, shank applications) while others place the fungicide into the seed or root zone (in-furrow sprays, soil injections, crown dips).
- For applications made to the soil surface, rainfall will move the fungicide to the seed or root zone.
- However, if rainfall is not expected within 24 hours after application, mechanically incorporate (before planting) or sprinkler irrigate (after planting) with ½-1 inch of water.
- For ground application, apply in a minimum of 20 gallons of water per acre, unless specified otherwise.
- For aerial application, apply in a minimum of 5 gallons of water per acre, unless specified otherwise.

4.4 Mixing Directions

1. Thoroughly clean spray equipment before using this product.
2. Prepare no more spray mixture than is needed for the immediate operation.
3. Keep product container tightly closed when not in use.
4. Agitate the spray solution before and during application.
5. Do not let the spray mixture stand overnight in the spray tank.
6. Rinse the spray equipment thoroughly after each day's use and dispose of pesticide rinsate by application to an already treated area.

4.4.1 Mefenoxam 2E Alone

1. Add ¼ - ½ of the required amount of water to the spray or mixing tank.
2. With the agitator running add Mefenoxam 2E to the tank.
3. Continue agitation while adding the remainder of the water.
4. Begin application of the spray solution after Mefenoxam 2E has completely dispersed into the mix water.
5. Maintain agitation until all of the mixture has been sprayed.

4.4.2 Tank-Mix Precautions

- 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.
- Tank mixes of Mefenoxam 2E with other pesticides, fertilizers, or any other additives not specifically labelled for use with Mefenoxam 2E may result in tank mix incompatibility or unsatisfactory performance. In such cases, always check tank mix compatibility by conducting a jar test according to guidance in **Section 4.4.3** before actual tank mixing.

4.4.3 Tank-Mix Compatibility Test

- Conduct a jar test using a 1 pt to 1 qt container with lid by adding water or other intended carrier such as liquid fertilizer to the jar.
- Next, add the appropriate amount of pesticides(s) or tank mix partner(s) in their relative proportions based on recommended label rates. Add tank mix components separately in the order described in the tank-mixing section, **Section 4.4.4**. After each addition, shake or stir gently to thoroughly mix.
- After all ingredients have been added, put the lid on the jar, then tighten and invert the jar 10 times to mix.
- After mixing, let the mixture stand 15 – 30 minutes and then examine for signs of incompatibility such as obvious separation, large flakes, precipitates, gels, or heavy oily film on the jar.
- If the mixture remains mixed or can be remixed readily, it is physically compatible and can be used.
- If the mixture is incompatible, repeat the test using a compatibility agent at the recommended rate. Or, if applicable, slurry dry formulations in water before adding to the jar. If incompatibility is still observed after following these procedures, do not use the mixture.
- After compatibility testing is complete, dispose of any pesticide wastes in accordance with the storage and disposal section, **Section 9.0,** of this label.

4.4.4 Mefenoxam 2E in Tank Mixtures

1. Add ¼ - ½ of the required amount of water to the spray or mixing tank.
2. With the agitator running, add the tank-mix partner(s) into the tank in the following order:
   a. wettable powders
   b. water dispersible granular products
   c. liquid flowables
   d. emulsifiable concentrates
3. Allow the material to completely dissolve and disperse into the mix water.
4. Continue agitation while adding the remainder of the water and Mefenoxam 2E to the spray tank.
5. Allow Mefenoxam 2E to completely disperse.
6. Spray the mixture with the agitator running.
7. Follow the precautions and limitations of the most restricted product in the tank mixture.

4.5 **Application through Irrigation Systems (Chemigation)**

4.5.1 Chemigation Restrictions

- Use only on crops for which chemigation is specified on this label.
- Apply Mefenoxam 2E 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 state extension service specialists, equipment manufacturers, 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.
- Mefenoxam 2E must be applied on the schedule specified in the specific crop use directions, not according to the irrigation schedule.

Note: Mefenoxam 2E can affect many seal materials and should not be used at full strength. Leather seals are best, EPDM or silicone rubber seals can be used, but should be replaced once a year. Do not use Viton, Buna-N, Neoprene, or PVC seals.

4.5.2 Operating Instructions for Public Water Systems

1. The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water-source contamination from backflow.
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, such as a positive displacement injection pump (e.g., diaphragm pump), effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
7. Do not apply when wind speed favors drift beyond the area intended.

4.5.3 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, backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.
3. The pesticide injection pipeline must contain a functional, automatic, quick-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 device, such as a positive displacement injection pump (e.g., diaphragm pump), effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
7. Do not apply when wind speed favors drift beyond the area intended for treatment.

4.5.4 Application Directions for Irrigation Systems

- Apply Mefenoxam 2E 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.
- Do not inject Mefenoxam 2E at full strength or deterioration of seals may occur. Use a dilution ratio of at least 15 parts water to 1 part Mefenoxam 2E in the tank mix.
- The chemical tank and injector system should be thoroughly cleaned. Flush system with clean water.
- Good agitation should be maintained during the entire application period.
- Uniform coverage is required for good control.

5.0 REPLANT AND ROTATIONAL CROP RESTRICTIONS

5.1 Replanting

If replanting is necessary, additional applications of Mefenoxam 2E may be made, provided that the total amount of active ingredient in Mefenoxam 2E applied does not exceed the maximum allowed for the specific crop.

5.2 Rotational Crop Restrictions

Do not plant any crop which is not registered for use with mefenoxam in soil treated with this active ingredient for a period of 365 days unless a shorter interval is specified in the following list.

Rotation Crop	Planting Time From Last Mefenoxam 2E Application
Alfalfa (including birdsfoot trefoil) Asparagus Brassica Vegetables (e.g., broccoli, cabbage, cauliflower) Clover Corn Cotton Cucurbit Vegetables (e.g., cucumber, melons, squash) Fruiting Vegetables (e.g., tomatoes, peppers, eggplant) Herbs (fresh and dried) Leafy Vegetables, except Brassica (e.g., lettuce, spinach, celery) Legume Vegetables (e.g., beans and peas, succulent and dried) Onions (dry bulb, including garlic, and green) Peanuts Pineapples Root and Tuber Vegetables (e.g. potatoes, carrots, sugar beets) Soybeans Strawberries Sunflower	0 days
Crops **Not Intended** for Food or Feed	0 days
Cereal Grains (other than Corn)	14 days
All Other Crops **Intended** for Food or Feed	365 days

6.0 RESTRICTIONS AND PRECAUTIONS

See **Sections 7.0 and 8.0** for crop-specific restrictions and precautions.

6.1 Use Restrictions

- **DO NOT** use in greenhouses or other structures such a lath houses, float houses, and hydroponic facilities, unless specified on this label.
- **DO NOT** use for disease control in bedding plants, transplant trays, or nurseries except where specifically allowed in certain crop sections.
- **DO NOT** use 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 Mefenoxam 2E except where specifically allowed in certain crop sections.
- Maximum usage when applying both mefenoxam- and metalaxyl-containing products to the same crop within the same season: **DO NOT** apply more than the maximum yearly total application rate for the active ingredient as stated on the label of the product containing the lowest yearly total on that crop.
- Soil-applied maximum application rates include all uses in **Section 7.0** and all uses in **Section 8.0** except foliar applications.

6.2 Use Precautions

- Avoid spray overlap as crop injury may occur.
- Under conditions conducive to severe disease pressure, additional fungicide applications beyond the number allowed by this label may be needed. Under these conditions, use another fungicide registered for the crop/disease appearing on this label.
- Where rate ranges are specified on this label, use the higher rate when heavy disease pressure is expected and the lower rate when disease pressure is expected to be light, unless otherwise noted.

6.3 Spray Drift Management

- AVOIDING SPRAY DRIFT AT THE APPLICATION SITE IS THE RESPONSIBILITY OF THE APPLICATOR AND THE GROWER.
- To avoid spray drift, do not apply when conditions favor drift beyond the target area.
- The interaction of many equipment- and weather-related factors determine the potential for spray drift.

6.4 Spray Drift Advisory

THE APPLICATOR IS RESPONSIBLE FOR AVOIDING OFF-SITE SPRAY DRIFT. BE AWARE OF NEARBY NON-TARGET SITES AND ENVIRONMENTAL CONDITIONS.

6.4.1 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.

6.4.2 Controlling Droplet Size – Ground Boom

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

6.4.3 Controlling Droplet Size – Aircraft

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

6.4.4 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 crop and have minimal bounce.

6.4.5 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 10ft above the crop canopy, unless a greater application height is necessary for pilot safety.

6.4.6 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.

6.4.7 Temperature and Humidity

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

6.4.8 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.

6.4.9 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.

7.0 CROP USE DIRECTIONS FOR SOIL-INJECTED OR SOIL-INCORPORATED APPLICATIONS

- NA indicates not applicable.
- The restricted-entry interval (REI) for soil-injected or soil-incorporated applications is 0 hours.

7.1 Alfalfa

Crops (including all cultivars, varieties, and/or hybrids)			
Alfalfa (birdsfoot trefoil)			
Target Disease	**Rate pt/A (lb ai)**	**Application Timing**	**Use Directions**
Damping Off (*Pythium* spp.) Root Rot (*Phytophthora* spp.)	0.50-1.0 (0.12-0.25)	At planting	**Soil spray (broadcast):** Apply as a broadcast soil surface spray. If alfalfa seed was previously treated with mefenoxam or metalaxyl as a seed dressing, use the 0.50 pt/A rate.
For soil directed and other foliar applications, refer to **Section 8.1**.			
Resistance Management Recommendations: • Refer to **Section 3.2**			
USE RESTRICTIONS			
1) Refer to **Section 6.1** for additional product use restrictions. 2) **Maximum Single Application Rate:** 1.0 pt/A (equivalent to 0.25 lb ai/A mefenoxam) 3) **Minimum Application Interval:** NA 4) **Maximum Annual Application Rate:** 1.0 pt/A/year (equivalent to 0.25 lb ai/A mefenoxam) a) **DO NOT** exceed 0.25 lb ai/A/year of mefenoxam- and metalaxyl-containing products. 5) **DO NOT** feed green forage or cut hay for 60 days following application. 6) **Pre-harvest Interval (PHI):** 60 days			

7.2 Artichokes

Crops (including all cultivars, varieties, and/or hybrids)			
Artichoke, globe			
Target Disease	**Rate pt/A (lb ai)**	**Application Timing**	**Use Directions**
Damping Off (*Pythium* spp.) Root Rot *(Phytophthora spp)*	2.0-4.0 (0.5-1.0)	At planting	**Soil spray (broadcast):** Apply as a broadcast soil spray. Move product into the soil as described in **Section 4.3.**
Resistance Management Recommendations: • Refer to **Section 3.2**			
USE RESTRICTIONS			
1) Refer to **Section 6.1** for additional product use restrictions. 2) **Maximum Single Application Rate:** 4.0 pt/A (equivalent to 1 lb ai/A mefenoxam) 3) **Minimum Application Interval:** NA 4) **Maximum Annual Application Rate:** 4.0 pt/A/year (equivalent to 1 lb ai/A mefenoxam) a) **DO NOT** exceed 1.0 lb ai/A/year of mefenoxam- and metalaxyl-containing products. 5) **Pre-harvest Interval (PHI):** 200 days			

7.3 Avocado

Crops (including all cultivars, varieties, and/or hybrids)			
Avocado			
Target Disease	**Rate (lb ai)**	**Application Timing**	**Use Directions**
Root Rot *(Phytophthora spp)*	0.50 fl oz in 18 gal of water	At transplant	**Sleeve Drench:** Drench the roots inside the sleeve with 1 qt of the diluted mixture per tree.
	4.0-8.0 qt/A (1.0-2.0) or 1.0-2.0 fl oz/1000 gal water	Start of the growing season or at transplant Two additional applications may be made at 3-month intervals.	**Injection (drip irrigation):** Inject into the irrigation water as soon as soil tests indicate the presence of *Phytophthora.* Applications are not needed during the winter months of November through February.
For soil directed and other foliar applications, refer to **Section 8.4**.			
Resistance Management Recommendations: • Refer to **Section 3.2**			
Precautions: • Sleeve drench does not replace other soil applications for long-term control of root rot. • For new plantings, use *Phytophthora* resistant rootstocks. • Mature trees in moderate to advanced stages of decline cannot be cured with Mefenoxam 2E.			
USE RESTRICTIONS			
1) Refer to **Section 6.1** for additional product use restrictions. 2) **Maximum Single Application Rate:** 8.0 pt/A (equivalent to 2 lb ai/A mefenoxam)			

3) **Minimum Application Interval:** 90 days
4) **Maximum Annual Application Rate:** 24 pt/A/year (equivalent to 6 lb ai/A mefenoxam)
   a) **DO NOT** exceed 6.0 lb ai/A/year of mefenoxam- and metalaxyl-containing products.
5) **Pre-harvest Interval (PHI):** 28 days

7.4 Brassica (Cole) Leafy Vegetables, Crop Group 5

Crops (including all cultivars, varieties, and/or hybrids)		
Broccoli	Cabbage, Chinese (napa)	Kale
Broccoli, Chinese (gai lon)	Cabbage, Chinese mustard (gai choy)	Kohlrabi
Broccoli raab (rapini)	Cauliflower	Mizuna
Brussels sprouts	Cavalo broccolo	Mustard greens
Cabbage	Collards	Mustard spinach
Cabbage, Chinese (bok choy)		Rape greens

Target Disease	Rate pt/A (lb ai)	Application Timing	Use Directions
Basal stem rot (*Phytophthora* spp.)	2.0 – 4.0 (0.5-1.0)	Preplant incorporated	**For preplant incorporation**, apply as a broadcast or band application. Apply in water or liquid fertilizer and incorporate in the top 2 inches of soil.
		At planting	**For at-planting**, apply as a soil spray by broadcast or band application in water or liquid fertilizer. Move into soil as recommended in **Section 4.3.** **Injection (drip irrigation):** inject Mefenoxam 2E into the irrigation water at the labeled rates. For banded applications, use a 7-inch band.
Damping off (*Pythium* spp)	0.5 – 1.0 (0.25-0.5)	Preplant incorporated	**Preplant incorporated:** Apply as a broadcast or band application in water or liquid fertilizer and incorporate in the top 2 inches of soil. For banded applications, use a 7-inch band.

Resistance Management Recommendations:

- Refer to **Section 3.2**.

USE RESTRICTIONS

1) Refer to **Section 6.1** for additional product use restrictions.
2) **Maximum Single Application Rate:** 4.0 pt/A (equivalent to 1 lb ai/A mefenoxam)
3) **Minimum Application Interval:** NA
4) **Maximum Annual Application Rate:** 4.0 pt/A/year (equivalent to 1 lb ai/A mefenoxam)
   a) **DO NOT** exceed 1.0 lb ai/A/year of soil-applied and 0.50 lb ai/A/year of foliar-applied mefenoxam- and metalaxyl-containing products.
5) **Pre-harvest Interval (PHI):** NA

7.5 Bulb Vegetables Crop Group 3-07

Crops (including all cultivars, varieties, and/or hybrids of these)

Onion Dry, Bulb		Onion, Green	
Garlic	Onion, Chinese	Chive, fresh leaves	Onion, fresh
Garlic, great headed	Onion, pearl	Chive, Chinese, fresh leaves	Onion, green
Garlic, serpent	Onion, potato	Elegans hosta	Onion, Japanese bunching
Lily	Shallots	Fritillaria, leaves	Onion, macrostem
Onion		Green eschalots	Onion, spring
		Kurrat	Onion, tree tops
		Lady's leek	Onion, Welsh
		Leek	Scallions
		Onion, Beltsville bunching	Shallots, green
			Shallots, fresh leaves

Target Disease	Rate pt/A (lb ai)	Application Timing	Use Directions
Damping off (*Pythium* spp.)	1.0-2.0 (0.25-0.5)	Preplant incorporated	**Preplant incorporated (broadcast or band):** Apply in water or liquid fertilizer and mechanically incorporate in the top 2 inches of soil.
		At planting	**Soil spray (broadcast or band):** Apply in water or liquid fertilizer at planting. For banded applications, use a 7-inch band.

Resistance Management Recommendations:

- Refer to **Section 3.2**

USE RESTRICTIONS

1) Refer to **Section 6.1** for additional product use restrictions.
2) **Maximum Single Application Rate:** 2.0 pt/A (equivalent to 0.5 lb ai/A mefenoxam)
3) **Minimum Application Interval:** NA
4) **Maximum Annual Application Rate:** 2.0 pt/A/year (equivalent to 0.5 lb ai/A mefenoxam)
   a) For onions (dry bulb): **DO NOT** exceed 1.0 lb ai/A/year of soil-applied and 0.5 lb ai/A/year of foliar-applied mefenoxam- and metalaxyl-containing products.
   b) For onions (green): **DO NOT** exceed 1.0 lb ai/A/year of soil-applied and 0.3 lb ai/A/year of foliar-applied mefenoxam- and metalaxyl-containing products.
5) **Pre-harvest Interval (PHI):** NA

7.6 Clover

Crops (including all cultivars, varieties, and/or hybrids)			
Clover			
Target Disease	**Rate pt/A (lb ai)**	**Application Timing**	**Use Directions**
Damping off (*Pythium* spp) Root rot (*Phytophthora* spp)	0.5-1.0 (0.125-0.25)	At planting	Apply as a broadcast soil surface spray. If the clover seed was previously treated with mefenoxam or metalaxyl as a seed dressing, use the 0.5 pt/A rate.

Resistance Management Recommendations:

- Refer to **Section 3.2**

USE RESTRICTIONS

1) Refer to **Section 6.1** for additional product use restrictions.
2) **Maximum Single Application Rate:** 1.0 pt/A (equivalent to 0.25 lb ai/A mefenoxam)
3) **Minimum Application Interval:** NA
4) **Maximum Annual Application Rate:** 1.0 ptA/year (equivalent to 0.25 lb ai/A mefenoxam)
   a) **DO NOT** exceed 0.25 lb ai/A/year of soil-applied mefenoxam- and metalaxyl-containing products.
5) **DO NOT** feed or cut hay for 90 days following application.
6) **Pre-harvest Interval (PHI):** 90 days

7.7 Cotton

Crops (including all cultivars, varieties, and/or hybrids)			
Cotton			
Target Disease	**Rate (lb ai)**	**Application Timing**	**Use Directions**
Root rot Seed rot (*Pythium ultimum*) Seeding blight (*Pythium aphanidermatum*))	0.15-0.30 fl oz/1000 row ft (0.002-0.004)	At planting	Apply as an in-furrow spray in water or liquid fertilizer. Direct the spray into the furrow over the seed just before the seeds are covered.

Resistance Management: Recommendations

- Refer to **Section 3.2**

USE RESTRICTIONS

1) Refer to **Section 6.1** for additional product use restrictions.
2) **Maximum Single Application Rate:** 0.30 fl oz/1000 row ft (equivalent to 0.004 lb ai/A mefenoxam
3) **Minimum Application Interval:** NA
4) **Maximum Annual Application Rate:** 0.30 fl oz/1000 row ft/year (equivalent to 0.004 lb ai/A mefenoxam
   a) **DO NOT** exceed 0.125 lb ai/A/year of soil-applied mefenoxam- and metalaxyl-containing products.
5) **Pre-harvest Interval (PHI):** NA

7.8 Cucurbit Vegetables, Crop Group 9

Crops (including all cultivars, varieties, and/or hybrids of these)	
Chayote (fruit) Chinese waxgourd (Chinese preserving melon) Citron melon Cucumber Gherkin **Gourd, edible** Hyotan Cucuzza Hechima Chinese okra ***Momordica* spp.** Balsam apple Balsam pear Bittermelon Chinese cucumber **Muskmelon** Cantaloupe Casaba Crenshaw melon Golden pershaw melon Honeydew melon	Honey balls Mango melon Persian melon Pineapple melon Santa Claus melon Snake melon True cantaloupe Pumpkin **Squash, summer** Crookneck squash Scallop squash Straightneck squash Vegetable marrow Zucchini **Squash, winter** Acorn squash Butternut squash Calabaza Hubbard squash Spaghetti squash Watermelon

Target Disease	Rate pt/A (lb ai)	Application Timing	Use Directions
Damping off (*Pythium* spp) **<u>Suppression:</u>** Phytophthora blight (*Phytophthora capsici*)	2.0-4.0 (0.5-1.0)	Preplant incorporated At planting	**For preplant incorporation** apply as a broadcast or banded application in water or liquid fertilizer and incorporate in the top 2 inches of soil. **For soil spray applications**, apply as a broadcast or banded application in water or liquid fertilizer at planting. Move into soil as recommended in **Section 4.3.** **For injection (drip irrigation),** inject Mefenoxam 2E into the irrigation water at the labeled rates. For banded applications, use a 7-inch band.

For soil directed and other foliar applications, refer to **Section 8.7**.

Resistance Management Recommendations:

- Refer to **Section 3.2.**

Precautions:

- There is a risk of plant injury with transplant water application.
  - Crop injury is more likely when applied in less than 100 gallons/acre. Injury is temporary and should disappear within three weeks.
  - Pre-mixing Mefenoxam 2E in a tank separate from the transplant water source tank will help to prevent incompatibility with fertilizers or other pesticides in the transplant water solution.

USE RESTRICTIONS
1) Refer to **Section 6.1** for additional product use restrictions. 2) **Maximum Single Application Rate:** 4.0 pt/A (equivalent to 1 lb ai/A mefenoxam) 3) **Minimum Application Interval:** 14 days 4) **Maximum Annual Application Rate:** 4.0 pt/A/year (equivalent to 1 lb ai/A mefenoxam) a) **DO NOT** exceed 1.0 lb ai/A/year of soil-applied and 0.5 lb ai/A/year of foliar-applied mefenoxam- and metalaxyl-containing products. 5) **Pre-harvest Interval (PHI):** 5 days

7.9 Fruiting Vegetables

7.9.1 Crop Group 8, except Tomato

Crops (including all cultivars, varieties, and/or hybrids of these)			
Eggplant Groundcherry		Pepino Pepper, bell	Pepper, non-bell Tomatillo
Target Disease	**Rate pt/A (lb ai)**	**Application Timing**	**Use Directions**
Damping off (*Pythium* spp.) **<u>Suppression:</u>** Crown rot (*Phytophthora capsici*)	2.0 (0.5)	Preplant or at-planting For **direct seeded peppers**, apply preplant or prior to emergence. For application by **drip irrigation**, make up to two additional applications on a 30-day schedule following initial application at planting. To control **crown rot**, apply before the plants are infected to obtain satisfactory control.	**For soil spray applications**, apply as a broadcast or banded application in water or liquid fertilizer preplant or at-planting. Move into soil as recommended in **Section 4.3.** For banded applications, use a 12- to 16-inch band. **For Injection (drip irrigation),** inject Mefenoxam 2E into the irrigation water.
For soil directed and other foliar applications, refer to **Section 8.8.1**.			
Resistance Management Recommendations: • Refer to **Section 3.2**			
USE RESTRICTIONS			
1) Refer to **Section 6.1** for additional product use restrictions. 2) **Maximum Single Application Rate:** 2.0 pt/A (equivalent to 0.5 lb ai/A mefenoxam) 3) **Minimum Application Interval:** 30 days 4) **Maximum Annual Application Rate:** 6.0 pt/A/year (equivalent to 1.5 lb ai/A mefenoxam) a) **DO NOT** exceed 1.5 lb ai/A/year of soil-applied containing products and 0.5 lb ai/A/year of foliar-applied mefenoxam- and metalaxyl-containing products. 5) **Pre-harvest Interval (PHI):** 7 days			

7.9.2 Tomato

Crops (including all cultivars, varieties, and/or hybrids)			
Tomato			
Target Disease	**Rate pt/A (lb ai)**	**Application Timing**	**Use Directions**
Damping off (*Pythium* spp.)	2.0 – 4.0 (0.5-1.0)	At planting	**Soil spray (broadcast or band):** Apply in water or liquid fertilizer. Move product into soil as recommended in **Section 4.3.** For banded applications, use a 7-inch band.
Fruit rot Root rot (*Phytophthora* spp.) (*Pythium* spp.)	2.0 (0.5)	4-6 weeks after planting Apply a second drip irrigation as needed up to 1 week before harvest.	**Injection (drip irrigation):** Initiate control of fruit and root rot with a soil application as described above. Make subsequent applications by drip application according to the application timing schedule. For injected applications, base rate calculations on a 7-inch band.
For soil directed and other foliar applications, refer to **Section 8.8.2**.			
Resistance Management Recommendations: • Refer to **Section 3.2**			
USE RESTRICTIONS			
1) Refer to **Section 6.1** for additional product use restrictions. 2) **Maximum Single Application Rate:** 4.0 pt/A (equivalent to 1 lb ai/A mefenoxam) 3) **1Minimum Application Interval:** 28 days 4) **Maximum Annual Application Rate:** 6.0 pt/A/year (equivalent to 1.5 lb ai/A mefenoxam) a) **DO NOT** exceed 1.5 lb ai/A/year of soil-applied mefenoxam- and metalaxyl-containing products and 0.5 lb ai/A/year of foliar-applied mefenoxam- and metalaxyl-containing products. 5) **Pre-harvest Interval (PHI):** 7 days			

7.10 Grass, Forage, Fodder and Hay, Crop Group 17

Crops (including all cultivars, varieties, and/or hybrids of these)			
Bermuda grass Bluegrass	Bromegrass	Fescue	
Target Disease	**Rate pt/A (lb ai)**	**Application Timing**	**Use Directions**
Seedling diseases (*Pythium* spp.)	0.50 – 2.0 (0.125-0.5)	At planting	**Soil spray (broadcast):** Apply as a broadcast soil surface spray. If the grass seed was previously treated with mefenoxam or metalaxyl as a seed dressing, use the 0.50-1.0 pt/A rate. Move into soil as recommended in **Section 4.3.**
Resistance Management Recommendations: • Refer to **Section 3.2**			
USE RESTRICTIONS			
1) Refer to **Section 6.1** for additional product use restrictions. 2) **Maximum Single Application Rate:** 2.0 pt/A (equivalent to 0.5 lb ai/A mefenoxam) 3) **Minimum Application Interval:** NA 4) **Maximum Annual Application Rate:** 2.0 pt/A/year (equivalent to 0.5 lb ai/A mefenoxam) a) **DO NOT** exceed 0.50 lb ai/A/year of mefenoxam- and metalaxyl-containing products. 5) **DO NOT** apply to range grasses. 6) **DO NOT** graze, feed green forage, or cut hay for 60 days following application. 7) **Pre-harvest Interval (PHI):** 60 days			

7.11 Herbs, Fresh and Dried, Herb Subgroup 19A

Crops (including all cultivars, varieties, and/or hybrids of these)		
Angelica, balm	Curry (leaf)	Rosemary
Basil	Dillweed	Rue
Borage	Horehound	Sage
Burnet	Hyssop	Savory, Summer and winter
Camomile	Lavender	Sweet bay
Catnip	Lemongrass	Tansy
Chervil (dried)	Lovage (leaf)	Tarragon
Chive	Marigold	Thyme
Chive, Chinese, Clary	Marjoram	Wintergreen
Coriander (leaf)	Nasturtium	Woodruff
Costmary	Parsley (dried)	Wormwood
Cilantro (leaf)	Pennyroyal	

Target Disease	Rate pt/A (lb ai)	Application Timing	Use Directions
Damping off (*Pythium* spp.)	2.0 – 4.0 (0.5-1.0)	Preplant incorporated	**Preplant incorporated (broadcast or band):** Apply in water or liquid fertilizer and mechanically incorporate in the top 2 inches of soil. Move into soil as recommended in **Section 4.3.** **Soil spray (broadcast or band):** Apply in sufficient water to provide uniform coverage. For banded applications, use a 7-inch band.

For soil directed and other foliar applications, refer to **Section 8.9**.

Resistance Management Recommendations:

- Refer to **Section 3.2**

USE RESTRICTIONS

1) Refer to **Section 6.1** for additional product use restrictions.
2) **Maximum Single Application Rate:** 4.0 pt/A (equivalent to 1 lb ai/A mefenoxam)
3) **Minimum Application Interval:** 28 days
4) **Maximum Annual Application Rate:** 8.0 pt/A/year (equivalent to 2 lb ai/A mefenoxam)
   a) **DO NOT** exceed 2.0 lb ai/A/year of soil-applied mefenoxam- and metalaxyl-containing products.
5) **Pre-harvest Interval (PHI):** 21 days

7.12 Leafy Vegetables (except Brassica), Crop Group 4

Crops (including all cultivars, varieties, and/or hybrids of these)		
Amaranth, Chinese spinach Amaranth, leafy Amaranth, tampala Arugula (Rocket) Cardoon Celery Celery, Chinese Celtuce Chervil Chrysanthemum, edible-leaved Chrysanthemum, garland	Corn salad Cress, garden Cress, upland Dandelion Dock (sorrel) Dillweed Dock Endive (escarole) Fennel, Florence (finochio) Lettuce, head and leaf	Orach Parsley Purslane, garden Purslane, winter Radicchio (red chicory) Rhubarb Spinach Spinach, New Zealand Spinach, vine Swiss chard

Target Disease	Rate pt/A (lb ai)	Application Timing	Use Directions
Damping off (*Pythium* spp.)	2.0 – 4.0 (0.5-1.0)	Preplant incorporated At planting	**Preplant incorporated (broadcast or band):** Apply in water or liquid fertilizer and mechanically incorporate in the top 2 inches of soil. **Soil spray (broadcast or band):** Apply in water or liquid fertilizer at planting. Move into soil as recommended in **Section 4.3.** For banded applications, use a 7-inch band.
Spinach only: Downy Mildew (*Peronospora effuse; P. farinosa*) White rust (*Albugo occidentalis*)	0.50 (0.125)	21 days after planting or after the first cutting. A second application may be shanked in after the next cutting. Applications may be made on a 21-day interval.	**Shank application for spinach only:** Shank in Mefenoxam 2E according to the application timing schedule. A total of 2 shanked applications may be made to spinach.

Resistance Management Recommendations:

- Refer to **Section 3.2**

Precautions:

- White rust can be controlled only in a preventive disease control program that begins with an application of Mefenoxam 2E.

USE RESTRICTIONS

1) Refer to **Section 6.1** for additional product use restrictions.
2) **Maximum Single Application Rate:** 4.0 pt/A (equivalent to 1 lb ai/A mefenoxam)
3) **Minimum Application Interval:** 21 days - spinach only at 0.25 pt/A/application.
4) **Maximum Annual Application Rate:** 4.0 pt/A/year (equivalent to 1 lb ai/A mefenoxam)
   a) For lettuce, **DO NOT** exceed 1.0 lb ai/A/year of soil-applied and 0.4 lb ai/A/year of foliar-applied mefenoxam- and metalaxyl-containing products.

b) For spinach, **EITHER**, **DO NOT** exceed 1.0 lb ai/A/year of soil-applied mefenoxam- and metalaxyl -containing products at planting and 0.25 lb ai/A/year of soil-applied post planting, shanked-in applications of mefenoxam- and metalaxyl-containing products **OR, DO NOT** exceed the equivalent of 1.0 lb ai/A/year of soil-applied mefenoxam- and metalaxyl-containing products at planting and 0.4 lb ai/A/year of foliar-applied mefenoxam- and metalaxyl-containing products.

5) If Mefenoxam 2E is not applied at planting, **DO NOT** use at any other time throughout the season.
6) **DO NOT** apply Mefenoxam 2E in foliar applications or make curative applications in situations where white rust is already established.
7) **Pre-harvest Interval (PHI):**
   a) Leafy vegetables (except spinach): 7 days
   b) Spinach: 21 days

7.13 Legume Vegetables, Succulent or Dried, Crop Group 6, except Soybeans

Crops (including all cultivars, varieties, and/or hybrids of these)	
Bean (*Lupinus* spp.)	Mung bean
Grain lupin	Rice bean
Sweet lupin	Southern pea
White lupin	Urd bean
White sweet lupin	Yardlong bean
Bean (*Phaseolus* spp.)	**Pea (*Pisum* spp.)**
Field bean	Dwarf pea
Kidney bean	Edible-pod pea
Lima bean	English pea
Navy bean	Field pea
Pinto bean	Garden pea
Runner bean	Green pea
Snap bean	Snow pea
Tepary bean	Sugar snap pea
Wax bean	Broad bean
Bean (*Vigna* spp.)	Chickpea (garbanzo bean)
Adzuki bean	Guar
Asparagus bean	Jackbean
Blackeyed pea	Lablab bean
Catjang	Lentil
Chinese longbean	Pigeon pea
Cowpea	Soybean, (immature seed only)
Crowder pea	Sword bean
Moth bean	

Target Disease	Rate pt/A (lb ai)	Application Timing	Use Directions
Damping off Root rot (*Pythium* spp.)	1.0-2.0 (0.25-0.5)	Preplant incorporated.	**Preplant incorporated (broadcast or band):** Apply in water or liquid fertilizer and mechanically incorporate in the top 2 inches of soil.
		At planting	**Soil spray (broadcast or band):** Apply in water or liquid fertilizer at planting. Move into soil as recommended in **Section 4.3.**

			For banded applications, use a 7-inch band.

Resistance Management Recommendations:
- Refer to **Section 3.2**

USE RESTRICTIONS

1) Refer to **Section 6.1** for additional product use restrictions.
2) **Maximum Single Application Rate:** 2.0 pt/A (equivalent to 0.5 lb ai/A mefenoxam)
3) **Minimum Application Interval:** NA
4) **Maximum Annual Application Rate:**2.0 pt/A/year (equivalent to 0.5 lb ai/A mefenoxam)
   a) **DO NOT** exceed 0.5 lb ai/A/year of soil-applied mefenoxam- and metalaxyl-containing products.
5) **Pre-harvest Interval (PHI):** NA

7.14 Peanuts

Crops (including all cultivars, varieties, and/or hybrids)

Peanuts

Target Disease	Rate pt/A (lb ai)	Application Timing	Use Directions
Pythium root rot (*Pythium* spp.)	0.50 (0.125)	For seedling disease control	**In-furrow spray:** Position the spray so the fungicide is mixed with the soil covering the seed. Avoid spraying the seed directly or crop injury may occur. **Soil spray (banded):** Apply over the row. Use a 7-inch band. Move into soil as recommended in **Section 4.3.**

For soil directed and other foliar applications, refer to **Section 8.11**.

Resistance Management Recommendations:
- Refer to **Section 3.2**

USE RESTRICTIONS

1) Refer to **Section 6.1** for additional product use restrictions.
2) **Maximum Single Application Rate:**0.50 pt/A (equivalent to 0.125 lb ai/A mefenoxam)
3) **Minimum Application Interval:** NA
4) **Maximum Annual Application Rate:**0.50 pt/A/year (equivalent to 0.125 lb ai/A mefenoxam)
   a) **DO NOT** exceed 0.125 lb ai/A/year of soil-applied and 0.50 lb ai/A/year of foliar-applied mefenoxam- and metalaxyl-containing products.
5) **Pre-harvest Interval (PHI):** NA

7.15 Pineapple, Crown Dip

Crops (including all cultivars, varieties, and/or hybrids)			
Pineapple			
Target Disease	**Rate pt (lb ai)**	**Application Timing**	**Use Directions**
Heart rot disease (*Phytophthora* spp.)	1.0 - 2.0 in 100 gallons of water (0.25-0.50)	**Crown dip** before planting	The amount of dip solution per acre will depend on crown size, plant density, and dipping techniques. Use 75-100 gallons of the mixture per acre for dipping.

Resistance Management Recommendations:

- Refer to **Section 3.2**

USE RESTRICTIONS

1) Refer to **Section 6.1** for additional product use restrictions.
2) **Maximum Single Application Rate:** 2.0 pt/100 gallons water (equivalent to 0.5 lb ai/A mefenoxam)
3) **Minimum Application Interval:** NA
4) **Maximum Annual Application Rate:** 2.0 pt/100 gallons water/A/year (equivalent to 0.5 lb ai/A mefenoxam)
   a) **DO NOT** exceed 0.5 lb ai/A/year of mefenoxam- and metalaxyl-containing products.
5) If there is a crop failure within one year of planting treated crowns, **DO NOT** harvest plant material for animal feed.
6) **Pre-harvest Interval (PHI):** NA

7.16 Root and Tuber Vegetables

7.16.1 Carrots

Crops (including all cultivars, varieties, and/or hybrids)			
Carrots			
Target Disease	**Rate pt/A (lb ai)**	**Application Timing**	**Use Directions**
Cavity spot Damping off Root dieback (*Pythium* spp.)	1.0-2.0 (0.125-0.5)	Preplant incorporated. At-planting or prior to emergence.	**For preplant incorporation**, apply as a broadcast or band application. Apply in water or liquid fertilizer and mechanically incorporate in the top 2 inches of soil. **For at-planting or prior to emergence application**, apply by broadcast or band application in water or liquid fertilizer. Move into soil as recommended in **Section 4.3.** For banded applications, use a 7-inch band.
For soil directed and other foliar applications, refer to **Section 8.16.1**.			
Resistance Management Recommendations: • Refer to **Section 3.2**.			
USE RESTRICTIONS			
1) Refer to **Section 6.1** for additional product use restrictions. 2) **Maximum Single Application Rate:** 2.0 pt/A (equivalent to 0.5 lb ai/A mefenoxam) 3) **Minimum Application Interval:** 14 days 4) **Maximum Annual Application Rate:** 5.6 pt/A/year (equivalent to 1.4 lb ai/A mefenoxam) a) **DO NOT** exceed 1.4 lb ai/A/year of mefenoxam- and metalaxyl-containing products. b) **DO NOT** exceed 0.65 lb ai/A/year of soil-applied and 0.75 lb ai/A/year of foliar-applied metalaxyl- and mefenoxam-containing products. 5) **DO NOT** use a soil application if a seed treatment containing mefenoxam or metalaxyl is used. 6) **Pre-harvest Interval (PHI):** 7 days			

7.16.2 Crop Group 1, except Carrot, Ginseng, Potato and Sugar Beet

Crops (including all cultivars, varieties, and/or hybrids of these)			
Arracacha Arrowroot Artichoke, Chinese Artichoke, Jerusalem Beet, garden Burdock, edible Canna, edible Cassava, bitter Cassava, sweet Celeriac (celery root) Chayote (root)		Chervil, turnip-rooted Chicory Chufa Dasheen (taro) Ginger Horseradish Leren Parsley, turnip-rooted Parsnip Radish Radish, oriental (daikon)	Rutabaga Salsify (oyster plant) Salsify, black Salsify, Spanish Skirret Sweet potato Tanier (cocoyam) Turmeric Turnip Yam bean (jicama, manois pea) Yam, true
Target Disease	**Rate pt/A (lb ai)**	**Application Timing**	**Use Directions**
Pythium root rot (*Pythium* spp.) Phytophthora root rot (*Phytophthora* spp.)	2.0 – 4.0 (0.5-1.0)	Preplant incorporated	**Preplant incorporated (broadcast or band):** Apply in water or liquid fertilizer and mechanically incorporate in the top 2 inches of soil. Use sufficient water to provide uniform coverage of soil.
		At planting	**Soil spray (broadcast or band):** Apply in water or liquid fertilizer at planting. Move into soil as recommended in **Section 4.3.** For banded applications, use a 7-inch band.
Resistance Management Recommendations: • Refer to **Section 3.2**			
USE RESTRICTIONS			
1) Refer to **Section 6.1** for additional product use restrictions. 2) **Maximum Single Application Rate:** 4.0 pt/A (equivalent to 1 lb ai/A mefenoxam) 3) **Minimum Application Interval:** NA 4) **Maximum Annual Application Rate:** 4.0 pt/A/year (equivalent to 1 lb ai/A mefenoxam) a) **DO NOT** exceed 1.0 lb ai/A/year of mefenoxam- and metalaxyl-containing products. 5) **Pre-harvest Interval (PHI):** NA			

7.16.3 Ginseng

Crops (including all cultivars, varieties, and/or hybrids)			
Ginseng			
Target Disease	**Rate pt/A (lb ai)**	**Application Timing**	**Use Directions**
Phytophthora Root Rot (*Phytophthora cactorum*)	1.5 (0.375)	Apply in the spring before plants start growing.	For stand establishment, apply uniformly as a soil drench to the soil surface. Apply in 100-400 gallons of water per acre. Follow with additional applications of Ridomil Gold GR.
Resistance Management Recommendations: • Refer to **Section 3.2**			
USE RESTRICTIONS			
1) Refer to **Section 6.1** for additional product use restrictions. 2) **Maximum Single Application Rate:** 1.5 pt/A (equivalent to 0.375 lb ai/A mefenoxam) 3) **Minimum Application Interval:** NA 4) **Maximum Annual Application Rate:** 1.5 pt/A/year (equivalent to 0.375 lb ai/A mefenoxam) a) **DO NOT** exceed 0.375 lb ai/A/year of mefenoxam- and metalaxyl-containing products. 5) **DO NOT** make more than one application of Mefenoxam 2E per year. 6) **Pre-harvest Interval (PHI):** NA			

7.16.4 Potato

Crops (including all cultivars, varieties, and/or hybrids)			
Potatoes			
Target Disease	**Rate (lb ai)**	**Application Timing**	**Use Directions**
Pink rot (*Phytophthora erythroseptica*) Pythium leak Pythium seedling disease (*Pythium* spp.)	0.84 fl oz/1,000 row ft Equiva-lent to 12.2 fl oz/A on 36 inch rowspac-ing (0.19)	At planting A follow up application may be needed at tuber initiation.	**In-furrow spray:** Apply directly over the seed pieces in-furrow as a 6- to 8-inch band prior to row closure or use markout application method (incorporated). If needed, follow this in-furrow application with a Mefenoxam 2E prepack or tank mix (see **Section 8.12.1**) foliar application at tuber initiation: • When conditions are conducive for disease development. • When the variety is susceptible or moderately susceptible to Pink rot/Pythium leak. • In areas with a long growing season. Mefenoxam 2E may be impregnated on dry fertilizer or applied in combination with liquid fertilizers.

For soil directed and other applications, refer to **Section 8.12.1**.

Resistance Management Recommendations:
- Refer to **Section 3.2**

USE RESTRICTIONS

1) Refer to **Section 6.1** for additional product use restrictions.
2) **Maximum Single Application Rate:** 0.84 fl oz/1000 row ft (equivalent to 0.019 lb ai/A mefenoxam)
3) **Minimum Application Interval:** NA
4) **Maximum Annual Application Rate:** 0.84 fl oz/1000 row ft (equivalent to 0.019 lb ai/A mefenoxam)
   a) **DO NOT** exceed 0.34 lb ai/A/year of soil-applied and 0.40 lb ai/A/year of foliar-applied mefenoxam- and metalaxyl-containing products.
5) **DO NOT** use the "dribble" application method.
6) **Pre-harvest Interval (PHI):** NA

7.16.5 Sugar Beet

Crops (including all cultivars, varieties, and/or hybrids)

Sugar beet

Target Disease	Rate pt/A (lb ai)	Application Timing	Use Directions
Pythium root rot (*Pythium* spp.)	2.0 – 4.0 (0.5-1.0)	Preplant incorporated	**Preplant incorporated (broadcast or band):** Apply in water or liquid fertilizer and mechanically incorporate in the top 2 inches of soil.
		At planting	**Soil spray (broadcast or band):** Apply in water or liquid fertilizer at planting. Move into soil as recommended in **Section 4.3.** For banded applications, use a 7-inch band.

Resistance Management Recommendations:
- Refer to **Section 3.2**

USE RESTRICTIONS

1) Refer to **Section 6.1** for additional product use restrictions.
2) **Maximum Single Application Rate:** 4.0 pt/A (equivalent to 1 lb ai/A mefenoxam)
3) **Minimum Application Interval:** NA
4) **Maximum Annual Application Rate:** 4.0 pt/A/year (equivalent to 1 lb ai/A mefenoxam)
   a) **DO NOT** exceed 1.0 lb ai/A/year of soil-applied mefenoxam- and metalaxyl-containing products.
5) **Pre-harvest Interval (PHI):** NA

7.17 Soybeans

Crops (including all cultivars, varieties, and/or hybrids)			
Soybean			
Target Disease	**Rate (lb ai)**	**Application Timing**	**Use Directions**
Phytophthora root and stem rot (*Phytophthora megasperma*) Pythium damping off (*Pythium* spp.)	0.16-0.56 fl oz/1,000 row ft (0.0025-0.0087)	At seeding	**In-furrow spray:** Apply in water or liquid fertilizer. Position the spray so the fungicide is mixed with the soil covering the seed. Use the higher specified rate for full-season control. Use 0.16-0.30 fl oz for early- to mid-season control.
	0.74-2.5 pt/A (0.18-0.625)	At seeding	**Soil spray (broadcast or band):** Apply in water or liquid fertilizer. Use the higher specified rate for full-season control. Use 0.74-1.50 pt for early- to mid-season control. For banded applications, use a 7-inch band. Move into soil as recommended in **Section 4.3.** For best results, use soybean varieties that have some degree of resistance to the races of *Phytophthora* present in the field. Use the higher specified rate in areas with a history of heavy *Phytophthora* damage.

Resistance Management Recommendations:

- Refer to **Section 3.2**

Precaution:

- Under heavy late-season *Phytophthora* pressure, Mefenoxam 2E may not provide complete control.

USE RESTRICTIONS

1) Refer to **Section 6.1** for additional product use restrictions.
2) **Maximum Single Application Rate:** 2.5 pt/A (equivalent to 0.625 lb ai/A mefenoxam)
3) **Minimum Application Interval:** NA
4) **Maximum Annual Application Rate:** 2.5 pt/A/year (equivalent to 0.625 lb ai/A mefenoxam)
   a) **DO NOT** exceed 0.625 lb ai/A/year of mefenoxam- and metalaxyl-containing products.
5) **Pre-harvest Interval (PHI):** NA

7.18 **Tobacco**

Crops (including all cultivars, varieties, and/or hybrids)			
Tobacco			
Target Disease	**Rate pt/A (lb ai)**	**Application Timing**	**Use Directions**
Damping off (*Pythium* spp.)	1.0-2.0 (0.25-0.5) or 0.50-1.0 fl oz/150 sq yd	Before or at time of planting.	**Soil spray (broadcast):** Apply as a preplant soil application before or at time of planting. Use higher specified application rate on broadleaf tobacco. Use 50 gal/A of water (2 gallons water/150 sq yd). Move into soil as recommended in **Section 4.3.**
Blue mold (*Peronospora tabacina*)	**Broadcast;** 1.0 - 2.0 (0.25-0.5) For No-Till Tobacco: 1.0 – 2.0 (0.25-0.5)	Prior to transplanting.	**Soil spray (broadcast):** Apply as a broadcast soil application and incorporate in the top 2-4 inches of soil before forming beds. Use the low specified rate for low disease pressure or early-season control. Use the higher specified rate for high disease pressure, extended control, and for burley and other tobacco types other than flue-cured.
Black shank (*Phytophthora parasitica* var. *nicotianae*)	Broadcast 2.0 – 6.0 (0.5-1.5) For no-till tobacco: 1.0 – 2.0 (0.25-0.5)	Within one week of planting (soil spray broadcast application). Apply preventatively. If black shank is expected early in the season, apply as near as possible to transplanting followed by sequential application.	**Soil spray (broadcast):** Apply to the soil and incorporate in the top 2-4 inches of soil. Use the higher specified rate if disease epidemic is expected to be severe. In FL and GA, use 6 pt/A where black shank is severe. Move into soil as recommended in **Section 4.3.** 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 with a history of severe black shank, use the highest specified rate and plant variety resistant to the race of *Phytophthora* present (Burley L8 hybrids are

			resistant to only *Phytophthora* Race 0).
For soil directed and other foliar applications, refer to **Section 8.14**.			
Resistance Management Recommendations: • Refer to **Section 3.2**			
Precautions: • Failure to adequately control nematodes in fields treated with Mefenoxam 2E may result in poor control of black shank. • Do Not apply to stressed seedlings or during hot and dry conditions due to injury potential.			
USE RESTRICTIONS			
1) Refer to **Section 6.1** for additional product use restrictions. 2) **Maximum Single Application Rate:** 6.0 pt/A (equivalent to 1.5 lb ai/A mefenoxam) 3) **Minimum Application Interval:** 14 days 4) **Maximum Annual Application Rate:** 6.0 pt/A/year (equivalent to 1.5 lb ai/A mefenoxam) a) **DO NOT** exceed 1.5 lb ai/A/year of mefenoxam- and metalaxyl-containing products. 5) **DO NOT** use in high black shank areas on highly susceptible flue-cured varieties. 6) **DO NOT** use Mefenoxam 2E for black shank control in PA. 7) **Pre-harvest Interval (PHI):** NA			

8.0 CROP USE DIRECTIONS FOR SOIL DIRECTED OR OTHER FOLIAR APPLICATIONS

- NA indicates not applicable.
- The restricted-entry interval (REI) for soil-directed or foliar applications is 48 hours.

8.1 Alfalfa

Crops (including all cultivars, varieties, and/or hybrids)			
Alfalfa (birdsfoot trefoil)			
Target Disease	**Rate pt/A (lb ai)**	**Application Timing**	**Use Directions**
Damping Off (*Pythium* spp.) Root Rot (*Phytophthora* spp.)	0.50 (0.125)	At planting when inter-seeding into existing stands for renovation.	**Soil spray (broadcast):** Apply as a broadcast soil surface spray.
For soil injected or soil incorporated applications, refer to **Section 7.1**.			
Resistance Management Recommendations: • Refer to **Section 3.2**			
USE RESTRICTIONS			
1) Refer to **Section 6.1** for additional product use restrictions. 2) **Maximum Single Application Rate:** 0.50 pt/A (equivalent to 0.125 lb ai/A mefenoxam) 3) **Minimum Application Interval:** NA 4) **Maximum Annual Application Rate:** 1.0 pt/A/year (equivalent to 0.5 lb ai/A mefenoxam) a) **DO NOT** exceed 0.5 lb ai/A/year of mefenoxam- and metalaxyl-containing products. 5) **DO NOT** feed green forage or cut hay for 60 days following application. 6) **Pre-harvest Interval (PHI):** 60 days			

8.2 Apple

<table>
<tr><th colspan="4">Crops (including all cultivars, varieties, and/or hybrids)</th></tr>
<tr><td colspan="2">Apple bearing trees</td><td colspan="2">Apple, non-bearing trees</td></tr>
<tr><th>Target Disease</th><th>Rate
(lb ai)</th><th>Application Timing</th><th>Use Directions</th></tr>
<tr><td rowspan="2">Collar rot
Crown rot
Root rot
(Phytophthora spp).</td><td>4.0 qt/A
(2.0)
or
3.0 fl oz/1000 sq ft</td><td>Apply in the early spring before growth begins (established plantings) and in the fall after harvest but before the ground freezes.</td><td>Soil spray (broadcast, banded or irrigation): The treated area is based on the area under the tree canopy or the area of the sprayed row.

Use sufficient water volume to obtain thorough coverage of the soil.

Move into soil as recommended in Section 4.3.</td></tr>
<tr><td>Diluted mixture: 1.0 pt in 100 gal water
(0.25)</td><td>Apply in early spring before growth starts and in the fall after harvest, but before the ground freezes.

On new plantings, delay the first application until 2 weeks after planting.

NOTE: Apply before symptoms appear.</td><td>Soil drench: Apply the diluted mixture around the trunk of each tree.
Use the amount of diluted mixture based upon the following tree parameters:

<table><tr><th>Trunk diameter at 12 inches above the soil line</th><th>Quantity of diluted mixture</th></tr><tr><td><1 inch</td><td>1 qt</td></tr><tr><td>1-3 inches</td><td>3 qt</td></tr><tr><td>4 inches</td><td>3.5 qt</td></tr><tr><td>5 inches</td><td>4qt</td></tr></table>
Use Mefenoxam 2E in conjunction with good cultural practices and rootstocks that are most tolerant to disease.</td></tr>
<tr><td colspan="4">Resistance Management Recommendations:
• Refer to Section 3.2</td></tr>
<tr><td colspan="4">Precaution:
• Mefenoxam 2E will not revitalize trees showing moderate to severe disease symptoms.</td></tr>
<tr><td colspan="4">USE RESTRICTIONS</td></tr>
<tr><td colspan="4">1) Refer to Section 6.1 for additional product use restrictions.
2) Maximum Single Application Rate: 4.0 qt/A (equivalent to 2 lb ai/A mefenoxam)
3) Minimum Application Interval: 90 days
4) Maximum Annual Application Rate: 8.0 qt/A/year (equivalent to 4 lb ai/A mefenoxam)
a) DO NOT exceed 4.0 lb ai/A/year of mefenoxam- and metalaxyl-containing products.
5) DO NOT graze or feed cover crops in treated orchards.
6) Pre-harvest Interval (PHI): NA</td></tr>
</table>

8.3 Asparagus

Crops (including all cultivars, varieties, and/or hybrids)			
Asparagus			
Target Disease	**Rate pt/A (lb ai)**	**Application Timing**	**Use Directions**
Crown rot Spear rot *(Phytophthora* spp*)*	2.0 (0.5)	**Cutting beds:** Apply 30 to 60 days before the first cutting. Apply again just before the beginning of harvest. **New plantings:** Apply after planting seedlings or after covering one-year old crowns.	**Soil spray (broadcast or band):** Apply as a soil spray (broadcast or band). Move into soil as recommended in **Section 4.3.**
Resistance Management Recommendations: • Refer to **Section 3.2**			
USE RESTRICTIONS			
1) Refer to **Section 6.1** for additional product use restrictions. 2) **Maximum Single Application Rate:** 2.0 pt/A (equivalent to 0.5 lb ai/A mefenoxam) 3) **Minimum Application Interval:** 30 days 4) **Maximum Annual Application Rate:** 4.0 ptA/year (equivalent to 1 lb ai/A mefenoxam) a) **DO NOT** exceed 1.0 lb ai/A/year of soil-applied mefenoxam- and metalaxyl-containing products. 5) **Pre-harvest Interval (PHI):** 1 day			

8.4 Avocado

Crops (including all cultivars, varieties, and/or hybrids)			
Avocado			
Target Disease	**Rate pt/A (lb ai)**	**Application Timing**	**Use Directions**
Root Rot *(Phytophthora cinnamomi)*	2.0 – 8.0 (0.5-2.0)	Start of the growing season or at transplanting. Two additional applications may be made at 3-month intervals. Applications are not needed during the winter months of November through February.	**Sprinkler irrigation:** Apply as a soil surface spray to the soil surface under the tree canopy or via the irrigation system (drip, microemitter, and sprinkler). Use 2.0 pt/A if the trees have a canopy diameter of 2 ft. Increase the rate as the canopy diameter increases. For canopy diameters of 15 ft or more, use the 8.0 pt/A rate.
		Begin applications as soon as soil tests indicate the presence of *Phytophthora*.	**Soil spray:** Apply to the soil directly under the drip emitter. Use irrigation to incorporate the material into the soil. If there is more than one emitter, distribute the amount of Mefenoxam 2E among the emitters.

			Use the same rate and application regime described above under sprinkler irrigation. For new plantings, use *Phytophthora*-resistant rootstocks.
For soil directed or soil incorporated applications, refer to **Section 7.3**.			
Resistance Management Recommendations: • Refer to **Section 3.2**			
Precaution: • Mature trees in moderate to advanced stage of decline cannot be cured with Mefenoxam 2E.			
USE RESTRICTIONS			
1) Refer to **Section 6.1** for additional product use restrictions. 2) **Maximum Single Application Rate:** 8.0 pt/A (equivalent to 2 lb ai/A mefenoxam) 3) **Minimum Application Interval:** 90 days 4) **Maximum Annual Rate:** 24.0 ptA/year (equivalent to 6 lb ai/A mefenoxam) a) **DO NOT** exceed 6.0 lb ai/A/year of soil-applied mefenoxam- and metalaxyl-containing products. 5) **Pre-harvest Interval (PHI):** 28 days			

8.5 Berry and Small Fruit

8.5.1 Blueberries

Crops (including all cultivars, varieties, and/or hybrids of these)			
Blueberries			
Target Disease	**Rate pt/A (lb ai)**	**Application Timing**	**Use Directions**
Root rot *(Phytophthora* spp.)	7.2 (1.8) or 0.50 pt/1000 row ft	At planting Reapply once during a period favorable for root rot.	**Soil spray (broadcast or band): New Plantings:** For band applications, use an 18-inch band. Move into soil as recommended in **Section 4.3.**
			Soil spray (band) Established Plantings: Make applications in a 3-ft. band over the row before the plants start to grow in the spring. One additional application may be made to coincide with the period most favorable for root rot development. Move into soil as recommended in **Section 4.3.**
Resistance Management Recommendations: • Refer to **Section 3.2**.			
Precautions: • Mefenoxam 2E will not revitalize plants showing moderate to severe root rot symptoms.			

• Use Mefenoxam 2E in conjuction with good cultural practices to minimize disease.
USE RESTRICTIONS
1) Refer to **Section 6.1** for additional product use restrictions. 2) **Maximum Single Application Rate:** 7.2 pt/A (equivalent to 1.8 lb ai/A mefenoxam) 3) **Minimum Application Interval:** 90 days 4) **Maximum Annual Application Rate:** 14.4 pt/A/year (equivalent to 3.6 lb ai/A mefenoxam) a) **DO NOT** exceed 3.6 lb ai/A/year of soil-applied mefenoxam- and metalaxyl-containing products. 5) **Pre-harvest Interval (PHI):** 0 days

8.5.2 Cranberries

Crops (including all cultivars, varieties, and/or hybrids)			
Cranberry			
Target Disease	**Rate pt/A (lb ai)**	**Application Timing**	**Use Directions**
Phytophthora root rot *(Phytophthora* spp.)	2.0 – 3.5 (0.5-0.875)	Make 3 applications: Make the first application in the fall after harvest. Make the second application in the spring, and the final application up to, but no later than, 45 days before harvest.	Apply as a soil spray (broadcast) by ground or via chemigation (**Section 4.5**) equipment. Move product into the soil as recommended in **Section 4.3**.
Resistance Management Recommendations: • Refer to **Section 3.2**			
USE RESTRICTIONS			
1) Refer to **Section 6.1** for additional product use restrictions. 2) **Maximum Single Application Rate:** 3.5 pt/A (equivalent to 0.875 lb ai/A mefenoxam) 3) **Minimum Application Interval:** 90 days 4) **Maximum Annual Application Rate:** 10.5 pt/A/year (equivalent to 2.6 lb ai/A mefenoxam) a) **DO NOT** exceed 2.65 lb ai/A/year of soil-applied mefenoxam- and metalaxyl-containing products. 5) **DO NOT** apply by air. 6) **Pre-harvest Interval (PHI):** 45 days			

8.5.3 Lingonberries

Crops (including all cultivars, varieties, and/or hybrids of these)			
Lingonberry			
Target Disease	**Rate pt/A (lb ai)**	**Application Timing**	**Use Directions**
Root rot *(Phytophthora* spp.)	7.2 (1.8) or 0.50 pt/1000 row ft	**Soil spray (New Plantings):** At or after the time of planting	**Soil spray (New Plantings):** Apply as a broadcast or banded spray to the soil. For banded applications on new plantings, an 18-inch band over the row is recommended.

		Established Plantings: Before the plants start growth in the spring. A second application may be made to coincide with periods most favorable for root rot development.	**Established Plantings:** Apply in 3-feet band over the row, Move into soil as recommended in **Section 4.3.**

Resistance Management Recommendations:

- Refer to **Section 3.2**.

USE RESTRICTIONS

1) Refer to **Section 6.1** for additional product use restrictions.
2) **Maximum Single Application Rate:** 7.2 pt/A (equivalent to 1.8 lb ai/A mefenoxam)
3) **Minimum Application Interval:** 90 days
4) **Maximum Annual Application Rate:** 14.4 pt/A/year (equivalent to 3.6 lb ai/A mefenoxam)
   a) **DO NOT** exceed 3.6 lb ai/A/year of mefenoxam- and metalaxyl-containing products.
5) **DO NOT** use an adjuvant.
6) **Pre-harvest Interval (PHI):** 0 days

8.5.4 Raspberries

Crops (including all cultivars, varieties, and/or hybrids)			
Raspberry			
Target Disease	**Rate pt/A (lb ai)**	**Application Timing**	**Use Directions**
Root rot *(Phytophthora* spp.)	7.2 (1.8)	Make one application in the spring and another in the fall after harvest.	Apply in 3-foot band over the row.

Resistance Management Recommendations:

- Refer to **Section 3.2**

USE RESTRICTIONS

1) Refer to **Section 6.1** for additional product use restrictions.
2) **Maximum Single Application Rate:** 7.2 pt/A(equivalent to 1.8 lb ai/A mefenoxam)
3) **Minimum Application Interval:** 90 days
4) **Maximum Annual Application Rate:** 14.4 pt/A/year (equivalent to 3.6 lb ai/A mefenoxam)
   a) **DO NOT** exceed 3.6 lb ai/A/year of soil-applied mefenoxam- and metalaxyl-containing products.
5) **Pre-harvest Interval (PHI):** 45 days.

8.5.5 Strawberries

Crops (including all cultivars, varieties, and/or hybrids)			
Strawberry			
Target Disease	**Rate pt/A (lb ai)**	**Application Timing**	**Use Directions**
Leather rot (*Phytophthora cactorum*) Red stele (*P. fragariae)* Vascular collapse (*P. cactorum*)	2.0 (0.5)	**Annual plantings:** Apply up to 3 times per crop. Make the first application after transplanting. Make the second application 30 days before the beginning of harvest or at fruit set. Apply the third application during harvest, depending on disease pressure and environmental conditions. **Established plantings:** Apply up to 3 times per crop. Make the first application in the spring after the ground thaws and before first bloom. Make a second application after harvest in the fall. For **control of leather rot**, make an additional application during the growing season at fruit set.	**Annual plantings:** Apply by ground (banded), drip, or overhead chemigation (**Section 4.5**). **Established plantings:** Apply by ground (banded), drip, or overhead chemigation (**Section 4.5**) If applying through drip irrigation, calculate the rate as a band application (**Section 4.1.1**) with a band width equal to the root zone width. Inject Mefenoxam 2E into the irrigation water. Move into soil as recommended in **Section 4.3.**
Resistance Management Recommendations: • Refer to **Section 3.2**			
USE RESTRICTIONS			
1) Refer to **Section 6.1** for additional product use restrictions. 2) **Maximum Single Application Rate:** 2.0 pt/A (equivalent to 0.5 lb ai/A mefenoxam) 3) **Minimum Application Interval:** 30 days 4) **Maximum Annual Application Rate:** 6.0 pt/A/year (equivalent to 1.5 lb ai/A mefenoxam) a) **DO NOT** exceed 1.5 lb ai/A/year of soil-applied mefenoxam- and metalaxyl-containing products. 5) **DO NOT** make more than 3 applications per crop. 6) **Pre-harvest Interval (PHI):** 0 days.			

8.6 Citrus Fruit, Crop Group 10

Crops (including all cultivars, varieties, and/or hybrids of these)			
Calamondin Citrus citron Citrus hybrids chironja tangelo tangor	Grapefruit Kumquat Lemon Lime Mandarin (tangerine)	Orange, sour Orange, sweet Pummelo Satsuma mandarin	
Target Disease	**Rate (lb ai)**	**Application Timing**	**Use Directions**

Brown rot Citrus foot rot Gummosis Root rot Trunk canker *(Phytophthora* spp.) **NOTE:** for best *Phytophthora* control, a combination of cultural practices, fungicides with different modes of action, and resistant varieties are recommended.	Broadcast 4 pt/A(1.0)Chemigation 1.0 pt/grove acre **California only:** Broadcast 4.0 - 8.0 pt/A (1.0-2.0) Chemigation 1.0 – 2.0 pt/grove acre	**Citrus Resets or New Plantings:** Make first application at planting. Make two or three applications per year (spring + summer, summer + fall, or spring + summer + fall).	**Spray boom:** Apply to soil beneath the tree canopy. If rain is not expected within 24 hours after application, sprinkler irrigate with ½ to 1 inch of water to move product into root zone. **Chemigation:** Mefenoxam 2E can be applied through irrigation water (micro-sprinkler or drip).
	Water Ring drench 2.0 – 3.0 fl oz/100 gallons of water		**Water ring drench:** Apply 5 gal of the mix around the base of each tree within the watering ring of resets or new plantings.
	Newly planted to 6 months 1.0 fl oz/20 trees Trees >6months 2.0 – 3.0 fl oz/20 trees	**Individual Tree Treatment for Resets/New Plantings:** Newly planted to 6 months Trees >6 months	Mix desired amount of Mefenoxam 2E in water. Apply as a directed spray to individual trees (generally 8-12 fl oz 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. May be tank mixed with other approved pesticides.
	Broadcast 2.0 – 4.0 pt/A (0.5-1.0) Chemigation 1.0 – 2.0 pt/grove acre (0.25-0.5) **California only:** Broadcast 2.0 – 12.0 pt/A (0.5-3.0)	**Established Plantings:** Begin applications during the spring root flush period. One or two additional applications may be made to coincide with flushes of root growth. Time the applications as in the **Citrus Resets or New Plantings** section above.	**Spray boom:** Apply to soil beneath the tree canopy. If rain is not expected within 24 hours after application, sprinkler irrigate with ½ to 1 inch of water to move product into root zone. **Chemigation:** can be applied through irrigation water (micro-sprinkler or drip). Consult local extension bulletins for additional use directions.
	2.0 pt in 3 gallons of water (1.0) **In Florida** 2.0 pt in 10 gallons of water	**Trunk Spray for Gummosis:** Apply up to 3 times per year.	Spray the trunks to thoroughly wet the cankers.
Resistance Management Recommendations:			

- Refer to **Section 3.2.**

USE RESTRICTIONS

1) Refer to **Section 6.1** for additional product use restrictions.
2) **Maximum Single Application Rate:** 12.0 pt/A (equivalent to 3 lb ai/A mefenoxam)
3) **Minimum Application Interval:** 90 days
4) **Maximum Annual Application Rate:** 24.0 pt/A/year (equivalent to 6 lb ai/A mefenoxam)
   a) **DO NOT** exceed 6.0 lb ai/A/year of mefenoxam- and metalaxyl-containing products.
5) **DO NOT** apply to bare roots.
6) **DO NOT** apply to citrus in field or greenhouse nurseries.
7) **DO NOT** apply rates higher than 4.0 pt/A to citrus resets or new plantings (less than 5 years old) in FL, PR and TX to prevent potential phytotoxicity.
8) **DO NOT** use on the highly Phytophthora susceptible sweet orange rootstock in FL.
9) **DO NOT** apply tank mixes of Mefenoxam 2E and residual herbicides to trees less than 3 years old. Apply the herbicide first; then wait 3-4 weeks to apply Mefenoxam 2E.
10) **DO NOT** make trunk gummosis sprays and soil applications to the same tree in the same cropping season.
11) **Pre-harvest Interval (PHI):** 0 days

8.7 Cucurbit Vegetables, Crop Group 9

Crops (including all cultivars, varieties, and/or hybrids of these)

Chayote (fruit)	***Momordica* spp.**	Mango melon	**Squash, summer**
Chinese waxgourd	Balsam apple	Persian melon	Zucchini
(Chinese preserving melon)	Balsam pear	Pineapple melon	**Squash, winter**
Citron melon	Bittermelon	Santa Claus melon	Acorn squash
Cucumber	Chinese cucumber	Snake melon	Butternut squash
Gherkin	**Muskmelon**	True cantaloupe	Calabaza
Gourd, edible	Cantaloupe	Pumpkin	Hubbard squash
Hyotan	Casaba	**Squash, summer**	Spaghetti squash
Cucuzza	Crenshaw melon	Crookneck squash	Watermelon
Hechima	Golden pershaw melon	Scallop squash	
Chinese okra	Honeydew melon	Straightneck squash	
	Honey balls	Vegetable marrow	

Target Disease	Rate pt/A (lb ai)	Application Timing	Use Directions
Root rot (*Pythium* spp) **<u>Suppression:</u>** Phytophthora blight (*Phtophthora capsici*)	0.50 – 0.80 (0.125-0.2)	If soil applications were made at planting, two additional applications may be made at 20- to 30-day intervals.	**For soil spray (directed)** applications, direct the spray to the base of the plants and cover 6-8 inches of the soil on either side of the plants. Incorporate mechanically or sprinkler-irrigate to move the Mefenoxam 2E into the root zone. **Injection (drip irrigation):** Inject Mefenoxam 2E into the irrigation water at the labeled rates.

For soil-injected or soil incorporated applications, refer to **Section 7.8**.

Resistance Management Recommendations:

- Refer to **Section 3.2.**

USE RESTRICTIONS

1) Refer to **Section 6.1** for additional product use restrictions.
2) **Maximum Single Application Rate:** 0.80 pt/A (equivalent to 0.2 lb ai/A mefenoxam)

3) **Minimum Application Interval:** 20 days
4) **Maximum Annual Application Rate:** 1.6 pt/A/year (equivalent to 0.4 lb ai/A mefenoxam)
   a) **DO NOT** exceed 1.0 lb ai/A/year of soil-applied and 0.5 lb ai/A/year of foliar-applied mefenoxam- and metalaxyl-containing products.
5) **Pre-harvest Interval (PHI):** 5 days

8.8 Fruiting Vegetables

8.8.1 Crop Group 8, except Tomato

Crops (including all cultivars, varieties, and/or hybrids of these)			
Eggplant Groundcherry	Pepino Pepper, bell	Pepper, non-bell Tomatillo	
Target Disease	**Rate pt/A (lb ai)**	**Application Timing**	**Use Directions**
Crown rot (*Phytophthora capsici*)	2.0 (0.5)	Make 2 post-directed applications at 30-day intervals following transplanting. Apply before plants are infected to obtain satisfactory results.	**For banded spray application**, direct the spray to the base of the plants and cover 6-8 inches of the soil on either side of the plants. Incorporate mechanically or sprinkler-irrigate to move the Mefenoxam 2E into the root zone. **For shank application**, apply in liquid fertilizer, shanked in as a banded treatment to either side of the plant. For Injection (drip irrigation), inject Mefenoxam 2E into the irrigation water.
For soil-injected or soil incorporated applications, refer to **Section 7.9.1**.			
Resistance Management Recommendations: • Refer to **Section 3.2**			
Precaution: • Application of Mefenoxam 2E may cause some yellowing of pepper leaves. • Plants already infected with *Phytophthora capsici* cannot be cured with Mefenoxam 2E. • The foliar blight phase of *Phytophthora* cannot be cured with Mefenoxam 2E.			
USE RESTRICTIONS			
1) Refer to **Section 6.1** for additional product use restrictions. 2) **Maximum Single Application Rate:** 2.0 pt/A (equivalent to 0.5 lb ai/A mefenoxam) 3) **Minimum Application Interval:** 30 days 4) **Maximum Annual Application Rate:** 6.6 pt/A/year (equivalent to 1.5 lb ai/A mefenoxam) a) **DO NOT** exceed 1.5 lb ai/A/year of soil-applied mefenoxam- and metalaxyl-containing products and 0.5 lb ai/A/year of foliar-applied mefenoxam- and metalaxyl-containing products. 5) **Pre-harvest Interval (PHI):** 7 days			

8.8.2 Tomato

Crops (including all cultivars, varieties, and/or hybrids)			
Tomato			
Target Disease	**Rate pt/A (lb ai)**	**Application Timing**	**Use Directions**
Fruit rot (*Phytophthora* spp.) Root rot (*Pythium* spp.)	2.0 (0.5)	4-6 weeks after planting. If needed, make a second application up to 1 week before harvest.	**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 soil as recommended in **Section 4.3.**
For soil-injected or soil incorporated applications, refer to **Section 7.9.2**.			
Resistance Management Recommendations: • Refer to **Section 3.2**			
USE RESTRICTIONS			
1) Refer to **Section 6.1** for additional product use restrictions. 2) **Maximum Single Application Rate:** 2.0 pt/A (equivalent to 0.5 lb ai/A mefenoxam) 3) **Minimum Application Interval:** 28 days 4) **Maximum Annual Application Rate:** 6.0 pt/A/year (equivalent to 1.5 lb ai/A mefenoxam) a) **DO NOT** exceed 1.5 lb ai/A/year of soil-applied and 0.5 foliar application mefenoxam- and metalaxyl-containing products. 5) **Pre-harvest Interval (PHI):** 7 days			

8.9 Herbs, Fresh and Dried, Herb Subgroup 19A

Crops (including all cultivars, varieties, and/or hybrids of these)		
Angelica, balm	Curry (leaf)	Rosemary
Basil	Dillweed	Rue
Borage	Horehound	Sage
Burnet	Hyssop	Savory, Summer and winter
Camomile	Lavender	Sweet bay
Catnip	Lemongrass	Tansy
Chervil (dried)	Lovage (leaf)	Tarragon
Chive	Marigold	Thyme
Chive, Chinese, Clary	Marjoram	Wintergreen
Coriander (leaf)	Nasturtium	Woodruff
Costmary	Parsley (dried)	Wormwood
Cilantro (leaf)	Pennyroyal	

Target Disease	Rate pt/A (lb ai)	Application Timing	Use Directions
Damping off (*Pythium* spp.)	2.0 – 4.0 (0.5-1.0)	28 days after planting or after first cutting.	**Banded spray:** Apply as a basally directed spray. Direct the spray toward the base of the plants (12- to 16-inch band width/row).
For soil-injected or soil incorporated applications, refer to **Section 7.11**.			
Resistance Management Recommendations: • Refer to **Section 3.2**			

USE RESTRICTIONS
1) Refer to **Section 6.1** for additional product use restrictions. 2) **Maximum Single Application Rate:** 4.0 pt/A (equivalent to 1 lb ai/A mefenoxam) 3) **Minimum Application Interval:** 28 days 4) **Maximum Annual Application Rate:** 8.0 pt/A/year (equivalent to 2 lb ai/A mefenoxam) a) **DO NOT** exceed 2.0 lb ai/A/year of soil-applied mefenoxam- and metalaxyl-containing products. 5) **Pre-harvest Interval (PHI):** 21 days

8.10 **Hops**

Crops (including all cultivars, varieties, and/or hybrids)			
Hops			
Target Disease	**Rate pt/A (lb ai)**	**Application Timing**	**Use Directions**
Downy mildew (*Pseudoperonospora humuli*)	1.0 (0.25)	**Soil Application (drench or via drip/micro-sprinkler irrigation):** Apply after pruning but before training when shoots are 6 inches or less.	**Soil Application (drench or via drip/micro-sprinkler irrigation):** Apply as a drench in water or liquid fertilizer to the soil over the crowns. May also be applied via drip/micro-sprinkler irrigation.
	1.0 (0.25)	**Foliar spray:** At the first sign of a secondary infection (primary infection persists after the soil drench and/or there is evidence of foliar infection).	**Foliar spray:** Apply in combination with a copper fungicide. Apply by ground with a minimum of 50 gal of water per acre.
Resistance Management Recommendations: • Refer to **Section 3.2**			
USE RESTRICTIONS			
1) Refer to **Section 6.1** for additional product use restrictions. 2) **Maximum Single Application Rate:** 1.0 pt/A (equivalent to 0.25 lb ai/A mefenoxam) 3) **Minimum Application Interval:** 14 days 4) **Maximum Annual Application Rate:** 1.0 pt/A/year soil-applied (equivalent to 0.25 lb ai/A mefenoxam) and 2.0 pt/A/year foliar-applied (equivalent to 0.5 lb ai/A mefenoxam) a) **DO NOT** exceed 0.25 lb ai/A/year of soil-applied and 0.5 lb ai/A/year of foliar-applied mefenoxam- and metalaxyl-containing products. 5) **DO NOT** apply foliar sprays of Ridomil Gold SL without a copper fungicide registered for hops. 6) **Pre-harvest Interval (PHI):** 45 days			

8.11 Peanuts

Crops (including all cultivars, varieties, and/or hybrids)			
Peanuts			
Target Disease	**Rate pt/A (lb ai)**	**Application Timing**	**Use Directions**
Pod rot (*Pythium* spp.)	1.0-2.0 (0.25-0.5)	At pegging to early pod set	Apply at early pod set as a soil spray or at pegging as a foliar spray (overhead irrigation).
For soil-injected or soil incorporated applications, refer to **Section 7.14**.			
Resistance Management Recommendations: • Refer to **Section 3.2**			
USE RESTRICTIONS			
1) Refer to **Section 6.1** for additional product use restrictions. 2) **Maximum Single Application Rate:** 2.0 pt/A (equivalent to 0.5 lb ai/A mefenoxam) 3) **Minimum Application Interval:** NA 4) **Maximum Annual Application Rate:** 2.0 pt/A/year (equivalent to 0.5 lb ai/A mefenoxam) a) **DO NOT** exceed 0.125 lb ai/A/year soil-applied and 0.5 lb ai/A/year foliar-applied of mefenoxam- and metalaxyl-containing products. 5) **Pre-harvest Interval (PHI):** 60 days			

8.12 Root and Tuber Vegetables

8.12.1 Potato

Crops (including all cultivars, varieties, and/or hybrids)			
Potato			
Target Disease	**Rate fl oz/A (lb ai)**	**Application Timing**	**Use Directions**
Pink rot (*Phytophthora erythroseptica*) Pythium leak (*Pythium* spp.)	6.4 (0.1)	At flowering and with a second application 14 days later If the field has a history of storage rot problems, make a third application 14 days after the second.	If conditions favor the development of foliar diseases, a tank mix or premix product with chlorothalonil or mancozeb is recommended.
For soil-injected or soil incorporated applications, refer to **Section 7.16.4**.			
Resistance Management Recommendations: • Refer to **Section 3.2**			
USE RESTRICTIONS			
1) Refer to **Section 6.1** for additional product use restrictions. 2) **Maximum Single Application Rate:** 6.4 fl oz/A (equivalent to 0.1 lb ai/A mefenoxam) 3) **Minimum Application Interval:** 14 days 4) **Maximum Annual Application Rate:** 19.2 fl oz/A/year (equivalent to 0.3 lb ai/A mefenoxam) a) **DO NOT** exceed 0.34 lb ai/A/year of soil-applied and 0.40 lb ai/A/year of foliar-applied mefenoxam- and metalaxyl-containing products. 5) **Pre-harvest Interval (PHI):** 14 days			

8.13 Stone Fruits, Crop Group 12

Crops (including all cultivars, varieties, and/or hybrids of these)			
Apricot Cherry, sweet Cherry, tart Nectarine		Peach Plum Plum, Chickasaw Plum, Damson	Plum, Japanese Plumcot Prune
Target Disease	**Rate pt/A (lb ai)**	**Application Timing**	**Use Directions**
Collar rot Crown rot Root rot (*Phytophthora* spp.)	8.0 (2.0) or 3.0 fl oz/1,000 sq ft	Two weeks after planting (new plantings) or in the spring before growth begins (established plantings). Additional applications may be made at 2- to 3-month intervals, depending on disease pressure. Apply before symptoms appear.	**Soil spray (broadcast, band or irrigation):** Apply to soil beneath the tree canopy or apply through irrigation water (micro-sprinkler or drip) to cover the root zone. Move into soil as recommended in **Section 4.3.** For intensive plantings (2-3 times the normal planting rate), apply on a per area basis (1,000 sq ft).

Resistance Management Recommendations:

- Refer to **Section 3.2**

Precaution:

- Mefenoxam 2E will not revitalize trees showing moderate to severe disease symptoms.

USE RESTRICTIONS

1) Refer to **Section 6.1** for additional product use restrictions.
2) **Maximum Single Application Rate:** 8.0 pt/A (equivalent to 2 lb ai/A mefenoxam)
3) **Minimum Application Interval:** 60 days
4) **Maximum Annual Application Rate:** 24.0 pt/A/year (equivalent to 6 lb ai/A mefenoxam)
   a) **DO NOT** exceed 6.0 lb ai/A/year of soil-applied mefenoxam- and metalaxyl-containing products.
5) **DO NOT** apply more than 3 applications per year.
6) **DO NOT** concentrate spray around tree trunks.
7) **DO NOT** apply to trees under stress.
8) In CA, **DO NOT** apply to newly planted trees within 45 days of planting. On some varieties, chlorosis may occur on leaf margins.
9) **DO NOT** graze livestock in treated areas.
10) **DO NOT** graze or feed cover crops grown in treated orchards.
11) **Pre-harvest Interval (PHI):** 0 days

8.14 Tobacco

Crops (including all cultivars, varieties, and/or hybrids)			
Tobacco			
Target Disease	**Rate pt/A (lb ai)**	**Application Timing**	**Use Directions**
Blue mold (*Peronospora tabacina*)	1.0 (0.25) For no-till tobacco: 1.0-2.0 (0.25-0.5)	If Mefenoxam 2E was applied prior to transplanting, make an additional application at lay-by or the last cultivation.	**Soil spray (band):** Position the nozzles so the spray is deposited under the plants and is covered by the soil in cultivation. Move into soil as recommended in **Section 4.3.**
Black shank (*Phytophthora parasitica* var. *nicotianae*)	2.0 –4.0 (0.5-1) For no-till tobacco: 1.0-2-.0 (0.25-0.5)	One application at lay-by or one application at the first cultivation and a second application at lay-by. Apply preventatively 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.	**Soil spray (broadcast or band):** Position the nozzles so the spray is deposited under the plants and covered with soil by the cultivator. Use the higher specified rate if the disease epidemic is expected to be severe. Consult local extension bulletins for additional use directions. Move into soil as recommended in **Section 4.3.** For best results against black shank, use tobacco varieties that have high resistance to black shank and use crop rotation. In fields with a history of severe black shank, use the highest specified rate and plant variety resistant to the race of *Phytophthora* present (Burley L8 hybrids are resistant to only *Phytophthora* Race 0).
For soil-injected or soil incorporated applications, refer to **Section 7.18**.			
Resistance Management Recommendations: • Refer to **Section 3.2**			
Precautions: • Failure to adequately control nematodes in fields treated with Mefenoxam 2E may result in poor control of black shank.			
USE RESTRICTIONS			
1) Refer to **Section 6.1** for additional product use restrictions. 2) **Maximum Single Application Rate:** 4.0 pt/A (equivalent to 1 lb ai/A mefenoxam) 3) **Minimum Application Interval:** 14 days 4) **Maximum Annual Application Rate:** 6.0 pt/A/year (equivalent to 1.5 lb ai/A mefenoxam) a) **DO NOT** exceed 1.5 lb ai/A/year of mefenoxam- and metalaxyl-containing products. 5) **DO NOT** use in high black shank areas on highly susceptible flue-cured varieties. 6) **DO NOT** use Mefenoxam 2E for black shank control in PA. 7) **Pre-harvest Interval (PHI):** NA			

8.15 Tree Nuts

Crops (including all cultivars, varieties, and/or hybrids)			
Almond	Walnut		
Target Disease	**Rate pt/A (lb ai)**	**Application Timing**	**Use Directions**
Collar rot Crown rot Root rot (*Phytophthora* spp.)	8.0 (2.0) or 3.0 fl oz/1,000 sq ft	2 weeks after planting (new plantings) or in the spring before growth begins (established plantings). Additional applications may be made at 2- to 3-month intervals, depending on disease pressure. Apply before symptoms appear.	**Soil spray (broadcast, band or irrigation):** Apply to soil beneath the tree or apply through irrigation water (micro-sprinkler or drip) to cover the root zone. For intensive plantings (2-3 times the normal planting rate), apply on a per area basis (1,000 sq ft). Move into soil as recommended in **Section 4.3.**

Resistance Management Recommendations:

- Refer to **Section 3.2**

Precaution:

- Mefenoxam 2E will not revitalize trees showing moderate to severe disease symptoms.

USE RESTRICTIONS

1) Refer to **Section 6.1** for additional product use restrictions.
2) **Maximum Single Application Rate:** 8.0 pt/A (equivalent to 2 lb ai/A mefenoxam)
3) **Minimum Application Interval:** 60 days
4) **Maximum Annual Application Rate:** 24.0 pt/A/year (equivalent to 6 lb ai/A mefenoxam)
   a) **DO NOT** exceed 6.0 lb ai/A/year of soil-applied mefenoxam- and metalaxyl-containing products.
5) **DO NOT** apply more than 3 applications per year.
6) **DO NOT** concentrate spray around tree trunks.
7) **DO NOT** apply to trees under stress.
8) In CA, **DO NOT** apply to newly planted trees within 45 days of planting. On some varieties, chlorosis may occur on leaf margins.
9) **DO NOT** graze livestock in treated areas.
10) **DO NOT** graze or feed cover crops grown in treated orchards.
11) **Pre-harvest Interval (PHI):** 30

8.16 Tropical and Subtropical Fruit, Inedible Peel

8.16.1 Medium to Large Fruit, Smooth and Rough or Hairy Peel

Crops (including all cultivars, varieties, and/or hybrids of these)	
Canistel Mango Papaya Sapote, black	Sapote, mamey Sapodilla Star apple

Target Disease	Rate pt/A (lb ai)	Application Timing	Use Directions
Damping off (*Pythium* spp.) Root rot (*Phytophthora* spp.)	3.0 – 6.0 (0.75-1.5)	Two applications may be made per season. Make the first application at transplanting or in the spring at root growth flush. Make a second application at least 30 days before harvest.	Apply in sufficient water or liquid fertilizer to provide an adequate soil drench. Measure the amount of water required to drench one plant (approximately one square foot of soil around each plant). Multiply that volume by the number of plants per acre to determine the total water volume per acre. Add Mefenoxam 2E to this amount of water and drench plants.

Resistance Management Recommendations:

- Refer to **Section 3.2**

USE RESTRICTIONS

1) Refer to **Section 6.1** for additional product use restrictions.
2) **Maximum Single Application Rate:** 6.0 pt/A (equivalent to 1.5 lb ai/A mefenoxam)
3) **Minimum Application Interval:** 90 days
4) **Maximum Annual Application Rate:** 12.0 pt/A/year (equivalent to 3 lb ai/A mefenoxam)
   a) **DO NOT** exceed 3.0 lb ai/A/year of mefenoxam- and metalaxyl-containing products.
5) **DO NOT** apply Mefenoxam 2E as a soil drench if Ridomil Gold Copper will be used as a trunk and foliage spray.
6) **Pre-harvest Interval (PHI):** 1 day

8.16.2 Medium to Large Fruit, Rough or Hairy Peel

Crops (including all cultivars, varieties, and/or hybrids of these)	
Atemoya Biriba Cherimoya Custard apple	Ilama Soursop Sugar apple

Target Disease	Rate pt/A (lb ai)	Application Timing	Use Directions

Damping off (*Pythium* spp.) Phytophthora root rot (*Phytophthora* spp.)	3.0-6.0 (0.75-1.5)	Make one application in the spring when root growth begins. Make a second application in the fall.	**Soil drench:** Add Mefenoxam 2E to water or a liquid fertilizer solution. Make applications to the soil surface under the canopy of the trees delivering approximately 5 gal/plant.

Resistance Management Recommendations:

- Refer to **Section 3.2**

USE RESTRICTIONS

1) Refer to **Section 6.1** for additional product use restrictions.
2) **Maximum Single Application Rate:** 6.0 pt/A (equivalent to 1.5 lb ai/A mefenoxam)
3) **Minimum Application Interval:** 90 days
4) **Maximum Annual Application Rate:** 12.0 pt/A/year (equivalent to 3 lb ai/A mefenoxam)
   a) **DO NOT** exceed 3.0 lb ai/A/year of mefenoxam- and metalaxyl-containing products.
5) **Pre-harvest Interval (PHI):** 30 days

8.16.3 Kiwifruit

Crops (including all cultivars, varieties, and/or hybrids of these)			
Kiwifruit			
Target Disease	**Rate (lb ai)**	**Application Timing**	**Use Directions**
Root and Crown Rot (*Pythium and Phytophthora* spp.)	11.2 - 22.4 fl oz/40 gal of water (0.175-0.35)	Make the first application in the fall after harvest or in February or early March. Make a second application in spring or approximately 60 days after the February or March application.	Apply 2.0 pt of Mefenoxam 2E solution as a soil drench in a one square foot area around the base of each vine. At the recommended rate of 11.2 – 22.4 oz, this will apply 0.175-0.350 lb. ai/A if the planting density is 160 vines per acre. Move into soil as recommended in **Section 4.3.**

Resistance Management Recommendations:

- Refer to **Section 3.2**

USE RESTRICTIONS

1) Refer to **Section 6.1** for additional product use restrictions.
2) **Maximum Single Application Rate:** 22.4 fl oz/40 gal of water (equivalent to 0.35 lb ai/A mefenoxam)
3) **Minimum Application Interval:** 60 days
4) **Maximum Annual Application Rate:** 7.0 pt/A/year (equivalent to 1.75 lb ai/A mefenoxam)
   a) **DO NOT** exceed 1.75 lb ai/A/year of mefenoxam- and metalaxyl-containing products.
5) **Pre-harvest Interval (PHI):** 7 days

8.16.4 Starfruit

Crops (including all cultivars, varieties, and/or hybrids of these)			
Starfruit			
Target Disease	**Rate pt/A (lb ai)**	**Application Timing**	**Use Directions**
Phytophthora Root and Crown Rot *(Phytophthora* spp.*)* Pythium Root and Crown Rot *(Pythium* spp.*)*	3.0-6.0 (0.75-1.5)	Make one application in the spring when root growth begins and a second application in the fall.	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.
Resistance Management Recommendations: • **Refer to Section 3.2**			
USE RESTRICTIONS			
1) Refer to **Section 6.1** for additional product use restrictions. 2) **Maximum Single Application Rate:** 6.0 pt/A (equivalent to 1.5 lb ai/A mefenoxam) 3) **Minimum Application Interval:** 90 days 4) **Maximum Annual Application Rate**: 12.0 pt/A/year (equivalent to 3 lb ai/A mefenoxam) a) **DO NOT** exceed 3.0 lb ai/A/year of mefenoxam- and metalaxyl-containing products. 5) **Pre-harvest Interval (PHI):** 30 days			

9.0 STORAGE AND DISPOSAL

Storage and Disposal

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

Pesticide Storage

Do not use, pour, spill, or store near heat or open flame.

Pesticide Disposal

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

Container Handling [(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 ¼ 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 incineration, 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 ¼ 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 incineration, 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 incineration, or by other procedures approved by state and local authorities.

For minor spills, leaks, etc., follow all precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during cleanup and disposal of wastes.

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

10.0 CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

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

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of SYNGENTA CROP PROTECTION, LLC or Seller. To the extent permitted by applicable law, Buyer and User agree to hold SYNGENTA and Seller harmless for any claims relating to such factors.

SYNGENTA warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. To the extent permitted by applicable law: (1) this warranty does not extend to the use of the product contrary to label instructions, or under conditions not reasonably foreseeable to or beyond the control of Seller or SYNGENTA, and (2) Buyer and User assume the risk of any such use. TO THE EXTENT PERMITTED BY APPLICABLE LAW, SYNGENTA MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS WARRANTED BY THIS LABEL.

To the extent permitted by applicable law, in no event shall SYNGENTA be liable for any incidental, consequential or special damages resulting from the use or handling of this product. **TO THE EXTENT PERMITTED BY APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF SYNGENTA AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF SYNGENTA OR SELLER, THE REPLACEMENT OF THE PRODUCT.**

SYNGENTA and Seller offer this product, and Buyer and User accept it, subject to the foregoing Conditions of Sale and Limitation of Warranty and Liability, which may not be modified except by written agreement signed by a duly authorized representative of SYNGENTA.

11.0 APPENDIX

11.1 [Optional] Mefenoxam 2E Use Summary Table

[Start of Optional Text]

IMPORTANT: The table below is a summary of the Crop Use Directions for Mefenoxam 2E. However, it is important for the user to read and follow the complete instructions contained within this label.

Crop or Crop Group Subgroup with examples	Maximum Rate Per Application (lb ai/A)	Maximum Annual Application Rate (lb ai/A/year)	Minimum Application Interval Days	Pre-Harvest Interval (PHI days)
FOR SOIL INJECTED OR SOIL INCORPORATED APPLICATIONS				
Alfalfa	0.25	0.25	NA	60
Artichokes	1.0	1.0	NA	200
Avocado	2.0	6.0	90	28
Brassica (Cole) Leafy Vegetables, Crop Group 6 Broccoli Cauliflower	1.0	1.0 soil 0.5 foliar	NA	NA
Bulb Vegetables, Crop Group 3-07 Onion Dry, Bulb Onion, Green	Dry Bulb Onions: 0.5 soil Green Onions 0.5 soil	Dry Bulb Onions: 1.0 soil 0.5 foliar Green Onions 1.0 soil 0.3 foliar	NA	NA
Clover	0.25	0.25	NA	90
Cotton	0.125	0.125	NA	NA
Cucurbit Vegetables, Crop Group 9 Cucumber Cantaloupe	1.0	1.0 soil 0.5 foliar	14	5
Fruiting Vegetables **Crop Group 8, except Tomato** Eggplant Pepino	0.5	1.5 soil 0.5 foliar	30	7
Fruiting Vegetables Tomato	1.0	1.5 soil 0.5 foliar	28	7

Grass, Forage, Fodder and Hay, Crop Group 17 Bermuda grass Bluegrass	0.5	0.5	NA	60
Herbs, Fresh and Dried, Herb Subgroup 19A Basil Rosemary	1.0	2.0	28	21
Leafy Vegetables (except Brassica), Crop Group 4 Lettuce Spinach	**Lettuce:** 1.0 soil-applied/0.4 foliar-applied **Spinach:** 0.125 soil-applied/0.25 foliar-applied	**Lettuce:** 1.0 soil-applied/0.4 foliar-applied **Spinach:** 1.0 soil-applied/0.25 foliar-applied	**Spinach:** 21	**Leafy Vegetables (except Spinach):** 7 **Spinach:** 21
Legume Vegetables, Succulent or Dried, Crop Group 6 except Soybeans Bean Pea	0.5	0.5	NA	NA
Peanuts	0.125	0.125 soil 0.5 foliar	NA	NA
Pineapple, Crown Dip	0.5	0.5	NA	NA
Root and Tuber Vegetables Carrots	0.50	1.4 total 0.65 soil 0.75 foliar	14	7

Root and Tuber Vegetables **Crop Group1, except Carrot, Ginseng, Potato and Sugar Beet** Ginger Turnip	1.0	1.0	NA	NA
Root and Tuber Vegetables Ginseng	0.375	0.375	NA	NA
Root and Tuber Vegetables Potato	0.34 soil-applied 0.40 foliar-applied	0.34 soil-applied 0.40 foliar-applied	NA	NA
Root and Tuber Vegetables Sugar Beet	1.0	1.0	NA	NA
Soybean	0.625	0.625	NA	NA
Tobacco	1.5	1.5	14	NA
FOR SOIL DIRECTED OR OTHER FOLIAR APPLICATIONS				
Crop or Crop Group Subgroup with examples	**Maximum Rate Per Application** **(lb ai/A)**	**Maximum Annual Application Rate (lb ai/A/year)**	**Minimum Application Interval Days**	**Pre-Harvest Interval (PHI days)**
Alfalfa	0.125	0.25		60
Apple	2.0	4.0	90	NA
Asparagus	0.5	1.0	30	1
Avocado	2.0	6.0	90	28
Berry and Small Fruit Blueberries	1.8	3.6	90	0

Berry and Small Fruit Cranberries	0.875	2.6	90	45
Berry and Small Fruit Lingonberries	1.8	3.6	90	0
Berry and Small Fruit Raspberries	1.8	3.6	90	45
Berry and Small Fruit Strawberries	0.5	1.5	30	0
Citrus Fruit, Crop Group 10 Lemon Lime	3.0	6.0	90	0
Cucurbit Vegetables, Crop Group 9 Cucumber Cantaloupe	0.2	1.0 soil 0.5 foliar	20	5
Fruiting Vegetables **Crop Group 8, except Tomato** Eggplant Pepino	0.5	1.5 soil 0.5 foliar	30	7
Fruiting Vegetables Tomato	0.5	1.5 soil 0.5 foliar	28	7
Herbs, Fresh and Dried, Herb Subgroup 19A Basil Rosemary	1.0	2.0	28	21
Hops	0.25	0.25 soil 0.5 foliar	14	45

Peanuts	0.5	0.125 soil 0.5 foliar	NA	60
Root and Tuber Vegetables Potato	0.1	0.34 soil 0.4 foliar	14	14
Stone Fruits, Crop Group 12 Apricot Peach	2.0	6.0	60	0
Tobacco	1.0	1.5	14	NA
Tree Nuts	2.0	6.0	60	30
Tropical and Subtropical Fruit, Inedible Peel Mango Papaya	1.5	3.0	90	1
Tropical and Subtropical Fruit, Inedible Peel Medium to Large Fruit, Rough or Hairy Peel Custard Apple Sugar Apple	1.5	3.0	90	30
Tropical and Subtropical Fruit, Inedible Peel Kiwifruit	0.35	1.75	60	7
Tropical and Subtropical Fruit, Inedible Peel Starfruit	1.5	3.0	90	30

[End of Optional Text]

For non-emergency (e.g. current product information), call
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