

U.9 ENVIRONMENTAL PROTECTION AGENCY Office of Pesticide Programs Registration Division (H7505C) 401 "M" St. S.W. Washington, D.C. 20460

NOTICE OF PESTICIDE:

\_ Registration Reregistration

(under FIFRA, as amended)

EPA Reg. Number: 100-798

Term of Issuance:

Time-Limited

Name of Pesticide Product:

Mefenoxam GR (chemical

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:

- This registration shall expire on March 5, 1997 without opportunity for hearing.
- 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).
- 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.
- 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:

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- 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. 100-798".
- b. On page 4, it is suggested that the prohibition against use on transplant trays, greenhouses, etc. be boxed and "Note" be included in the "Note" which appears above the box.
- c. On page 6, it is suggested that the headings, under Avocados, be changed to "Sprinkler Irrigated Orchards" and "Drip Irrigated Orchards", to clarify that this is not a chemigation application.
  - 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.

with COMMENTS

as amended, for the pesticide

Mefenoxam GR

#### FUNGICIDE

For control of Phytophthora and Pythlum diseases of avocados, citrus, cotton, cranberries, ginseng, leafy vegetables, nonbearing deciduous fruits and nuts, peanuts, raspberries, soybeans, spinach, sugar beets, and tomatoes

50 Pounds Net Weight

Active Ingredient:

Mefenoxam: (R)-2-[(2,6-dimethylphenyi)-

methoxyacetylamino]-propionic acld methyl ester ...... 2.43% Inert Ingredients: 97.50%

Total:

100.00%

Mefenoxam GR is a granular fungicide.

#### KEEP OUT OF REACH OF CHILDREN.

#### CAUTION

See additional precautionary statements on left side of bag and directions for use on right side of bag.

EPA Reg. No. 100-

EPA Est. 5905-GA-01

Product ID.

[GANNONC LABELM-W]MEFNX-GR - 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**

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

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

#### AGRICULTURAL USE REQUIREMENTS

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

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 48 hours. Exception: If 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.

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
- Waterproof gloves
- Shoes plus socks

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

#### **General Information**

Mefenoxam GR is a systemic fungicide which provides control of certain diseases caused by members of the Oomycete class of fungi on selected crops.

**Note**: Do not use in nurseries, turf, or landscape plantings, unless specified in this label.

Note: Mefenoxam 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 GR as recommended, an insensitive strain of fungi may be present. If the treatment is ineffective due to the presence of a mefenoxam insensitive strain of fungi, neither Mefenoxam GR 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 in your particular crop and disease control situation.

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.

Calculate the amount of Mefenoxam GR needed for band treatment by the formula:

band width in inches row spacing in inches

X broadcast rate per acre

= amount needed per acre of field

# **Applicator Settings**

It is important the user calibrate each individual granular applicator before its use. The settings in the chart in the Soybeans section of the label SHOULD ONLY BE USED AS A STARTING POINT. Even after calibration, it is best to check the actual application rate under your operating conditions. Application rates can vary due to changing moisture conditions, equipment wear, normal variation in product with density and particle size distribution.

Calibration: To calibrate a granular applicator, follow the procedure as outlined below:

- 1. Fill the hopper with Mefenoxam GR.
- 2. Attach a plastic bag to the spout opening.
- 3. Refer to the appropriate chart in the Soybeans section of this label and adjust the setting on the applicator to match the desired rate per acre.
- 4. Measure off 1,000 linear ft. and drive at the speed selected.
- 5. Weigh or measure the volume of each bag, change settings as needed to obtain the desired rate and repeat steps 2-5 until the setting delivers the correct number of ounces per 1,000 ft.
- 6. Repeat steps 1-5 for each applicator box.

#### Conversions:

1. Time to cover 1,000 ft. at:

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4 \text{ mph} = 2 \text{ min. } 50 \text{ sec.}

5 \text{ mph} = 2 \text{ min. } 16 \text{ sec.}

6 \text{ mph} = 1 \text{ min. } 57 \text{ sec.}
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2. Ounces (wt.) of granules to approximate ounces (volume):

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6 oz. wt. = 8 fl. oz. (1 level cup)
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When calibrating granular applicators, follow the recommendations below:

- 1. To reduce granule flow variability, adjust orifice openings by moving the controls in one direction only, such as from the closed position to open.
- 2. Granule flow through an orifice is not always proportional to ground speed, so make calibration checks at the same speed you plant at and maintain that ground speed as constant as possible when planting.
- Granular pesticide products vary considerably in size, density and particle shape, so recalibrate applicators whenever you change brands and/or formulations. The same brand can even change from year to year.
- 4. Changing humidity and temperature during the day can change the flow rate of granules through the applicator's orifice. Recalibrate when conditions change and periodically readjust orifice settings to compensate.

- 5. Know the recommended rate. 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 (ounces) of granules 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 formula above can be used to calculate the amount of Mefenoxam GR needed per acre of crop when banded applications are made.
- 6. Calibrate frequently. There are several acceptable calibration methods. Learn one. Do the arithmetic first, then complete the material collection phase under field conditions.

#### **Preharvest Intervals**

Unless otherwise stated in the directions for use for a specific crop, there is no preharvest interval for Mefenoxam GR.

#### **Avocados**

Mefenoxam GR is a systemic fungicide which provides control of avocado root rot caused by *Phytophthora cinnamomi*. For best results, Mefenoxam GR should be used before or as soon as early symptoms of disease appear. For new plantings, the use of Phytophthora resistant root stocks with Mefenoxam GR is recommended. Mature trees in advanced stages of decline cannot be cured with Mefenoxam GR. Applications are not needed during the winter months of November through February.

**Sprinkler Irrigation:** Apply 3/4-1 1/2 oz./sq. yd. evenly to the soil surface under the canopy of the tree. The following table shows the amount of Mefenoxam GR to use based on the diameter of the tree canopy. Start applications at the beginning of the growing season or at transplanting and make 2 additional applications at 3-month intervals.

**Drip Irrigation:** Place the recommended amount of Mefenoxam GR (see following table) on the soil surface directly around the drip emitter at each tree. If there is more than one emitter per tree, distribute the total amount of Mefenoxam GR among the emitters. Start applications at the beginning of the growing season or at transplanting and make 2 additional applications at 3-month intervals.

# Diameter of Tree Canopy in Ft.

# Amount of Mefenoxam GR Per Tree

5 10 15 or wider 1 1/2- 3 oz. 6-12 oz. 14-28 oz.

**Notes**: (1) Do not make more than 3 applications per year and do not make the last application within 28 days of harvest, or possible illegal residues may result. (2) Do not apply more than 240 lbs. of Mefenoxam GR per treated acre per year.

#### Citrus

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

Use Mefenoxam GR on citrus to control citrus foot rot, root rot, and trunk canker caused by *Phytophthora* spp. Apply to the soil as a broadcast application under the canopy of the trees. If rain is not expected within 3 days of application, water in with 1/2-1 inch of irrigation. For banded applications, use the formula in the **General Information** section for calculating the amount of Mefenoxam GR needed per acre of trees. If the trees are on a drip irrigation system, distribute the amount of Mefenoxam GR needed per tree (see table) to the soil surface in the immediate vicinity of the drip emitter(s) at each tree. If there is more than one emitter at each tree, distribute the total amount of Mefenoxam GR needed among the emitters.

**Notes**: (1) 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 GR applications. (2) For all citrus, do not apply more than a total of 240 lbs. of Mefenoxam GR per treated acre per year.

Precaution: For best Phytophthora control, a combination of cultural practices and resistant varieties is recommended. The use of Mefenoxam GR 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 GR at the time of planting and make 2 additional applications at 3-month intervals during the period when trees are actively growing. Apply 40-80 lbs. per treated acre as a broadcast or banded application to the seedbeds, liners, or bedded stock. For banded applications, use a band wide enough to cover the root systems of the plants.

Note: Do not use Mefenoxam GR in greenhouse nurseries.

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

Make the first application of Mefenoxam GR to citrus resets or new plantings at the time of transplanting. Make up to 3 repeat applications at 3-month intervals to coincide with root growth flushes during the growing season. Apply as a broadcast or banded application. For banded applications, use a band wide enough to cover the root systems of the plants.

Water Ring Treatment: Uniformly spread 1 - 1 1/2 oz. within the watering ring, then drench with 5 gals. water per tree.

**Soil Surface Treatment:** Apply 40-80 lbs. treated acre (15-30 oz./1,000 sq. ft.) under the canopy of the trees. If natural rainfall is not expected within 3 days, lightly irrigate with 1/2-1 inch of water.

# **Established Plantings**

Soil Surface Applications (FL and PR Only): Apply 40-80 lbs. per treated acre (15 - 30 oz./1,000 sq. ft.) as a soil surface treatment under the canopy of the trees. Two additional applications may be made per year at 3-month intervals. Use the following table as a guide for treating individual trees.

Diameter of Tree Canopy in Ft.	Amount of Mefenoxam GR Per Tree				
5	1/4 - 1/2 oz				
10	1 1/4 - 2 1/2 oz.				
15	2 1/2 - 5 oz.				
20	5 -10 oz.				

Soil Surface Applications (AZ and CA Only): Make one application in March-April. One or two additional applications can be made at 3-month intervals to coincide with root flushes. 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 GR at 80 lbs. per treated acre (30 oz./1,000 sq. ft.) when 3 applications are planned and at 120 lbs. per treated acre (45 oz./1,000 sq. ft.) when 2 applications are planned. Immediately after application, irrigate with 1/2-1 inch sprinkler irrigation.

	Ounces of Mefenoxam GR Per Tree						
Diameter of Tree Canopy in Ft.	2 Applications Per Year	3 Applications Per Year					
5	3/4 oz.	1/2 oz.					
10	3 1/4 oz.	2 1/2 oz.					
15	7 1/2 oz.	5 1/2 oz.					
20	12 oz.	10 oz.					

#### Cotton

Mefenoxam GR provides control of seed rot and seedling diseases of cotton caused by *Pythium* spp. It does not control seedling diseases caused by other fungi.

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

Apply 1 1/4 - 2 1/2 lbs./13,000 linear ft. of row (1 1/2 -3 oz./1,000 linear ft.) as an in-furrow application at the time of planting. Mount the application tubes so the granules are mixed with the soil covering the seeds.

For broader spectrum disease control, Mefenoxam GR can be applied with 10-20 lbs. Terraclor® 10G per 13,000 linear ft. of row as an in-furrow application.

**Note**: Alternatively, Mefenoxam PC may be used if the predominant pathogens are *Pythium* spp. and *Rhizoctonia* spp.

#### Cranberries

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

Apply Mefenoxam GR by ground or air at 20-35 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 45 days before harvest.

**Notes**: To avoid possible illegal residues, (1) Do not apply within 45 days before harvest, and (2) Do not apply more than 105 lbs./A per growing season.

# **Deciduous Fruits and Nuts in Orchards (Nonbearing)**

# **Phytophthora Diseases**

Use of Mefenoxam GR 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. Mefenoxam GR applications should be made before symptoms appear, especially in areas favorable for disease development. Mefenoxam GR will not revitalize trees showing moderate to severe disease symptoms.

Make the first application at the time of planting. (See Notes below.) Up to 2 additional applications should be made at 2-3 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 80 lbs. per treated acre (30 oz./1,000 sq. ft.) uniformly under the canopy of the tree. The treated area is based on the area under the tree canopy or the area of the row to be treated (similar to herbicide strips). Use the formula in the **General Information** section for calculating the amount of Mefenoxam GR needed per acre of trees. Soil surface applications of Mefenoxam GR will not be effective until the fungicide is moved into the root zone by rainfall or irrigation.

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 treat the roots directly or concentrate the granules 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 GR on a per tree basis. (5) In CA, do not apply Mefenoxam GR to newly planted trees within 90 days of planting. (6) Do not apply more than 240 lbs. of Mefenoxam GR per treated acre per year.

# Ginseng

Mefenoxam GR applied to the soil before early spring growth followed by additional applications at monthly intervals will control Phytophthora root rot in ginseng caused by *Phytophthora cactorum*.

Apply Mefenoxam GR at 15 lbs./A uniformly to the soil surface in the spring before the plants begin growing. Make additional applications of Mefenoxam GR at monthly intervals at 10 lbs./A. Up to 4 supplemental applications may be made at 15 lbs./A.

**Notes**: To avoid possible illegal residues: (1) Do not apply more than a total of 60 lbs. of Mefenoxam GR per acre of ginseng per growing season. (2) If Mefenoxam EC is applied to the soil before early spring growth, do not apply more than 45 lbs. of Mefenoxam GR as supplemental applications. (3) Do not harvest ginseng within 9 days after a Mefenoxam GR application.

# Leafy Vegetables\* (Excluding Spinach)

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

Mefenoxam GR applied as a soil application will control damping-off in leafy vegetables caused by *Pythium* spp. Applications may be made banded over the row or preplant incorporated.

Preplant Incorporated Application: Apply 20-40 lbs. per treated acre as a broadcast soil application and incorporate in the top 2 inches of soil. For banded applications, a minimum of a 7-inch band is recommended. Use the formula in the General Information section of this label to calculate the amount of Mefenoxam GR needed per acre. When incorporated applications are made at the time of planting, position the drop tubes so the granules are mixed with the soil, covering the seed at a rate of 10-20 oz. of granules per 1,000 linear feet of row. Avoid placing the granules directly in contact with the seed, or injury may occur.

**Surface Application:** Apply 20-40 lbs. per treated acre uniformly to the soil surface at the time of planting. For banded applications, a minimum of a 7-inch band is recommended. Use the formula in the **General Information** section of this label to calculate the amount of Mefenoxam GR needed per acre. If natural rainfall is not expected before the seeds start germinating, Mefenoxam GR 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 GR for disease control in greenhouse or field-grown vegetable bedding plants.

#### **Peanuts**

Mefenoxam GR is a systemic fungicide for use in control of seedling and pod diseases of peanuts caused by *Pythium* spp.

Seedling Diseases: Apply 6.5 oz./1,000 linear ft. in-furrow or in a 7-inch band (5 lbs./A on 42-inch rows) at the time of planting. With in-furrow applications, mount the application tubes so the granules are mixed with the soil covering the seed.

**Pod Rot:** Apply 13 oz./1,000 linear ft. of row in an 8 to 12-inch band (10 lbs./12,400 linear ft. on 42-inch rows) over the rows at early pegging. For best results, an irrigation should follow the application.

**Notes:** (1) Do not apply Mefenoxam GR to wet foliage as foliar phytotoxicity and/or poor control may result. (2) Where pathogens other than *Pythium* spp. are present, use fungicides that control these diseases in combination with Mefenoxam. (3) Alternatively, Mefenoxam PC may be used if the predominant pathogens are *Pythium* spp. and *Rhizoctonia* spp.

#### Raspberries

Mefenoxam GR is a systemic fungicide for use in the control of Phytophthora root rot.

Apply 5 lbs./1,000 ft. of row to the soil surface in a 3-foot band over the row (72.5 lbs./A on a broadcast basis). Make one application in the spring and another application in the fall after harvest.

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

# Soybeans

Mefenoxam GR is a systemic fungicide for use in the control of Phytophthora root and stem rot and Pythium damping-off. Mefenoxam GR may be applied in a 7-inch band over the row at planting or in the seed furrow before the seeds are covered. The seed furrow application 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 GR with soybean varieties that have some tolerance to the races of Phytophthora present in the field. The high rate of Mefenoxam GR should be used in areas with a history of severe Phytophthora damage. Under severe late season Phytophthora pressure, Mefenoxam GR may not provide complete control.

Pythium and Phytophthora: For full-season control apply 6 oz./1,000 linear ft. of row in a 7-inch band over the row or as a seed furrow application at the time of planting. For early- to mid-season control only, apply 1 1/2 - 3 oz./1,000 linear ft. of row in the seed furrow. When making seed furrow applications, position the applicator tubes so the granules are mixed with the soil covering the seed or are applied in a "T-band." Use the following table to determine the amount of Mefenoxam GR needed per acre based on the row spacing. Use the high rate in areas with a history of Phytophthora problems.

# **Suggested Rates Per Acre According to Row Spacing**

Row Spacing	Linear Ft. of Soybean Row Per Acre	Pounds of Mefenoxam GR Needed Per Acre Rate Desired in oz.						
		1 1/2	3	6				
38 in.	13,756	1 1/3	2 3/5	5 1/6				
36 in.	14,520	1 2/5	2 3/4	5 1/2				
30 in.	17,424	1 2/3	3 1/4	6 1/2				
24 in.	21,780	2	4 1/10	8 1/6				
20 in.	26,136	2 1/2	4 9/10	9 8/10				

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

					S	uggeste	d Applic	ation Se	ttings fo	r a 7-inch	Band W	fidth or i	n the See	d Furro	V					
4 MPH				5 MPH				6 MPH				7 MPH								
Ozs./ 1,000 ft.	1.5	3	4	5	6	1.5	3	4	5	6	1.5	3	4	5	6	1.5	3	4	5	6
Gandy	8	13	15	17	19	9	15	17	19	21	10	16	19	21	23	12	18	20	23	25
Allis Chalmers 1979-1985 International Harvester 1980 & Before	1.0	1.3	1.4	1.5	1.8	1.1	1.4	1.5	1.9	2.0	1.2	1.5	1.8	2.0	2.3	1.3	1.5	1.9	2.2	2.5
Noble (Remcor) 1973-Present White 5100 Series Deutz Allis 1985-Present	2	4	5	6	7	2 or 3	5	6	7	8 or 9	3	5	7	8 or 9	10	4	6	8	10	12
John Deere 7200 & 7300 MaxEmerge 2® White 6100 Series	8	12	14	16	18	9	13	16	19	22	10	15	18	22	26	11	16	20	26	30
John Deere 7000 & 7100 Max-Emerge® Meter Scale 01020	5	8	10	12	14	6	10	12	14	16	6 or 7	11	14	16	19	7	12	15	19	22
John Deere 1979 & Later Meter Scale 0515	4	7	8	9	10	5	7 or 8	9	10	12	5 or 6	8	10	12	14	6	9	11	14	16
International Harvester 1981-1985 Case IH 1985-Present	1.C	1.5	1.55	1.75	1.85	1.1	1.5	1.75	1.85	2.0	1.2	1.65	1.85	2.0	2.3	1.3	1.8	1.9	2.3	2.5

#### Spinach

Mefenoxam GR applied as a soil application will control damping off in spinach caused by *Pythium* spp., white rust (*Albugo occidentalis*) and downy mildew. Applications may be made preplant incorporated or preemergence.

**Preplant Incorporated Application:** Apply 20-40 lbs. per 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 GR needed per acre. When incorporated applications are made at the time of planting, position the drop tubes so the granules are mixed with the soil, covering the seed at a rate of 10-20 oz. of granules per 1,000 linear ft. of row. Avoid placing the granules directly in contact with the seed or injury may occur.

Surface Application: Apply 20-40 lbs. per treated acre uniformly to the soil surface at the time of planting. 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 GR needed per acre. If natural rainfall is not expected before the seeds start germinating, Mefenoxam GR 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: Make the first application at the time of planting according to the above directions. Make up to 2 additional applications of 5 lbs. of Mefenoxam GR per acre of crop as a side dress application. Make the first side dress application 21 days after planting or after the first cutting. One additional application may be made after the next cutting.

Notes: (1) White rust and downy mildew can only be controlled in a preventative disease control program that begins with an application of Mefenoxam GR or Mefenoxam EC to the soil at planting. If Mefenoxam is not used at planting, do not use Mefenoxam at any other time throughout the season. Do not apply Mefenoxam GR where rust or downy mildew infections are already established. The use of Mefenoxam GR in curative applications greatly increases the risk of the fungus developing insensitivity to mefenoxam. The development of insensitivity will destroy the effectiveness of Mefenoxam in controlling white rust. (2) To avoid possible illegal residues, do not harvest spinach within 21 days of a Mefenoxam GR application. (3) Do not use Mefenoxam GR for disease control in greenhouse or field-grown vegetable bedding plants.

# **Sugar Beets**

Mefenoxam GR is a systemic fungicide for use in the control of diseases caused by *Pythium* spp. Applications may be made preplant incorporated or as a surface application at planting.

**Preplant Incorporated Application:** Apply 20-40 lbs. per treated acre as a broadcast soil application and incorporate into 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 GR needed per acre.

Surface Application: Apply 20-40 lbs. per treated acre at planting. For banded application, a 7-inch band is recommended. Use the formula in the General Information section of this label to calculate the amount of Mefenoxam GR needed per acre. If natural rainfall is not expected before the seeds begin germinating, Mefenoxam GR should be incorporated mechanically before planting or be moved into the seed zone after planting with 1/2-1 inch sprinkler irrigation.

#### **Tomatoes**

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

Damping-Off (*Pythium* spp.): Apply 20 lbs. per treated acre uniformly over the surface of the soil at the time of planting. If natural rainfall is not expected before the seeds begin germinating Mefenoxam GR should be incorporated mechanically 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 GR needed per acre.

Fruit and Root Rot (*Pythium* spp. and *Phytophthora* spp.): Additional applications can be made as soil surface applications under the vines to provide control of root and fruit rot. If only one application is planned, apply 20 lbs. per treated acre under the vines 4 weeks after the planting application to 4 weeks before harvest, depending on the expected occurrence of the diseases. If root and fruit rot is a problem throughout the growing season or the occurrence of diseases cannot be predicted, make 2 additional applications at 10 its. per treated acre under the vines, one 4-6 weeks after the planting application and another 4 weeks before harvest. If rainfall is not expected within 3 days of the application, follow as soon as possible with 1/2-1 inch overhead irrigation. Use

the formula shown in the **General Information** section to determine the amount of Mefenoxam GR needed per acre.

Mefenoxam GR can be shanked into the beds with fertilizer. For calculating the amount of Mefenoxam GR needed per acre, apply the same amount as would be applied on a 7-inch band at 20 lbs. per treated acre. To obtain uniform disease control, Mefenoxam GR must be mixed uniformly with the fertilizer.

**Notes**: To avoid possible illegal residues, (1) Do not apply more than 40 lbs. per treated acre per season, and (2) Do not apply within 7 days of harvest. (3) Do not use Mefenoxam GR for disease control in greenhouse or field-grown vegetable bedding plants.

### Replanting

If replanting is necessary, additional applications of Mefenoxam can be made provided that the total amount of mefenoxam applied does not exceed the maximum specified on the product label for the particular 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. See following list.

# Planting Time From Last Mefenoxam GR Application (Days)

motation or op	Molonoxalli alli
Alfalfa (including birdsfoot trefoil)	-0-
Almonds	-0-
Apples	-0-
Asparagus	-0-
Avocados	-0-
Blueberries	-0-
Broccoli	-0-
Cabbage	-0-
Cauliflower	-0-
Chinese Broccoli (gai lon, white flowering broccoli)	-0-
Chinese Cabbage (tight-heading varieties only)	-0-
Citrus	-0-
Cotton	-0-
Cranberries	-0-
Cucurbit Vegetables	-0-
Deciduous Fruits and Nuts*	-0-
Eggplant	-0-
Garlic	-0-
Ginseng	-0-
Grapes	-0-
Hops	-0-
Leafy Vegetables (excluding Brassica)	-0-
Legume Vegetables (bean and peas - succulent and	-0-
dried)	
Onions (dry bulb, green, and seed)	-0-
Papaya	-0-
Peanuts	-0-
Peppers	-0-
Pineapples	-0-
Potatoes	-0-
Raspberries	-0-
Root and Tuber Vegetables	-0-
Soybeans	-0-
Spinach	-0-
Stone Fruits	-0-
Strawberries	-0-
Sugar Beets -	-0-
Tobacco	-0-
Tomatoes	-0-
Walnuts	-0-
Wheat, barley, and oats	360
Corn	360
Crops Not Intended for Food or Feed	-0-
All Other Crops Intended for Food or Feed	360

**Rotation Crop** 

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

# Storage and Disposal

Store in a dry place. Do not contaminate water, food, or feed by storage, disposal, or cleaning of equipment. Open dumping is prohibited.

# **Pesticide Disposal**

Wastes resulting from the use of this product are toxic. Improper disposal of unused pesticide is a violation of federal law. Pesticide 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**

Completely empty bag into application equipment. Dispose of empty bag 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

Causes eye irritation. Harmful if inhaled or absorbed through the skin. Avoid contact with skin, eyes, or clothing. Avoid breathing dust.

#### Statement of Practical Treatment

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

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

If inhaled: Move to fresh air.

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

# Personal Protective Equipment

# Applicators and other handlers must wear:

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

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 or enclosed cabs 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**

For terrestrial uses, do not apply directly to water, or 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 wash waters or rinsate.

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Ciba Crop Protection

Ciba-Geigy Corporation Greensboro, NC 27419

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