



U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Pesticide Programs
Registration Division (H7505C)
401 M St. S.W.
Washington, D.C. 20460

EPA Reg. Number
100-802

Date of Issuance
MAR - 6 1996

NOTICE OF PESTICIDE:
 Registration
 Reregistration

(under FIFRA, as amended)

Term of Issuance:
Time-Limited

Name of Pesticide Product:
Mefenoxam WSP

Name and Address of Registrant (include ZIP Code):

Ciba-Geigy Corp.
P.O. Box 18300
Greensboro, NC 27419-8300

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act. Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is registered in accordance with section 3(c) (5) of FIFRA subject to the following terms:

1. This registration shall expire on March 5, 1997 without opportunity for hearing.
2. EPA may, by order and without opportunity for hearing, cancel this registration prior to March 5, 1997 if the Agency determines, based upon comments submitted pursuant to section 3(c) (4) of FIFRA, or upon any other information that this product no longer meets the requirements of section 3(c) (5).
3. You must submit to the Agency a written request to voluntarily cancel Metalaxyl Technical and its end use products within 10 business days from the date of this registration.
4. Submit and/or cite all data required for registration/reregistration of your product under FIFRA sec. 3(c) (5) when the Agency requires all registrants of similar products to submit such data; and submit acceptable responses required for reregistration of your product under FIFRA section 4.

(cont'd on page 2)

Signature of Approving Official:

Date:

MAR - 6 1996

5. Any outstanding data requirements cited in the Metalaxyl Reregistration Eligibility Document (RED) also apply to Mefenoxam. These studies may be conducted on either Metalaxyl or Mefenoxam.

6. Make the following label changes before you release the product for shipment:

a. Revise the EPA Registration Number to read, "EPA Reg. No. 101-802".

b. Under "Alfalfa", include directions for impregnating the product on fertilizer or delete this reference.

c. For "Avocados", the directions for use and dosage rates do not appear to be compatible with water soluble packaging. To measure the amount of product in ounces, the package would need to be opened. Revise the directions for use accordingly. In the amount heading in the table, indicate the units (lbs., ozs.)

d. For "Blueberries", under "New Plantings", the label recommends one or two applications in addition to the initial application. If made at the same rate, the maximum amount of product allowed (under "Note") would be exceeded. Indicate the rates to use in repeat applications or delete this recommendation.

e. Under "Legume Vegetables", delete "etc." at the end of the list of crops.

f. The dosage rate for papayas in nurseries does not appear to be appropriate for a water soluble pouch since the rates are so low. Clarify or delete this recommendation.

g. For "peppers and eggplants", since a maximum of 3 lbs/acre may be used, delete the 2 lbs/acre rate for the initial application or change the recommendation to 1 or 2 supplemental applications.

7. Submit five copies of your final printed label.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec. 6(e). Your release for shipment of the product constitutes acceptance of these conditions.

A stamped copy of the label is enclosed for your records.

3/70

Mefenoxam WSP/Water Soluble Pouch
(Front Cover)

Mefenoxam WSP

FUNGICIDE

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

ACCEPTED
with COMMENTS
In EPA Letter Dated
MAR - 6 1996

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

100-802

One Pound
Net Weight

Four Pounds
Net Weight

Active Ingredient:

Mefenoxam: (R)-2-[(2,6-dimethylphenyl)-methoxyacetyl-amino]-propionic acid methyl ester

43.6%

Related Compounds

1.4%

Inert Ingredients:

55.0%

Total:

100.0%

Mefenoxam WSP is a wettable powder packaged in a water-soluble bag.

EPA Reg. 100-

EPA Est. 67545-AZ-1

KEEP OUT OF REACH OF CHILDREN.

CAUTION

See additional precautionary statements and directions for use inside booklet.

This outer protective container contains Mefenoxam WSP in an inner water-soluble bag. Entire inner bag and contents dissolve in water. After opening outer container, immediately drop entire unopened inner bag into the partially filled sprayer or mix tank. Do not handle the soluble bag or expose it to moisture since this may cause injury.

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CGA

[FUNGICIDE] [MARRI] [M-M-ME] [MFPNKWSP] - 3/4/96

DIRECTIONS FOR USE AND CONDITIONS OF SALE AND WARRANTY

IMPORTANT: Read the entire **Directions for Use** and the **Conditions of Sale and Warranty** before using this product. If terms are not acceptable, return the unopened product container at once.

Conditions of Sale and Warranty

The **Directions for Use** of this product reflect the opinion of experts based on field use and tests. The directions are believed to be reliable and should be followed carefully. However, it is impossible to eliminate all risks inherently associated with use of this product. Crop injury, ineffectiveness, or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application all of which are beyond the control of Ciba-Geigy or the Seller. All such risks shall be assumed by the Buyer.

Ciba-Geigy warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the **Directions for Use** subject to the inherent risks referred to above. **Ciba-Geigy makes no other express or implied warranty of Fitness or Merchantability or any other express or implied warranty. In no case shall Ciba-Geigy or the Seller be liable for consequential, special, or indirect damages resulting from the use or handling of this product.** Ciba-Geigy and the Seller offer this product, and the Buyer and user accept it, subject to the foregoing **Conditions of Sale and Warranty**, which may be varied only by agreement in writing signed by a duly authorized representative of Ciba-Geigy.

DIRECTIONS FOR USE

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. Observe any requirements specific to your State or Tribe, and consult the agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and 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 requirements on this label about personal protective equipment and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 48 hours. Exception: When the product is soil-injected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

Procedures are 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:

Overalls

Waterproof gloves

Shoes plus socks

Deleted protective gear

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

General Information

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

THIS PRODUCT IS NOT TO BE USED IN FOLIAR APPLICATIONS UNLESS SPECIFIED ON THIS LABEL OR IN SOLUTIONS USED TO DIP PLANTS. DO NOT USE IN NURSERIES, TURF, OR LANDSCAPE PLANTINGS UNLESS SPECIFIED IN THIS LABEL.

Note: Mefenoxam WSP is a systemic fungicide having a specific mode of action and could be subject to development of insensitive strains of fungi. Development of insensitivity cannot be predicted. Therefore, Ciba-Geigy cannot assume liability for crop damage resulting from insensitive strains of fungi. If treatment is not effective following the use of Mefenoxam WSP as recommended, an insensitive strain of fungi may be present. If the treatment is ineffective due to the presence of a Mefenoxam WSP insensitive strain of fungi, neither Mefenoxam WSP nor any other fungicide with similar action will effectively control that disease. Consideration should then be given to the prompt use of other types of suitable fungicides. Consult with your State Agricultural Experiment Station or Extension Service Specialist for guidance on your particular crop and disease control situation.

Do not make foliar applications to field grown tobacco, or other crops unless specified since this practice may encourage more rapid development of insensitivity.

THIS LABEL IS FOR FIELD USE ONLY AND IS NOT INTENDED FOR USE ON TRANSPLANT TRAYS, GREENHOUSES, LATH HOUSES, FLOAT HOUSES, HYDROPONIC PRODUCTION, OR IN BEDDING PLANT STRUCTURES.

Added

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.

To avoid spray drift, do not apply under windy conditions. Avoid spray overlap, as crop injury may result.

Mixing Instructions

Prepare no more spray mixture than is needed for the immediate operation. Thoroughly clean spray equipment before using this product. **Vigorous agitation is necessary to dissolve the bag and disperse the product. Maintain maximum agitation throughout the spraying operation.** Do not let the spray mixture stand overnight in the spray tank. Flush the spray equipment thoroughly following each use and apply the rinsate to a previously treated area. *revised, based*

Precautions: (1) Water soluble bags of Mefenoxam WSP must be completely dissolved and dispersed in plain water before any other tank mix partner, including micronutrients or other liquid or dry fertilizers, are added to the spray solution. Boron, especially in the form of a micronutrient additive, such as Solubor®, etc., or as a natural component of the mix water, may prevent water soluble bags from dissolving. (2) When the spray carrier is primarily composed of liquid fertilizers (e.g., 10-34-0 or 9-18-9) soluble bags of Mefenoxam WSP must be slurried in water following the procedure as outlined in **Mefenoxam WSP in Liquid Fertilizer**.

Mefenoxam WSP Alone: Add 1/4 of the required amount of plain water to the spray or mixing tank. With the agitator running, drop the required number of **unopened** soluble bags of Mefenoxam WSP into the tank all at once. Continue agitation while adding the remainder of the water. Begin application of the spray solution after the bags have dissolved and the material has completely dispersed into the mix water. Maintain agitation until all of the mixture has been applied.

BEFORE TANK MIXING MEFENOXAM WSP WITH OTHER REGISTERED PRODUCTS FOR ANY USE ON THIS LABEL, READ THE LABEL OF THE TANK MIX PARTNER TO BE CERTAIN IT IS LABELED FOR USE ON THE PARTICULAR CROP AND THAT USE PATTERNS ARE COMPATIBLE WITH THOSE OF MEFENOXAM WSP.

Mefenoxam WSP + Tank Mixtures: Mefenoxam WSP is usually compatible with most commonly used insecticides, fungicides, and spray adjuvants. When using Mefenoxam WSP in a tank mixture with other pesticides, observe the most restrictive label limitations and precautions of the products being used.

Add 1/4 of the required amount of plain water to the spray or mixing tank. With the agitator running, drop the required number of **unopened** soluble bags of Mefenoxam WSP, and any other products packaged in water soluble bags, into the tank all at once. After the water soluble bags have *revised*

dissolved and the products have dispersed uniformly into the mix water, continue to fill the tank with water. Then add the desired amount of other products recommended for tank mixture and allow them to become completely dispersed. Continue agitation to maintain a uniform suspension until all of the spray solution has been applied.

Mefenoxam WSP in Liquid Fertilizer: Slurry Mefenoxam WSP in water. Add a maximum of 4 unopened soluble bags of Mefenoxam WSP to 5 gallons of clean water. Stir the solution until all of the soluble bag material has dissolved and the Mefenoxam WSP has formed a smooth slurry.

Add 1/3 of the required amount of water and/or liquid fertilizer to the spray or mixing tank. With the agitator running, add the Mefenoxam WSP slurry. If adding other tank mix partners, add the products in the following order: Mefenoxam WSP slurry, wetttable powders or dispersible granules, and then emulsifiable concentrates. Allow each product to disperse before adding the next one, maintaining agitation the whole time. Triple rinse the slurry container and add to the spray tank. Add the remainder of the water and/or fertilizer and continue agitation. Maintain agitation until all of the mixture has been applied.

Application Instructions

Apply Mefenoxam WSP by ground or air in sufficient water to provide uniform coverage of the soil surface. Apply in a minimum of 20 gals./A for ground applications and 5 gals./A by air. Refer to the specific crop directions for use for application recommendations.

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

$$\frac{\text{band width in inches}}{\text{row spacing in inches}} \times \text{broadcast rate per acre} = \text{amount needed per acre of field}$$

Application Through Irrigation Systems

Mefenoxam WSP, alone or in combination with other fungicides which are registered for sprinkler irrigation, may be applied through irrigation systems.

Apply this product only through center pivot, solid set, hand-move, moving wheel, micro-sprinkler, or drip irrigation systems. Do not apply this product through any other type of irrigation system. Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water. If you have questions about calibration, you should 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 should the need arise.

Operating Instructions

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 for treatment.

Application Instructions

Mefenoxam WSP must be applied on the schedule specified in the specific crop use recommendations, not according to the irrigation schedule. If irrigation schedules are used, ground or aerial applications must supplement chemigation applications to achieve adequate disease control.

The following calibration and application techniques are provided for user reference, but do not constitute a warranty of fitness for application through sprinkler irrigation equipment. Users should check with state and local regulatory agencies for potential use restrictions before applying any agricultural chemical through sprinkler irrigation equipment.

Center Pivot Irrigation Equipment

Note: (1) Use only with drive systems which provide uniform distribution. (2) Do not use end guns when chemigating Mefenoxam WSP through center pivot systems because of non-uniform application. (3) Plug the first nozzle closest to well head to protect water source.

1. Determine the size of the area to be treated.
2. Determine the time required to apply 1/4-1/2 inch water over the area to be treated when the system and injection equipment are operated at normal pressures as recommended by the equipment manufacturer. Run the system at 80-95% of the manufacturer's rated capacity.
3. Using water, determine the injection pump output when operated at normal line pressure.
4. Determine the amount of Mefenoxam WSP required to treat the area covered by the irrigation system.
5. Add the required number of Mefenoxam WSP soluble bags and sufficient water to meet the injection time requirements to the solution tank. (See **Mixing Instructions** section of this label.)
6. Make sure the system is fully charged with water before starting injection of the Mefenoxam WSP solution. Time the injection to last at least as long as it takes to bring the system to full pressure.

- 7. Maintain constant solution tank agitation during the injection period.
- 8. Stop injection equipment after treatment is completed. Continue to operate the system until the Mefenoxam WSP solution has cleared the sprinkler head.

Solid Set, Hand-Move, and Moving Wheel Irrigation Equipment

- 1. Determine the acreage covered by the sprinklers.
- 2. Fill injector solution tank with plain water and calibrate the flow rate of the system to deliver the contents of the tank over a 20 to 30-minute time interval.
- 3. Determine the amount of Mefenoxam WSP required to treat the area covered by the irrigation system.
- 4. Add the required number of Mefenoxam WSP soluble bags into the same quantity of water used to calibrate the injection period. (See **Mixing Instructions** section of this label.)
- 5. Operate system at the same pressure and time interval established during the calibration.
- 6. Inject Mefenoxam WSP at the beginning of the ^{run} irrigation cycle or as a separate application to maximize the effectiveness of the fungicide. Do not apply in excess of 1" water. ^{added}
- 7. Stop injection equipment after treatment is completed. Continue to operate the system until the Mefenoxam WSP solution has cleared the last sprinkler head.

Micro Sprinkler or Drip Irrigation Systems

General Instructions

underscored items
↓

- 1. Each run of the irrigation system must be calibrated separately to determine the time it takes water to move through the system and to make sure all emitters in the system are putting out the same amount of water.
- 2. Only pressure injection or venturi equipment is recommended.
- 3. Determine the area to be treated in each irrigation run.
- 4. Measure the output of each of the emitters or drip tubes, closest to and farthest from the injector site.

5. For calibration, substitute a concentrated detergent (such as Wisk) for the Mefenoxam WSP in the injector tank. It is important to use the same volume of soap solution as the planned volume of Mefenoxam WSP solution when calibrating the system. The detergent will bubble as it leaves the emitters. The time period over which bubbles occur should be checked for both the closest and farthest emitters. If these times are not within 2 minutes of each other, adjust the dilution ratio and/or the injection rate.

Step-by-Step Instructions

Numbered item



1. Before starting to calibrate, operate the system until all the emitters are putting out at equal flow rates or until the system is operating at full pressure.
2. Make up an indicator solution of detergent or fertilizer, using the same ratio to be used with mixing Mefenoxam WSP.
3. Set the injector to apply the indicator solution at the injection rate to be used in the actual Mefenoxam WSP application.
4. Attach a 5-inch length of flexible tubing over the emitter closest to the injection point, another length over the emitter farthest away. Both emitters should be monitored to determine the time intervals that the indicator solutions are observed.
5. Begin injecting the indicator solution. Direct the flow from the tubes at the emitters into a small container. Begin timing when the indicator solution is first detected, stop timing when the indicator solutions are no longer detected.
6. If the period of detection of the indicator solution between the 2 emitters are within 2 minutes of each other, comparable coverage will be obtained. If they are not, make adjustments by increasing the dilution ratio, using more water per part of Mefenoxam WSP, or adjust the injector to a slower flow rate.
7. Once the system is calibrated, dilute the needed amount of Mefenoxam WSP with water using a minimum of 15 parts water to 1 part Mefenoxam WSP in the solution tank *added*
8. Do not begin to inject Mefenoxam WSP into the system until all emitters are producing equal flow rates, or until the system is at full pressure.

9. Inject the Mefenoxam WSP into the system at the beginning of the irrigation set in 1/2 - 1 inch of irrigation water. Do not apply in excess of 1" water. *added*

Alfalfa*

*Including birdsfoot trefoil

Mefenoxam WSP applied to the soil at planting will provide control of damping-off caused by *Pythium* spp. and root rots caused by *Phytophthora* spp.

Stand Establishment

Apply 1/4-1/2 lb./A as a broadcast surface spray at planting in a minimum of 20 gals. of water or impregnate on fertilizer. If inter-seeding alfalfa into existing stands for renovation, apply 1/4 lb./A as a broadcast surface spray at planting in a minimum of 20 gals. of water.

If alfalfa seed was previously treated with mefenoxam as a seed dressing, an application of Mefenoxam WSP at 1/4 lb./A is recommended at planting. Use the higher rate (1/2) lb./A in areas where disease pressure is expected to be heavy.

Note: To avoid possible illegal residues, do not feed green forage or cut hay for 60 days following application.

Apples (Bearing and Nonbearing Trees)

Use of Mefenoxam WSP will aid in the control of crown, collar and root rot caused by *Phytophthora* spp. when used in conjunction with good cultural practices and rootstocks that are most tolerant to the disease. Mefenoxam WSP applications should be made before symptoms appear, especially in areas of the orchard favorable for disease development. Mefenoxam WSP will not revitalize trees showing moderate to severe disease symptoms.

Broadcast Spray or Banded Applications: Apply

4 lbs./treated acre as a broadcast spray (1.5) oz./1,000 sq. ft.) in sufficient water to obtain thorough coverage. The treated area is based on the area under the tree canopy or the area of the sprayed row. Soil surface sprays of Mefenoxam WSP will not be effective until the fungicide is moved into the root zone by rainfall or irrigation. Applications should be made in early spring before growth starts and in the fall after harvest, but before the ground freezes.

Drench: Mix 1/2 lb. of Mefenoxam WSP with 100 gals. of water. Apply the amount of diluted mixture indicated in the following table around the trunk of each tree. Applications

should be made 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: To determine trunk diameter, measure the trunk 12 inches above the soil line. Rates of the diluted drench mixture follow:

Added

Trunk Diameter	Qts. of Diluted Mixture/Tree
< 1 inch	1 qt.
1-3 inches	2 qts.
3-5 inches	3 qts.
> 5 inches	4 qts.

Notes: (1) Do not dip roots of trees in or spray bare roots with solutions containing Mefenoxam WSP. (2) Do not graze or feed cover crops in treated orchards, or illegal residues may occur.

Asparagus

Mefenoxam WSP will control crown rot and spear rot caused by *Phytophthora* spp.

Apply 1 lb/A as a broadcast spray in a minimum of 10 gals. of water over the beds.

Cutting Beds: Apply 30 to 60 days before the first cutting. A supplemental application may be made, for additional control, by applying just before the beginning of harvest.

New Plantings: Apply after planting seedlings or after covering one-year old crowns.

Note: Do not apply Mefenoxam WSP within 1 day of harvest or possible illegal residues may result.

Avocados

Root Rot - *Phytophthora cinnamomi*

Begin applications at the start of the growing season or at transplanting. Two additional applications should be made at 3-month intervals. Applications are not needed during the winter months of November through February. Mefenoxam WSP may be applied as a sleeve drench at the time of transplanting, as a soil surface spray under sprinkler

irrigation systems, as a directed spray under drip emitters, or injected into the irrigation water.

Sleeve Drench: Mix 1/4 oz. of Mefenoxam WSP with 18 gals. of water. At the time of transplanting, drench the roots inside the sleeve with 1 qt. of Mefenoxam WSP solution per tree.

Note: The sleeve drench will not replace the soil surface applications for long-term control of root rot.

Sprinkler Irrigation: Apply as a soil surface spray under the canopy of the tree in sufficient water to obtain uniform coverage. See the following table for the amount of Mefenoxam WSP to use based on the diameter of the tree canopy. Start applications at the beginning of the growing season or at transplanting and continue at 3-month intervals.

Drip Irrigation: Apply the recommended amount of Mefenoxam WSP (see table) to the soil directly under the drip emitter at each tree. If there is more than one emitter per tree, distribute the total amount of Mefenoxam WSP needed among the emitters.

Injection into Irrigation Water (Sprinkler or Drip Irrigation Only): Inject Mefenoxam WSP into the irrigation water at a rate of 1/2-1 oz./1,000 gals. (1.9-3.75 ppm active ingredient) at each irrigation. If Mefenoxam WSP is not applied at each irrigation, use the following table to determine how much Mefenoxam WSP should be injected into the irrigation water. If Mefenoxam WSP is to be used more frequently than every 3 months, adjust the rates so that no more than the specified amount is applied during each 3-month period. See the **General Information** section of this label for further instructions and precautions when making applications through irrigation systems.

Diameter of Tree Canopy (Ft.)	Amount of Mefenoxam WSP Per Ten Trees/3 Months
2	1/8-1/4
5	3/4-1 1/2
10	3-6 1/2
15 or wider	7 1/2-14 1/2

Notes: (1) For best results, use Mefenoxam WSP as soon as soil tests indicate the presence of Phytophthora. (2) For new plantings, the use of Phytophthora resistant rootstocks, with Mefenoxam WSP is recommended. Mature trees in moderate to advanced stages of decline cannot be cured with Mefenoxam WSP. (3) Do not apply more than 12 lbs./A of Mefenoxam WSP.

per year. (4) Do not make an application within 28 days of harvest, or possible illegal residues may result.

Berries

Blueberries

Use of Mefenoxam WSP will aid in the control of root rot caused by *Phytophthora* spp. when used in conjunction with good cultural practices to minimize disease problems. Mefenoxam WSP will not revitalize plants showing moderate to severe root rot symptoms.

Established Plantings: Apply 1/4 lb./1000 linear ft. of row (3.6 lbs./A broadcast basis) in a 3-ft. band over the row before the plants start growth in the spring. One additional application may be made to coincide with periods most favorable for root rot development.

New Plantings: Apply 4 lbs./A broadcast to the soil at or after the time of planting. One or two additional applications should be made at 2-3 month intervals or to coincide with periods most favorable for root rot development. For banded applications, an 18-inch band over the row is recommended. Use the formula in the **General Information** section of the label to calculate the amount needed per acre.

Note: On new plantings, do not apply more than 7.2 lbs. of Mefenoxam WSP per acre broadcast during the 12 months before bearing harvestable fruit, or possible illegal residues may result.

Cranberries

Use Mefenoxam WSP as a soil application for control of *Phytophthora* root rot of cranberries caused by *Phytophthora* spp.

Apply Mefenoxam WSP at 1-1 1/2 lbs./A as a broadcast soil application for control of *Phytophthora* root rot of cranberries. Three applications per crop season are recommended. Make the first application in the fall after harvest. Make the second application in the spring followed by a third application up to but no later than 45 days before harvest.

Apply Mefenoxam WSP using ground or chemigation equipment. Sufficient water should be used to allow movement of Mefenoxam WSP into the root zone. Use a minimum of 20 gals. of water per acre when applying by ground equipment. Refer to the **Application Through Irrigation Systems** section of the

label for instructions and precautions when making applications through irrigation systems.

Notes: (1) Do not apply Mefenoxam WSP to cranberries by air. (2) To avoid possible illegal residues, do not apply within 45 days before harvest and do not apply more than 5.25 lbs./A per growing season.

Raspberries

Mefenoxam WSP is a soil-applied systemic fungicide for use in the control of *Phytophthora* root rot.

Apply 1/4 lb./1,000 linear ft. of row to the soil surface in a 3-foot band over the row. Make one application in the spring and another in the fall after harvest. Use the formula in the **General Information** section of this label to calculate the amount of Mefenoxam WSP needed per acre.

Note: Do not apply Mefenoxam WSP within 45 days before harvest, or possible illegal residues may result.

Strawberries

Mefenoxam WSP provides control of red stele (*Phytophthora fragariae*), vascular collapse (*P. cactorum*), and leather rot (*P. cactorum*) when used as directed. Applications may be made using ground application equipment.

New Plantings: Apply Mefenoxam WSP at 1 lb./treated acre in sufficient water to move the fungicide into the root zone of the plants. Make one application after transplanting followed by an additional application 30 days before the beginning of harvest or at fruit set. A third application may be made during the harvest season, depending on environmental conditions and disease pressure. For banded applications, use the formula in the **General Information** section of this label to determine the amount of Mefenoxam WSP needed per acre. When applying Mefenoxam WSP through drip irrigation systems, use the same amount as would be applied in a banded application to cover the root zone of the plants. Observe the precautions concerning application of Mefenoxam WSP through drip irrigation systems in the **General Information** section of this label.

Established Plantings: Apply Mefenoxam WSP at 1 lb./treated acre in sufficient water to move the fungicide into the root zone of the plants. Make one application in the spring after the ground thaws and before first bloom. A second application may be applied after harvest in the fall. For supplemental control of leather rot, an application may be made during the growing season at fruit set. For banded applications, use the formula in the **General Information**

section of this label to determine the amount of Mefenoxam WSP needed per acre. When applying Mefenoxam WSP through drip irrigation systems, use the same amount as would be applied in a banded application to cover the root zone of the plants. Observe the precautions concerning application of Mefenoxam WSP through drip irrigation systems in the **General Information** section of this label.

Notes: (1) To avoid possible illegal residues, do not use more than a total of 3 lbs of Mefenoxam WSP per treated acre per year. (2) For low annual rainfall areas, a surface application of Mefenoxam WSP needs to be moved into the root zone by rainfall, overhead irrigation, or mechanical incorporation.

Citrus

Includes grapefruits, lemons, limes, oranges, tangelos, tangerines, citrus citron, kumquats, satsuma mandarin, and hybrids of these.

Use Mefenoxam WSP on citrus for control of citrus foot rot, root rot, and trunk cankers caused by *Phytophthora* spp. Mefenoxam WSP can be sprayed as a topical canker application and as a soil application.

Note: Where nematodes are a problem, best results can be achieved if effective EPA-registered nematicides are used. Nematicides can be used in combination or in sequence with Mefenoxam WSP applications.

Precaution: For best Phytophthora control, a combination of cultural practices and resistant varieties is recommended. The use of Mefenoxam WSP is not recommended in FL for use on the highly susceptible sweet orange rootstock.

Citrus in Nurseries (AZ, CA, FL and PR Only)

Make the first application of Mefenoxam WSP at the time of planting. Make repeat applications at 3-month intervals during the period when trees are actively growing. For banded applications, use a band wide enough to cover the root systems of the plants. Do not apply Mefenoxam WSP solutions to bare roots.

Soil Drench: Apply 1-1 1/2 oz./100 gals. of water as a drench over the row at a rate of 100-250 gals./1,000 ft. of row. The width of the drench treatment should be wide enough to cover the root systems of the plants. Follow with a 1/2-1 inch irrigation over the treated area.

Soil Surface Spray: Apply 2-4 lbs./treated acre in a broadcast or banded surface spray to seedbeds, liners, or bedded stock in sufficient water to obtain thorough coverage. If applications are banded, the treated area should be wide enough to cover the root systems of the plants. Follow the applications with a 1/2-1 inch irrigation over the treated area.

Note: Do not use Mefenoxam WSP for disease control in greenhouse nurseries.

Citrus Resets or New Plantings (AZ, CA, FL and PR Only)

Make the first application of Mefenoxam WSP to citrus resets or new plantings at the time of transplanting. Make up to 3 additional applications per year at 3-month intervals or when root growth flushes occur.

Water Ring Drench: Mix 1-1 1/2 oz./100 gals. of water. Apply 5 gals. of the mix around the base of each tree within the watering ring.

Soil Surface Spray (AZ and CA Only): Apply 2-4 lbs./treated acre (3/4-1 1/2 oz./1,000 sq. ft.) in sufficient water to obtain uniform coverage of the soil surface. Apply spray to the soil surface beneath the tree canopy. If natural rainfall is not expected within 3 days of a soil surface application, irrigate with 1/2-1 inch water over the treated area. See instructions below for application through irrigation water.

Soil Surface Spray (FL and PR Only): Apply 2 lbs./treated acre (3/4 oz./1,000 sq. ft.) under the canopy of the tree.

Applications may be made through low volume irrigation systems at the rate of 1/2 lb. per grove acre for trees less than 5 years old. Two to three applications per year are recommended. Applications may be made on a spring + summer, summer + fall, or spring + summer + fall schedule. *added*

Established Plantings

Soil Application (FL and PR Only): Apply 1 lb./treated acre to groves that have a Phytophthora propagule count of 10 to 20 per cubic centimeter (cc) of soil as a feeder root rot disease maintenance treatment. Two to three applications per year are recommended. Applications may be made on a spring + summer, summer + fall, or spring + summer + fall

schedule. Applications may be made through low volume irrigation systems at the rate of 1/2 lb. per grove acre for trees 5 years or older. For groves with extremely high propagule counts (above 20 per cc of soil), apply 2 lbs./treated acre for one year (2-3 applications) to reduce the population. added

Soil Surface Spray (AZ and CA Only): For best results, begin Mefenoxam WSP applications during the spring root-flush period. One or two additional applications per year can be made at 3-month intervals or to coincide with flushes of root growth. Use the following table to determine the proper rate based on tree size and the number of applications per year. For applications based on broadcast rates, use Mefenoxam WSP at 2-4 lbs./A (3/4-1 1/2 oz./1,000 sq. ft.) when 3 applications are planned and at 6 lbs./A (2 1/4 oz./1,000 sq. ft.) when 2 applications are planned. Apply in sufficient water to provide uniform coverage.

Diameter of Tree Canopy (Ft.)	Ounces of Mefenoxam WSP per Ten Trees	
	2 applications/yr.	3 applications/yr.
5	0.38	0.25
10	1.88	1.25
15	3.75	2.50
20	7.50	5.00

Trunk Spray for Control of Gummosis Caused by Phytophthora spp. (AZ, CA and TX only): Add 2 lbs. of Mefenoxam WSP to 3 gals. of water and spray the surface of the trunks using enough spray to thoroughly wet the cankers. Mefenoxam WSP may be applied up to 3 times per year.

Notes: (1) To avoid possible illegal residues, do not make trunk and soil applications to the same tree in the same cropping season (2) Do not apply more than 12 lbs. of Mefenoxam WSP per treated acre per year.

Cole Crops (Broccoli, Cabbage, and Cauliflower)

Includes broccoli, Chinese broccoli (gai lon, white flowering broccoli), cabbage, Chinese cabbage (tight-heading varieties only), and cauliflower only.

Mefenoxam WSP applied as a soil application at planting will control damping-off caused by *Pythium* spp. and basal stem rot caused by *Phytophthora* spp. Applications may be made preplant incorporated or as a soil surface spray after planting.

Preplant Incorporated Application: Apply 1-2 lbs./treated acre as a broadcast soil application in sufficient water to

provide uniform coverage and incorporate in the top 2 inches of soil. For control of Pythium damping-off only use 1/4-1/2 lb./A. For banded applications, a 7-inch band is recommended. Use the formula in the **General Information** section of this label to calculate the amount of Mefenoxam WSP needed per acre.

Surface Application: Apply 1-2 lbs./treated acre at planting in sufficient water or liquid fertilizer to provide uniform coverage. For banded applications, a 7-inch band is recommended. Use the formula in the **General Information** section of this label to calculate the amount of Mefenoxam WSP needed per acre. If natural rainfall is not expected before the seeds start germinating, Mefenoxam WSP should be incorporated mechanically before planting or be moved into the seed zone after planting with 1/2-1 inch sprinkler irrigation.

added
Notes: (1) Do not use Mefenoxam WSP for disease control in greenhouse or field-grown vegetable bedding plants. (2) Do not dip plants in solutions containing Mefenoxam WSP, or crop injury may occur. (3) Mefenoxam WSP may be tank mixed with Terraclor® 75W to control club root (*Plasmodiophora brassicae*) or wirestem/black root (*Corticium solani*). Before applying, observe all precautions, limitations, rates, and directions for use including the need for incorporation on the Terraclor 75W label.

Cotton

Seed Rots and Seedling Diseases of Cotton Caused by Pythium spp.

Apply 1/16-1/8 lb./13,000 linear ft. of row (0.075-0.15 oz./1,000 linear ft.) as an in-furrow spray in 5-15 gals. of water at planting. Mount the spray nozzle so the spray is directed into the furrow over the seed just before the seeds are covered.

For control of Pythium and Rhizoctonia, apply 2-4 qts. Terraclor 2E or 1 1/3-2 3/4 lbs. Terraclor 75W per 13,000 linear feet of row in tank mixture with Mefenoxam WSP or use labeled rates of Mefenoxam PC.

Note: When Mefenoxam WSP is applied with Terraclor 2E or Terraclor 75W, observe all precautions and restrictions that appear on the Terraclor 2E or Terraclor 75W labels.

Cucurbit Vegetables

Includes balsam pear (bitter melon), Chinese waxgourd (Chinese preserving melon), citron melon, cucumber, gherkin, edible gourds, cantalope, casaba, crenshaw, honeydew melon, honey balls, mango melon, muskmelon, Persian melon, pumpkin, summer squash, winter squash, watermelon, and cucurbit hybrids only.

Mefenoxam WSP applied at planting will provide control of damping-off and cottony leak caused by *Pythium* spp. Applications may be made preplant incorporated or as a soil surface spray after planting.

Preplant Incorporated Application: Apply 1-2 lbs./treated acre as a broadcast soil application in sufficient water to provide uniform coverage and incorporate in the top 2 inches of soil. For banded applications, a 7-inch band is recommended. Use the formula in the **General Information** section of this label to calculate the amount of Mefenoxam WSP needed per acre.

Surface Application: Apply 1-2 lbs./treated acre at planting in sufficient water or liquid fertilizer to provide uniform coverage. For banded applications, a 7-inch band is recommended. Use the formula in the **General Information** section of this label to calculate the amount of Mefenoxam WSP needed per acre. If natural rainfall is not expected before the seeds start germinating, Mefenoxam WSP should be incorporated mechanically before planting or be moved into the seed zone after planting with 1/2-1 inch sprinkler irrigation.

Notes: (1) Do not use ^{added} Mefenoxam WSP for disease control in greenhouse or field-grown vegetable bedding plants. (2) Do not dip plants in solutions containing Mefenoxam WSP, or crop injury may occur.

Deciduous Fruits and Nuts in Orchards (Nonbearing)

Phytophthora Diseases

Use of Mefenoxam WSP will aid in the control of crown, collar, and root rot of deciduous fruit and nut trees caused by *Phytophthora* spp. when used in conjunction with good cultural practices and rootstocks that are most tolerant to the disease. Applications should be made before symptoms appear, especially in areas favorable for disease development. Mefenoxam WSP will not revitalize trees showing moderate to severe disease symptoms.

Make the first application at the time of planting (See following **Notes**). Additional applications should be made at 3-month intervals during the time when conditions are favorable for disease development. For established plantings, make the first application in the spring before growth starts.

Apply 4 lbs./treated acre (1 1/2 oz./1,000 sq. ft.) in sufficient water to obtain uniform coverage of the soil under the canopy of the trees. For banded applications, use the formula in the **General Information** section of this label to calculate the amount of Mefenoxam WSP needed per acre. Soil surface sprays of Mefenoxam WSP will not be effective until the fungicide is moved into the root zone by rainfall or irrigation.

added
Notes: (1) Unless labeled for bearing tree crops, do not apply to plantings that will bear harvestable fruit within 12 months of the last application, or possible illegal residues may result. (2) To avoid injury, do not use Mefenoxam WSP to dip or spray tree roots. Do not concentrate it around the tree trunks. (3) Do not apply to trees under stress. (4) For intense plantings (2-3 times the normal planting rate) make applications on a per area basis, i.e., per acre or 1,000 sq. ft. Do not calculate the amount of Mefenoxam WSP on a per tree basis. (5) In CA, do not apply Mefenoxam WSP to newly planted trees within 90 days of planting. (6) Do not apply more than 12 lbs. of Mefenoxam WSP per treated acre per year.

Ginseng

Mefenoxam WSP applied to the soil before early spring growth, followed by applications of Mefenoxam GR (See Mefenoxam GR label), will control Phytophthora root rot in ginseng caused by Phytophthora cactorum.

Apply Mefenoxam WSP at 3/4 lb./A as a drench in 100-400 gals. of water uniformly to the soil surface in the spring before the plants begin growth.

Note: Do not make any supplemental applications of Mefenoxam WSP.

Hops

Downy mildew (*Pseudoperonospora humuli*):

u **Soil Spray:** Apply 1/2 lb./A of hops in a minimum of 20 gals. of water to the soil surface over the crowns after

added

pruning, but before training. Early application before shoots are 6 inches long is preferable.

Foliar Spray: When primary infection (spikes) persist after a soil spray, and/or there is the first evidence of secondary (foliar) infection, foliar sprays of Mefenoxam WSP in combination with a contact copper fungicide may be used. Apply 1/2 lb. of Mefenoxam WSP per acre in a tank mix combination with 2 lbs./A of Kocide® 101 (or an equivalent rate of a comparable fungicide). Apply with ground equipment in a minimum of 50 gals. of water per acre.

added

Notes: (1) To avoid possible illegal residues, do not make more than 3 applications of Mefenoxam WSP per season (1 soil + 2 foliar sprays). (2) Do not make the last application within 45 days of harvest. (3) Apply foliar sprays of Mefenoxam WSP only in combination with a copper fungicide. (4) Do not apply after training or make more than one application per year, and (5) Do not feed hop refuse to livestock, or possible illegal residues may result.

added

Leafy Vegetables*

*Includes celery, garden cress, upland cress, endive, fennel, lettuce (head and leaf), parsley, rhubarb, spinach, and Swiss chard.

added

Mefenoxam WSP applied as a soil application will control damping-off caused by *Pythium* spp. in head lettuce and spinach and white rust (*Albugo occidentalis*) and downy mildew in spinach. Applications may be made banded over the row, preplant incorporated, or injected with liquid fertilizer.

Preplant Incorporated Application: Apply 1-2 lbs./treated acre as a broadcast soil application in sufficient water to provide uniform coverage and incorporate in the top 2 inches of soil. For banded applications, a 7-inch band is recommended. Use the formula in the **General Information** section of this label to calculate the amount of Mefenoxam WSP needed per acre.

Surface Application: Apply 1-2 lbs./treated acre at planting in sufficient water or liquid fertilizer to provide uniform coverage. For banded applications, a 7-inch band is recommended. Use the formula in the **General Information** section of this label to calculate the amount of Mefenoxam WSP needed per acre. If natural rainfall is not expected before the seeds start germinating, Mefenoxam WSP should be incorporated mechanically before planting or be moved into the seed zone after planting with 1/2-1 inch sprinkler irrigation.

White Rust and Downy Mildew Control (Spinach Only): In addition to the preplant incorporated or surface application described above, apply 1/4 lb. of Mefenoxam WSP per acre of crop, shanked in 21 days after planting or after the first cutting. One other application may be shanked in after the next cutting. A total of 2 supplemental applications may be made on a 21-day interval. Use sufficient mechanical or bypass agitation to keep the Mefenoxam WSP mixed with the water. *moved*

Notes: (1) The additional applications of Mefenoxam WSP noted above and made after each cutting by shanking the fungicide into the beds provide continuing control of white rust. However, white rust can only be controlled in a preventive disease control program that begins with an application of Mefenoxam WSP to the soil at planting. **If Mefenoxam WSP is not used at planting, do not use Mefenoxam WSP at any other time throughout the season.** Do not apply Mefenoxam WSP in foliar applications or make curative applications in situations where white rust infections are already established. The use of Mefenoxam WSP in curative applications greatly increases the risk of the fungus developing insensitivity to mefenoxam. The development of insensitivity will destroy the effectiveness of Mefenoxam WSP in controlling white rust. (2) To avoid possible illegal residues, do not harvest spinach within 21 days of a Mefenoxam WSP application. (3) ~~Do not use Mefenoxam WSP for disease control in greenhouse or field-grown vegetable bedding plants.~~ (4) Do not apply more than 2.75 lbs. of Mefenoxam WSP per acre per growing season in spinach. (5) Do not exceed a total of 1.4 lbs. active ingredient per acre of mefenoxam per growing season when using a combination of Mefenoxam WSP, Mefenoxam EC, Mefenoxam GR, or Mefenoxam/Copper in spinach. *added*

Legume Vegetables (Succulent or Dried)

Includes field beans, French beans, kidney beans, lima beans, mung beans, navy beans, pinto beans, runner beans, snap beans, wax beans, broad beans (fava beans), chickpeas (garbanzo beans), lentils, lupines (sweet, white sweet, white, and grain), garden peas, field peas, sugar peas, southern peas (blackeyed peas, crowder peas, cowpeas, catjang), and edible soybeans, etc.

Pythium Damping-Off and Root Rot: Mefenoxam WSP applied at planting will control damping-off and root rot caused by *Pythium* spp. Applications may be made preplant incorporated, or as a soil surface spray after planting.

Preplant Incorporated Application: Apply 1/2-1 lb./treated acre as a broadcast soil application in sufficient water or liquid fertilizer to provide uniform coverage and incorporate in the top 2 inches of soil. For banded applications, a 7-inch band is recommended. Use the formula in the **General Information** section of this label to calculate the amount of Mefenoxam WSP needed per acre.

Surface Application: Apply 1/2-1 lb./treated acre at planting in sufficient water to provide uniform coverage. For banded applications a 7-inch band is recommended. Use the formula in the **General Information** section of this label to calculate the amount of Mefenoxam WSP needed per acre. If natural rainfall is not expected before the seeds start germinating, Mefenoxam WSP should be incorporated mechanically before planting or be moved into the seed zone after planting with 1/2-1 inch sprinkler irrigation.

Notes: (1) Do not use ^{added} Mefenoxam WSP for disease control in greenhouse or field-grown vegetable bedding plants. (2) Mefenoxam WSP may be tank mixed with Terraclor 2E or 75W to control Rhizoctonia root and stem rot or white mold (*Sclerotinia sclerotiorum*) in snap and dry beans. Observe all precautions, limitations, rates, and directions for use on the respective Terraclor label before applying.

Onion - Dry Bulb*, Green, and Onions Grown for Seed**

Green Bedding

*Includes garlic, onions (dry bulb), and shallots (dry bulb)

**Includes green onions, leeks, spring onions or scallions, Japanese bunching onions, green shallots, or green eschalots.

Mefenoxam WSP applied at planting will control damping-off caused by *Pythium* spp. Applications may be made preplant incorporated or as a soil surface spray after planting.

Preplant Incorporated Application: Apply 1/2-1 lb./treated acre as a broadcast soil application in sufficient water to provide uniform coverage and incorporate in the top 2 inches of soil. For banded applications, a 7-inch band is recommended. Use the formula in the **General Information** section of this label to calculate the amount of Mefenoxam WSP needed per acre.

Surface Application: Apply 1/2-1 lb./treated acre at planting in sufficient water to provide uniform coverage. For banded applications a 7-inch band is recommended. Use the formula in the **General Information** section of this label to calculate the amount of Mefenoxam WSP needed per acre.

If natural rainfall is not expected before the seeds start germinating, Mefenoxam WSP should be incorporated mechanically before planting or be moved into the seed zone after planting with 1/2-1 inch sprinkler irrigation.

Note: Do not use Mefenoxam WSP for disease control in greenhouse or field-grown vegetable bedding plants.

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Papaya (Hawaii Only)

Mefenoxam WSP aids in the control of Phytophthora root rot of papaya in nurseries and in new plantings in the field.

Papaya in Nurseries: Apply Mefenoxam WSP as a soil drench by mixing 1/2-1 oz. with 40 gals. of water and applying to 800 sq. ft. Apply to seedlings 3-4 weeks after planting seed. Repeat application one month later if necessary. Do not apply more than twice per year in the nursery.

Papaya in the Field - New Plantings: Make the first application of Mefenoxam WSP at the time of transplanting to the field or within one week of transplanting. Apply 1.75-3.5 lbs./A* of soil treated (0.625-1.25 oz./1,000 sq. ft.) as a soil surface spray in sufficient water to obtain thorough coverage of the soil under the canopy of the trees. After application, immediately irrigate with 1/8-1/4 inch of water. Repeat in 2-4 weeks if conditions are favorable for disease. Use the following table as a guide for treating individual trees.

Diameter of Tree Canopy (Ft.)	Ounces Mefenoxam WSP Per Ten Trees
3	0.05-0.10
4	0.10-0.19
6	0.19-0.38
8	0.38-0.63

11b. = Deleted 0.45 lb per

Notes: To avoid possible illegal residues, (1) Do not apply more than 2 applications per year in the field to newly transplanted stock, and (2) Do not apply within 3 months of harvest.

Peanuts

Mefenoxam WSP is a soil-applied systemic fungicide for use in control of seedling and pod diseases of peanuts incited by *Pythium* spp.

Seedling Diseases: Apply 1/4 lb./A of crop as an application to the seed in-furrow or in a 7-inch band at the time of planting. For in-furrow applications, position the spray so the fungicide is mixed with the soil covering the seed. Avoid spraying the seed directly with the spray solution, or crop injury may occur.

Pod Rot: Apply 1/2-1 lb./A at early pod set or pegging. Make applications directly to soil in a 7-inch band.

Notes: (1) Where pathogens other than *Pythium* spp. are present, use fungicides that control those diseases in combination with Mefenoxam WSP. (2) Where the predominant pod rot pathogens are *Pythium* spp. and *Rhizoctonia* spp.; use Mefenoxam EC at labeled rates.

Peppers and Eggplant

Soil applications of Mefenoxam WSP will control damping-off caused by *Pythium* spp. and crown rot caused by *Phytophthora capsici*. Mefenoxam WSP must be applied to the soil before the plants are infected with *Phytophthora* to obtain satisfactory disease control.

Apply (1-2) lbs./treated acre at the time of planting in sufficient water (20-50 gals.) to provide uniform coverage. If rainfall is not expected before the plants begin growth, Mefenoxam WSP should be incorporated mechanically before planting or be moved into the root zone after planting with 1/2-1 inch of sprinkler irrigation water. For banded applications, a 12-16 inch band is recommended. After the initial application, 2 supplemental post-directed applications at (1 lb.)/treated acre should be made at 30-day intervals. The spray should be directed at the base of the plants and cover 6-8 inches of soil on either side of the plants. Such applications must be incorporated mechanically or by sprinkler irrigation to move the Mefenoxam WSP into the root zone. Mefenoxam WSP may be applied shanked in as a band treatment to either side of the plant. Use the formula in the **General Information** section of this label to calculate the amount of Mefenoxam WSP needed per acre.

Precautions: (1) Mefenoxam WSP may cause some yellowing of the pepper leaves. (2) Plants already infected with *Phytophthora* cannot be cured with Mefenoxam WSP

applications. (3) The foliar blight phase of *Phytophthora* cannot be controlled with foliar applications of Mefenoxam WSP. (4) Do not use Mefenoxam WSP for disease control in greenhouse crops or vegetable bedding plants.

Notes: To avoid possible illegal residues, (1) Do not apply within 7 days of harvest, and (2) Do not apply more than 3 lbs. of Mefenoxam WSP per acre of crop per season.

Pineapple

Mefenoxam WSP, applied as a "seed piece" dip, provides effective control of heart rot disease of pineapple caused by *Phytophthora* spp.

Apply Mefenoxam WSP as a crown dip before planting at the rate of 1/2-1 lb./100 gals. of water. Use 75 to 100 gals. of dip solution per planted acre, depending on crown size, plant density, and dipping techniques.

Note: If there is a crop failure within one year of planting treated crowns, do not harvest plant material for animal feed.

Root and Tuber Vegetables*

Includes artichoke (Jerusalem), beet (sugar** and table), carrot, cassava, chicory, ginger, ginseng***, horseradish, parsnip, radish, rutabaga, salsify, sweet potato, tanager, turnip, and yams.

*See Note at end of section. Do not apply Mefenoxam WSP to potatoes.

**See separate section for Sugar Beets

***See separate section for Ginseng

Mefenoxam WSP applied to the soil at planting will provide control of diseases caused by *Pythium* and *Phytophthora* spp. Applications may be made preplant incorporated or as a soil surface spray after planting.

Preplant Incorporated Application: Apply 1-2 lbs./treated acre as a broadcast soil application in sufficient water to provide uniform coverage and incorporate in the top 2 inches of soil. For banded applications, a 7-inch band is recommended. Use the formula in the **General Information** section of this label to calculate the amount of Mefenoxam WSP needed per dose.

Surface Application: Apply 1-2 lbs./treated acre at planting in sufficient water to provide uniform coverage. For banded applications a 7-inch band is recommended. Use the formula in the **General Information** section of this label to calculate the amount of Mefenoxam WSP needed per acre. If natural rainfall is not expected before the seeds start germinating, Mefenoxam WSP should be incorporated mechanically before planting or be moved into the seed zone after planting with 1/2-1 inch sprinkler irrigation.

Note: (1) Do not use ~~Mefenoxam WSP~~ ^{needed} for disease control in greenhouse or field-grown vegetable bedding plants. (2) To avoid development of insensitivity in the pathogen population, do not apply Mefenoxam WSP to potatoes.

Soybeans

Mefenoxam WSP is a soil-applied systemic fungicide for use in the control of Phytophthora root and stem rot and Pythium damping-off. Mefenoxam WSP may be applied broadcast, banded, or in the seed furrow before the seeds are covered. The seed furrow applications will provide more consistent results if rain is not expected before the seeds germinate.

For best results against Phytophthora root and stem rot, use Mefenoxam WSP with soybean varieties that have some tolerance to the races of Phytophthora present in the field. The higher rate of Mefenoxam WSP should be used in areas with a history of heavy Phytophthora damage. Under heavy late season Phytophthora pressure, Mefenoxam WSP may not provide complete control.

Surface Applications: For full season control, apply 1 1/4 lbs./treated acre in sufficient water to provide uniform coverage at the time of planting. For early- to mid-season control, apply 0.38-0.75 lbs./treated acre. For banded applications, a 7-inch band is recommended. Use the formula in the **General Information** section of this label to calculate the amount of Mefenoxam WSP needed per acre. *mixed from end of*

In-Furrow Applications: For full season control, apply 1/4 oz./1,000 linear ft. of row as an in-furrow spray in 5-10 gals. of water at planting. Position the spray so the fungicide is mixed with the soil covering the seed. Avoid spraying the seed directly with the spray solution, or crop injury may occur. Use sufficient water or liquid fertilizer to provide uniform coverage. Use the following table to determine the amount of Mefenoxam WSP needed per acre based on row spacing. For early- to mid-season control, apply 0.1-0.15 oz./1,000 linear ft. of row.

Suggested Rates Per Acre According to Row Spacing

Row Spacing	Linear Ft. of Soybean Row Per Acre	Ounces of Mefenoxam WSP Needed Per Acre		
	Rate Desired	0.10	0.15	0.25
38 in.	13,756	1.00	2.00	3.75
36 in.	14,520	1.13	2.25	4.00
30 in.	17,424	1.38	2.75	4.75
24 in.	21,780	1.63	3.25	6.00
20 in.	26,136	2.00	4.00	7.00

Note: Mefenoxam WSP is specific for Pythium and Phytophthora and will not control other diseases that may attack soybeans.

Stone Fruits*, Walnuts, and Almonds

*Including apricots, cherries (sweet, ^{revised} tart), nectarines, peaches, plums (Chickasaw, Damson, Japanese), prunes.

Use of Mefenoxam WSP will aid in the control of crown, collar, and root rot caused by Phytophthora spp. when used in conjunction with good cultural practices and rootstocks that are most tolerant to the disease. Mefenoxam WSP applications should be made before symptoms appear, especially in areas favorable for disease development. Mefenoxam WSP will not revitalize trees showing moderate to severe disease symptoms.

On new plantings, make the first application of Mefenoxam WSP two weeks after planting. Additional applications should be made at 2-3 month intervals or during periods most favorable for root, crown, or collar rot development.

For established plantings, the application should be made in the spring before the plants start growth. Additional applications should be made at 2-3 month intervals or to coincide with periods most favorable for root, crown, or collar rot development.

Apply 4 lbs. treated acre (1.5 oz./1,000 sq. ft.) in sufficient carrier to obtain thorough coverage of the soil under the canopy of the trees. Sufficient surface area should be treated in nurseries to cover the root zone of the plants. Up to 3 applications can be made per year. For banded applications, use the formula in the General Information section of this label to calculate the amount of Mefenoxam WSP needed per acre. Soil surface sprays of

Mefenoxam WSP will not be effective until the fungicide is moved into the root zone by rainfall or irrigation.

Precautions: (1) Do not dip the roots of trees in Mefenoxam WSP solutions, spray the roots, or concentrate it around the tree trunks, or injury may occur. (2) Do not apply it to trees under stress. (3) For intense plantings (2-3 times the normal planting rate) make applications on a per area basis, i.e., per acre or 1,000 sq. ft. Do not calculate the amount of Mefenoxam WSP on a per tree basis. (4) In CA, do not apply Mefenoxam WSP to newly planted trees within 90 days of planting.

Notes: To avoid possible illegal residues, (1) Do not graze livestock in treated areas, and (2) Do not graze or feed cover crops grown in treated orchards.

Sugar Beets

Mefenoxam WSP will provide control of diseases caused by *Pythium* spp. Applications may be made preplant incorporated or as a surface spray at planting.

Preplant Incorporated Application: Apply 1-2 lbs./treated acre as a broadcast soil application and incorporate in the top 2 inches of soil. For banded applications, a 7-inch band is recommended Use the formula in the **General Information** section of this label to calculate the amount of Mefenoxam WSP needed per acre.

Surface Application: Apply 1-2 lbs./treated acre at planting in sufficient water or liquid fertilizer to provide uniform coverage. For banded applications, a 7-inch band is recommended. Use the formula in the **General Information** section of this label to calculate the amount of Mefenoxam WSP needed per acre. If natural rainfall is not expected before the seeds begin germinating, Mefenoxam WSP should be incorporated mechanically before planting or be moved into the seed zone after planting with 1/2-1 inch sprinkler irrigation.

Tobacco

Mefenoxam WSP is a soil-applied systemic fungicide for use in the field before transplanting for control of black shank (*Phytophthora parasitica*, var. *Nicotianae*) and blue mold (*Peronospora tabacina*) on all types of tobacco. For control of anthracnose and other tobacco diseases, use fungicides that control those diseases.

*Deleted Tobacco
Plant Bed Section*

*Deleted Stmt.
w/ reference to
plant beds.*

revised *added*
Notes: (1) Do not use Mefenoxam WSP for disease control in greenhouse tobacco or tobacco plant beds. (2) Do not dip plants in solutions containing Mefenoxam WSP, or crop injury may occur. (3) Do not use Mefenoxam WSP for disease control in floathouse, floatbed production facility, hydroponic production, or greenhouse facility.

Field Planted Tobacco

Blue Mold: Apply Mefenoxam WSP as a broadcast soil application and incorporate in the top 1/2-1 inches of soil before forming beds. For flue-cured tobacco, use 1/2-1 lb./treated acre, depending on disease pressure and length of control desired. Under low disease pressure or for early season control, use 1/2 lb./treated acre. For burley and other tobacco types, use 1 lb./treated acre.

For **prolonged control** of blue mold in field planted tobacco, make a supplemental application of 1/2 lb. per acre of crop as a soil application at lay-by or the last cultivation. Position the nozzles so that the spray is deposited under the plants and is covered by soil by the cultivator. Do not make this application if more than 1 lb./A of Mefenoxam WSP was applied prior to transplanting or if no Mefenoxam WSP was applied prior to transplanting.

Note: For best control of blue mold, use Mefenoxam WSP in the plant bed and follow with an application in the field prior to transplanting. Do not use Mefenoxam WSP in transplant water on field tobacco because of the potential for crop injury. Do not use Mefenoxam WSP as a foliar spray to field planted tobacco.

Black Shank: Use Mefenoxam WSP as a broadcast soil application and incorporate in the top 2-4 inches of soil before forming beds. Apply Mefenoxam WSP using conventional ground application equipment in sufficient water to provide uniform coverage. Use the following table to determine the amount of Mefenoxam WSP needed per acre depending on the black shank severity.

Type of Tobacco	Disease Level in Field	Rate of Mefenoxam WSP
Flue-Cured	Low to moderate (Less than 6% Disease)	1 lb.
	High (More than 6% Disease)	2 lbs.*
Burley and Other**	Low to moderate (Less than 6% Disease)	2 lbs.
	High (More than 6% Disease)	3 lbs.

*FL and GA - Use 3 lbs./treated acre of Mefenoxam WSP in fields with heavy black shank levels (greater than 6%).

**PA - Do not use Mefenoxam WSP for black shank control.

For **prolonged control** of black shank in field planted tobacco, **one** of the following is recommended: (1) Make a preplant incorporated **and** a supplemental lay-by application (last cultivation). Apply the supplemental application at last cultivation at the rate of 1/2-1 lb./A as a soil treatment. Position the nozzles so that the spray is deposited under the plants and is covered with soil by the cultivator. Do not make this application if more than 1 lb./A of Mefenoxam WSP was applied at transplanting; or (2) Make a preplant incorporated **plus** two supplemental applications at first cultivation and last cultivation (lay-by). Apply Mefenoxam WSP at 1 lb./A just prior to transplanting **followed by** a second application of 1 lb./A at the first cultivation **followed by** a third application of 1 lb./A at lay-by or the last cultivation.

Precautions: (1) For best results against black shank, use Mefenoxam WSP with tobacco varieties that have some resistance to black shank and use crop rotation. In fields where there is a history of severe black shank, use the highest rate and plant a variety that is resistant to the race of *Phytophthora* present in the field. (Burley L8 hybrids are only resistant to *Phytophthora* Race 0.) (2) Mefenoxam WSP is not recommended for use in high black shank areas on highly susceptible flue-cured varieties such as Hicks, Virginia Gold, or White Gold. (3) Failure to adequately control nematodes in fields treated with Mefenoxam WSP may result in poor control of black shank.

No-till Tobacco: Apply Mefenoxam WSP to the field before transplanting for control of black shank and blue mold on all types of tobacco. Apply 1/2-1 lb./treated acre as a

preplant, broadcast, or banded soil application. For banded applications, use the formula in the **General Information** section of this label to calculate the amount of Mefenoxam WSP needed per acre. A supplemental lay-by application may be made 30-35 days after planting at $\frac{1}{2}$ lb./A. Do not make the lay-by application if more than 1 lb./A of Mefenoxam WSP were applied at transplanting or if no Mefenoxam WSP was applied at transplanting.

Tomatoes

Soil applications of Mefenoxam WSP at planting will provide control of damping-off caused by *Pythium* spp. Soil applications applied 4-12 weeks before harvest under the vines will control fruit and root rot caused by *Pythium* spp. and *Phytophthora* spp.

Damping-Off (*Pythium* spp.): Apply 1-2 lbs./treated acre in sufficient water to provide uniform coverage at the time of planting. If rainfall is not expected before the seeds start to germinate, Mefenoxam WSP should be incorporated mechanically before planting, during the planting operation, or be moved into the seed zone after planting with 1/2 - 1 inch sprinkler irrigation. For banded applications, a 7-inch band is recommended. Use the formula in the **General Information** section of this label to calculate the amount of Mefenoxam WSP needed per acre.

Root and Fruit Rot (*Phytophthora* spp. and *Pythium* spp.)

To aid in the control of root and fruit rot, 1 or 2 additional applications may be made during the growing season, depending on the severity of the conditions for disease infection.

Apply 1 lb./treated acre beginning 4-6 weeks after planting. A second application may be made as needed up to 4 weeks before harvest, but before the last irrigation. Mefenoxam WSP may be applied as a directed soil surface spray under the vines or it may be injected into the beds. If less than the full bed is treated, use the formula in the **General Information** section to determine the amount of Mefenoxam WSP needed per acre. If Mefenoxam WSP is injected into the beds, base calculations on a 7-inch band.

If soil surface sprays are used, the Mefenoxam WSP must be incorporated into the soil with 1/2 - 1 inch of rainfall or sprinkler irrigation.

Notes: To avoid possible illegal residues, (1) Do not apply more than 3 lbs./treated acre per season, and (2) Do not use

Accepted 7 days PHT

Mefenoxam WSP for disease control in greenhouse or field-^{added}
grown vegetable bedding plants.

Replanting

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

Rotation (Plantback) Restrictions

Do not plant any crop which is not registered for use with mefenoxam in mefenoxam treated soil for a period of 12 months, with the exception of cereal grains. See following list.

Rotation Crop	Planting Time from Last Mefenoxam WSP
Alfalfa (including birdsfoot trefoil)	-0- days
Almonds	-0- days
Apples	-0- days
Asparagus	-0- days
Avocados	-0- days
Blueberries	-0- days
Broccoli	-0- days
Cabbage	-0- days
Cauliflower	-0- days
Cereal Grains (other than corn)	14 days
Chinese Broccoli (gai lon, white flowering broccoli)	-0- days
Chinese Cabbage (tight-heading varieties only)	-0- days
Citrus	-0- days
Corn	9 months
Cotton	-0- days
Cranberries	-0- days
Cucurbit Vegetables	-0- days
Deciduous Fruits and Nuts*	-0- days
Eggplant	-0- days
Garlic	-0- days
Ginseng	-0- days
Grapes	-0- days
Hops	-0- days
Leafy Vegetables (except Brassica vegetables)	-0- days
Legume Vegetables (beans and peas - succulent and dried) <i>added description</i>	-0- days
Onions (dry bulb, green, and seed)	-0- days
Papayas	-0- days
Peanuts	-0- days
Peppers	-0- days
Pineapples	-0- days
Potatoes	-0- days
Raspberries	-0- days
Root and Tuber Vegetables	-0- days
Soybeans	-0- days
Spinach	-0- days
Stone Fruits	-0- days
Strawberries	-0- days
Sugar Beets	-0- days
Tobacco	-0- days
Tomatoes	-0- days
Walnuts	-0- days
Crops Not Intended for Food or Feed	-0- days
All Other Crops Intended for Food or Feed	12 months

*These crops and other perennial crops may be planted immediately following last application of Mefenoxam WSP, provided they will not bear harvestable fruit within 12 months.

Storage and Disposal

Storage

Store in a cool, dry place. Do not store this product under wet conditions. Handle outer packaging carefully to avoid breakage of inner soluble bags.

Zewind

Pesticide Disposal

Do not contaminate water, food, or feed by storage, disposal, or cleaning of equipment. Open dumping is prohibited. Wastes resulting from the use of this product are 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 Disposal

Do not reuse outer container. Dispose of empty outer container in a sanitary landfill, or by incineration, or by open burning, if allowed by state and local authorities. If burned, keep out of smoke.

For minor spills, etc., follow all precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during cleanup procedures and disposal of wastes. In the event of a major spill, fire, or other emergency, call 1-800-888-8372, day or night.

Precautionary Statements

Hazards to Humans and Domestic Animals

CAUTION

revised

Causes moderate eye irritation. Avoid contact with eyes or clothing. Harmful if swallowed or absorbed through skin. Avoid contact with skin.

Statement of Practical Treatment

If in eyes: Flush eyes with plenty of water. Get medical attention if irritation persists.

If swallowed: Call a physician or Poison Control Center. Drink 1 or 2 glasses of water and induce vomiting by touching back of throat with finger. Do not induce vomiting or give anything by mouth to an unconscious person.

If on skin: Wash with plenty of soap and water. Get medical attention if irritation persists.

Note to Physician: If ingested, induce emesis or lavage stomach. Treat symptomatically.

revised

Personal Protective Equipment

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Waterproof gloves
- Shoes plus socks

deleted eye wear, Demand clothing...

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

Engineering Control Statements

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

User Safety Recommendations

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

Environmental Hazards

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

Physical or Chemical Hazards

Do not use or store near heat or open flame.

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CGA

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