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# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

Tammy Tyler Syngenta Crop Protection LLC PO Box 18300 Greensboro, NC 27419

JUN 2 5 2014

Subject:

Ridomil Gold SL

EPA Reg. No. 100-1202

Your resubmission by email dated June 18, 2014 Original application dated February 28, 2014

Decision Number: 479489

Addition of potato foliar use to label and new supplemental, editorial

revisions

Dear Ms. Tyler:

The amended labeling referred to above, submitted in connection with registration under the Federal, Insecticide, Fungicide, and Rodenticide Act as amended is acceptable. A stamped copy of your label is enclosed for your records.

The supplemental labeling referred to above and submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act, as amended, is acceptable. It expires on May 19, 2017.

You must submit one (1) copy of the final printed labeling before you release the product for shipment with the new labeling. In accordance with 40 CFR 152.130(c), you may distribute or sell this product under the previously approved labeling for 18 months from the date of this letter. After 18 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR 152.3. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA §6(e). Your release for shipment of the product constitutes acceptance of these conditions.

If you have any questions, please contact me at (703) 305-5410.

Sincerely,

Hope A. Johnson Product Manager (21)

Fungicide Branch

Registration Division (7505P)

#### Booklet '

GROUP 4 FUNGICIDE

#### Ridomil Gold® SL

#### **Fungicide**

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

Active Ingredient:

Mefenoxam*	45.3%
Other Ingredients:	54.7%
Total:	100.0%

\*CAS Nos. 70630-17-0 and 69516-34-3

Contains 4 lbs. active ingredient per gallon.

#### KEEP OUT OF REACH OF CHILDREN.

## **CAUTION**

ACCEPTED

JUN 2 5 2014

Under the Federal Insecticida Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 100-1202

See additional precautionary statements and directions for use inside booklet.

EPA Reg. No. 100-1202

EPA Est. 39578-TX-1

Product of Switzerland Formulated in the USA

SCP 1202A-L1G 1112 [1 pint front booklet/base - Product ID 34128] SCP 1202A-L1.1G 1112 [1 pint back booklet/base - Product ID 34128] SCP 1202A-L2F 1112 [1 gallon booklet/base - Product ID 34129]

1 pint Net Contents

1 gallon Net Contents

	FIRST AID
If in eyes	<ul> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> </ul>
	Call a poison control center or doctor for treatment advice.
If on skin or clothing	<ul> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
If swallowed	<ul> <li>Call a poison control center or doctor immediately for treatment advice.</li> <li>Have person sip a glass of water if able to swallow.</li> <li>Do not induce vomiting unless told to do so by the poison control center or doctor.</li> <li>Do not give anything by mouth to an unconscious person.</li> </ul>
If inhaled	<ul> <li>Move person to fresh air.</li> <li>If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
Have the product doctor, or going for	container or label with you when calling a poison control center or or treatment.
	HOT LINE NUMBER
	Hour Medical Emergency Assistance (Human or Animal) or nical Emergency Assistance (Spill, Leak, Fire, or Accident)  Call 1-800-888-8372

#### PRECAUTIONARY STATEMENTS

#### Hazards to Humans and Domestic Animals

#### **CAUTION**

Causes moderate eye irritation. Harmful if swallowed or absorbed through skin. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.

### Personal Protective Equipment (PPE)

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for Category C on an EPA chemical resistance category selection chart.

#### Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves, such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, polyvinyl chloride (PVC), or Viton®
- Shoes plus socks

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

#### **Engineering Controls**

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

# User Safety Recommendations Users should:

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

#### **Environmental Hazards**

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

#### **Groundwater Advisory**

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

#### **Surface Water Advisory**

This product may contaminate water through drift of spray in wind. This product has a high potential for runoff for several months or more after application. Poorly draining

soils and soils with shallow water tables are more prone to produce runoff that contains this product. A level, well-maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential for contamination of water from rainfall runoff. Runoff of this product will be reduced by avoiding applications when rainfall is forecast to occur within 48 hours.

#### **Physical or Chemical Hazards**

Do not use or store near heat or open flame.

#### CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

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

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

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

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

RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF SYNGENTA OR SELLER, THE REPLACEMENT OF THE PRODUCT.

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

#### **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. For crop uses that fall under this REI, see Part 2, Soil-Directed and Other Foliar Applications under Directions for Use of this label.

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

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

Coveralls

- Chemical-resistant gloves, such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, polyvinyl chloride (PVC), or Viton
- Shoes plus socks

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

#### PRODUCT INFORMATION

Ridomil Gold SL is a systemic fungicide for use on selected crops to control certain diseases caused by members of the Oomycete class of fungi.

#### PRODUCT USE RESTRICTIONS

Do not use Ridomil Gold SL in greenhouses or other structures such as lath houses, float houses, and hydroponic facilities.

Do not use Ridomil Gold SL for disease control in bedding plants, transplant trays, or nurseries except where specifically allowed in certain crop sections.

DO NOT USE RIDOMIL GOLD SL AS A FOLIAR APPLICATION UNLESS SPECIFIED ON THIS LABEL.

Do not dip plants or roots, spray bare roots, or use a transplant water treatment with solutions containing Ridomil Gold SL except where specifically allowed in certain crop sections.

Under conditions conducive to severe disease pressure, additional fungicide applications beyond the number allowed by this label may be needed. Under these conditions, use another fungicide registered for the crop/disease appearing on this label.

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

Maximum usage when applying both metalaxyl- and mefenoxam-containing products to the same crop within the same season. Do not apply more than the maximum seasonal total for the active ingredient as stated on the label of the product containing the lowest seasonal total on that crop.

Soil-applied maximum application rates include all uses in Part 1 and all uses in Part 2 except foliar applications.



#### Replanting

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

#### PRODUCT USE INSTRUCTIONS

**Application:** Apply Ridomil Gold SL by ground or air in sufficient water or liquid fertilizer to provide uniform coverage of the soil surface. Apply in a minimum of 20 gals. per acre for ground applications and 3 gals. per acre by air. Refer to the *Directions for Use* for specific crop application directions. Refer to *Application Instructions* for band and in-furrow calculations.

#### Moving Ridomil Gold into the Root or Seed Zone:

To ensure maximum activity on soilborne pathogens, Ridomil Gold SL must be moved into the seed or root zone of the plant. Follow the specific crop directions. Placement in the seed or root zone includes in-furrow sprays, soil injections, crown dips. Incorporation includes preplant incorporated applications, soil drenches, or shank applications. For soil surface sprays, rainfall will move the fungicide into the seed or root zone, but if rain is not expected within 24 hours after application, mechanically incorporate (before planting) or sprinkler irrigate (after planting) with ½ to 1 inch of water.

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

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

Spray Drift Management: To avoid spray drift, do not apply when conditions favor drift beyond the target area. Avoid spray overlap as crop injury may occur. The interaction of many equipment and weather related factors determine the potential for spray drift. AVOIDING SPRAY DRIFT AT THE APPLICATION SITE IS THE RESPONSIBILITY OF THE APPLICATOR AND THE GROWER. More information on managing spray drift can be found on the Syngenta Crop Protection website under Stewardship http://www.syngentacropprotection-us.com/enviro/driftmanagement/

IPM: Ridomil Gold SL should be integrated into an overall disease and pest management strategy (IPM) whenever the use of a fungicide is required. Cultural

practices known to reduce disease development should be followed. Consult your local agricultural authorities for additional IPM strategies established for your area.

**Rotational Crops:** For crops that are on the label there is a 0-day plant back. For other crops refer to the table below.

Rotation Crop	Planting Time From Last Ridomil Gold SL Application
Clover	O dava
Sunflower	0 days
Cereal Grains (other than Corn)	14 days
Corn	9 months
Crops Not Intended for Food or Feed	0 days
All Other Crops Intended for Food or Feed	12 months

#### RESISTANCE MANAGEMENT

Group 4 Fungicide

Ridomil Gold SL is in the Group 4 class fungicide having a specific mode of action and is subject to the development of insensitive strains of fungi. Fungal pathogens can develop resistance to products with the same mode of action when used repeatedly. Because resistance development cannot be predicted, use of this product should conform to resistance management strategies established for the crop and use area. Consult your local or state agricultural authorities for resistance management strategies that are complementary to those in this label. Resistance management strategies may include rotating and/or tank mixing with products having different modes of action or limiting the total number of applications per season. Syngenta encourages responsible resistance management to ensure effective long-term control of the fungal diseases on this label. Ridomil Gold SL should not be alternated or tank mixed with any fungicide to which resistance has already developed.

#### SPRAY EQUIPMENT

#### **Nozzles**

- Equip sprayers with nozzles that provide accurate and uniform application.
- Nozzles should be the same size and uniformly spaced across the boom.
- Calibrate sprayer before use.
- It is suggested that screens be used to protect the pump and to prevent nozzles from clogging.
- Screens placed on suction side of pump should be 16-mesh or coarser.

- Do not place a screen in the recirculation line.
- Use 50-mesh or coarser screens between the pump and boom, and where required, at the nozzles.
- Check nozzle manufacturer's recommendations.

#### **Pump**

- Use a pump with capacity to:
  - (1) Maintain 35-40 psi at nozzles
  - (2) Provide sufficient agitation in tank to keep mixture in suspension this requires recirculation of 10% of tank volume per minute.
- Use a jet agitator or liquid sparge tube for agitation.
- Do not air sparge.

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

#### MIXING INSTRUCTIONS

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

#### Ridomil Gold SL Alone (no tank mix):

- Add ¼ ½ of the required amount of water to the spray or mixing tank.
- With the agitator running, add Ridomil Gold SL to the tank.
- Continue agitation while adding the remainder of the water.
- Begin application of the spray solution after Ridomil Gold SL has completely dispersed into the mix water.
- Maintain agitation until all of the mixture has been sprayed.

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

Do not combine Ridomil Gold SL in the spray tank with pesticides, surfactants or fertilizers, unless compatibility charts or your own prior use has shown that the

combination is physically compatible, effective and non-injurious under your conditions of use.

#### Mixing in the Spray Tank

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

#### **APPLICATION PROCEDURES**

#### **Ground Application (Broadcast):**

Apply\_in\_a\_minimum of 20\_gals. of water-per acre, unless specified otherwise.

#### **Ground Application (Banded):**

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

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

#### **Ground Applications (In-Furrow):**

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

Use Rate fl. oz./1,000		Ridomil Gold SL fl. oz./A				. n			
row feet	20-	22-	24-	30-	32-	34-	36-	38-	40-
(oz. a.i./1,000 row feet)	inch rows	inch rows	inch rows	inch rows	inch rows	inch rows	inch rows	inch rows	inch rows
0.08 (0.038)	2.0	1.8	1.6	1.4	1.2	1.1	1.1	1.0	0.9
0.15 (0.078)	4.0	3.6	3.2	2.8	2.4	2.3	2.2	2.0	1.9
0.28 (0.14)	7.0	6.7	6.1	4.8	4.6	4.3	4.0	3.8	3.7
0.42 (0.21)	11.0	10.0	9.1	7.3	6.8	6.5	6.1	5.8	5.4

20" = 26,136 row ft./A, 22" = 23,760 row ft./A, 24" = 21,780 row ft./A, 30" = 17,424 row ft./A, 32" = 16,315 row ft./A, 34" = 15,374 row ft./A, 36" = 14,520 row ft./A, 38" = 13,754 row ft./A, 40" = 13,068 row ft./A

#### **Aerial Application:**

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

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

- Apply this product only through center pivot, solid set, hand move, moving wheel, micro-sprinkler, or drip irrigation systems. Do not apply this product through any other type of irrigation system.
- Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.
- If you have questions about calibration, 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.
- Ridomil Gold SL must be applied on the schedule specified in the specific crop use directions, not according to the irrigation schedule.

**Note:** Do not inject Ridomil Gold SL at full strength or deterioration of valves and seals may occur. Use a dilution ratio of at least 15 parts water to 1 part Ridomil Gold SL in the mix tank. Ridomil Gold SL can affect many seal materials. Leather seals are best.

EPDM or silicone rubber seals can be used, but should be replaced once a year. Do not use Viton, Buna-N, Neoprene, or PVC seals.

#### **Operating Instructions**

- The system must contain a functional check-valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent watersource contamination from backflow.
- 2. The pesticide injection pipeline must contain a functional, automatic, quickclosing 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.

#### Specific Instructions for Public Water Systems

- 1. Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.
- 2. Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, back-flow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete

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

- 3. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- 4. The pesticide injection pipeline must contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- 5. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.
- 6. Systems must use a metering 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.

#### **DIRECTIONS FOR USE - PART 1**

#### SOIL-INJECTED OR SOIL-INCORPORATED APPLICATIONS

The restricted-entry interval (REI) for soil-injected or soil-incorporated applications is 0 hours.

Crop	Target Diseases (Pathogen)	Product Use Rate (lb. a.i.)	Remarks
Alfalfa (including birdsfoot trefoil)	Damping Off (Pythium spp.)  Root Rot (Phytophthora spp.)	0.25-0.50 pt./A (0.12-0.25)	Soil spray (broadcast): Apply as a broadcast soil surface spray at planting. If alfalfa seed was previously treated with mefenoxam or metalaxyl as a seed dressing use the 0.25 pt./A rate.

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

Do not feed green forage or cut hay for 60 days following application (60-day PHI).

Artichoke, Globe	Damping Off ( <i>Pythium</i> spp.)	1.0-2.0 pt./A (0.50-1.0)	Soil spray (broadcast): Apply at planting.
	Root Rot ( <i>Phytophthora</i> spp.)		
■ Do not apply wit	hin 200 days of harv	est (200-day PHI).	
Avocados	Root Rot (Phytophthora cinnamomi)	Diluted Mixture: 0.25 fl. oz. in 18 gals. water	Sleeve drench: At transplanting, drench the roots inside the sleeve with 1 qt. of the diluted mixture per tree. Sleeve drench does not replace other soil applications for long-term control of root rot.
		2.0-4.0 pts./A (1.0-2.0) or	Injection (drip irrigation): Inject Ridomil Gold SL into the irrigation water at the start of the growing season or at transplanting and as soon as soil tests indicate the presence of <i>Phytophthora</i> . Two additional applications
		0.50-1.0 fl. oz./ 1,000 gals. water (3.9-7.8 ppm)	may be made at 3-month intervals. Applications are not needed during the winter months of November through February.

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

- For new plantings, use Phytophthora-resistant rootstocks.
- Mature trees in moderate to advanced stages of decline cannot be cured with Ridomil Gold SL.
- Do not apply within 28 days of harvest (28-day PHI).
- Do not exceed the equivalent of 6.0 lb. a.i./A per crop of soil-applied mefenoxam-containing products.

Crop	Target Diseases (Pathogen)	Product Use Rate (lb. a.i.)	Remarks
Bushberry Subgroup:	Root Rot (Phytophthora spp.)	3.6 pt./A (1.8)	Soil Spray (broadcast or band) New Plantings: Make one application at the time of planting. For band applications use
Blueberries (High		or	an 18-inch band.
and Low Bush) Currants Elderberry Gooseberry Highbush Cranberry		0.25 pt./1,000 row ft.	(See direction for Established Plantings in Part 2 for subsequent applications).
Including hybrids, cultivars, and varieties of these			
See below for additional berries included in subgroup.			·

Other Bushberries in Subgroup: Aronia Berry, Highbush Blueberry, Lowbush Blueberry, Buffalo Currant, Chilean Guava, Black Currant, Red Currant, Elderberry, European Barberry, Gooseberry, Highbush Cranberry, Edible Honeysuckle, Huckleberry, Jostaberry, Juneberry, Lingonberry, Native Currant, Salal, and Sea Buckthorn.

- ----Use-Ridomil-Gold-St-in-conjunction-with-good-cultural-practices to minimize disease.
- Do not exceed the equivalent of 3.6 lb. a.i./A per crop of soil-applied mefenoxam-containing products.

Crop	Target Diseases (Pathogen)	Product Use Rate (lb. a.i.)	Remarks
Caneberry	Root Rot	3.6 pt./A	Soil Spray (broadcast or band)
(Blackberry and	(Phytophthora	(1.8)	New Plantings: Make one application at
Raspberry)	spp.)		the time of planting. For band applications
Subgroup:		or	use an 18-inch band. Do not make more
		0.05 114.000	than one soil application per season at 3.6
Blackberry		0.25 pt./1,000	pt./A.
Raspberry (Red		row ft.	(See directions for Established Blantings in
and Black)			(See directions for <i>Established Plantings</i> in Part 2 for subsequent applications.)
Wild Raspberry Cultivars	Ì		art 2 for subsequent applications.)
Outivars			
Including hybrids,			
cultivars, and			
varieties of these.			
See below for			
additional types			1
of caneberries.		1	

Subgroup includes: Andean Blackberry, Arctic Blackberry, Bingleberry, Black Satin Berry, Boysenberry, Brombeere, California Blackberry, Cherokee Blackberry, Chesterberry, Cheyenne Blackberry, Common Blackberry, Coryberry, Darrowberry, Dewberry, Dirksen Thornless Berry, Evergreen Blackberry, Himalayaberry, Hullberry, Lavacaberry, Loganberry, Lowberry, Lucretiaberry, Mammoth Blackberry, Marionberry, Mora, Mures Deronce, Nectarberry, Northern Dewberry, Olallieberry, Oregon-Evergreen-Berry, Phenomenalberry, Rangeberry, Ravenberry, Rossberry, Shawnee Blackberry, Southern Dewberry, Tayberry, Youngberry, and Zarzamora.

- Use Ridomil Gold SL in conjunction with good cultural practices to minimize disease.
- Do not exceed the equivalent of 1.8 lb. a.i./A per crop of soil-applied and 0.2 lb. a.i./A per crop of foliar-applied mefenoxam-containing products for a maximum seasonal application rate of 2.0 lb. a.i./A.

Crop	Target Diseases (Pathogen)	Product Use Rate (lb. a.i.)	Remarks
Carrots	Damping Off Cavity Spot Root Dieback ( <i>Pythium</i> spp.)	0.5-1.3 pt./A (0.25-0.65)	Preplant incorporated (broadcast or band): Apply in water or liquid fertilizer and mechanically incorporate in the top 2 inches of soil.  Soil spray (broadcast or band): Apply in water or liquid fertilizer at planting or prior to emergence.  For banded applications, a 7-inch band is recommended.  NOTE: If post planting applications are planned, see notes below for guidance on maximum rates for soil and foliar applications

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

- For best control of cavity spot, use a preventive disease control program that incorporates an atplanting or seed treatment use of Ridomil Gold SL or Apron XL® followed by one or more additional applications.
- If a seed treatment containing mefenoxam or metalaxyl is used, do not use a soil application.
- Do not exceed the equivalent of 1.4 lb. a.i./A (2.8 pt/A) per crop of total mefenoxam=containing products. The total can be split as instructed below.
- Do not exceed the equivalent of 0.65 lb. a.i./A (1.3 pt./A) per crop of soil-applied and 0.75 lb. a.i./A (1.5 pt./A) per crop of foliar-applied mefenoxam-containing products.

Clover	Damping Off ( <i>Pythium</i> spp.)	0.25-0.50 pt./A (0.125-0.25)	Soil spray (broadcast): Apply as a broadcast soil surface spray at planting. If the clover seed was previously treated with
	Root Rot ( <i>Phytophthora</i> spp.)	,	mefenoxam or metalaxyl as a seed dressing, use the 0.25 pt./A rate.

• Do not feed green forage or cut hay for 90 days following application (90-day PHI).

Crop	Target Diseases (Pathogen)	Product Use Rate (lb. a.i.)	Remarks
Cole Crops  Broccoli Brussels Sprouts Cabbage Cauliflower Collards Mustard Greens Including hybrids, cultivars, and varieties of these.	Basal Stem Rot (Phytophthora spp.)	1.0-2.0 pt./A (0.50-1.0)	Preplant incorporated (broadcast or band): Apply in water or liquid fertilizer and incorporate in the top 2 inches of soil.  Soil spray (broadcast or band): Apply in water or liquid fertilizer at planting.  Injection (drip irrigation): Inject Ridomil Gold SL into the irrigation water at the labeled rates.  For banded applications, a 7-inch band is recommended.
See additional cole crops below.	Damping Off ( <i>Pythium</i> spp.)	0.25-0.50 pt./A (0.125-0.250)	Preplant incorporated (broadcast or band): Apply in water or liquid fertilizer and incorporate in the top 2 inches of soil.  For banded applications, a 7-inch band is recommended.

Additional Cole (Brassica) Crops: Broccoli Raab (rapini), Cavalo Broccolo, Chinese Broccoli (gai lon), Chinese Cabbage (bok choy and napa), Chinese Mustard Cabbage (gai choy), Kale, Kohlrabi, Mizuna, Mustard Spinach, and Rape Greens.

For Downy Mildew control, see Cole Crops in Part 2 of Directions for Use: Soil Directed and Other Foliar Applications.

 Do not exceed the equivalent of 1.0 lb. a.i./A per crop of soil-applied and 0.50 lb. a.i./A per crop of foliar-applied mefenoxam-containing products.

Crop	Target Diseases (Pathogen)	Product Use Rate (lb. a.i.)	Remarks
Cotton	Seed and Root Rot (Pythium ultimum) Seedling Blight (Pythium aphanadermatum)	0.075-0.15 fl. oz./1,000 row ft. (0.002-0.004)	In-furrow spray: Apply in water or liquid fertilizer at planting. Direct the spray into the furrow over the seed just before the seeds are covered.
Cucurbits  Cantaloupe Cucumber Honeydew Pumpkin Squash, Summer Squash, Winter Watermelon  Including hybrids, cultivars, and varieties of these.	Damping Off (Pythium spp.)	1.0-2.0 pt./A (0.50-1.0)	Preplant incorporated (broadcast or band): Apply in water or liquid fertilizer and incorporate in the top 2 inches of soil.  Soil spray (broadcast or band): Apply in water or liquid fertilizer at planting.  Injection (drip irrigation): Inject Ridomil Gold SL into the irrigation water at the labeled rates.  For-banded applications, a 7-inch band is recommended.
See additional cucurbit crops below.			

Additional Cucurbit Crops: Chayote, Chinese Waxgourd, Citron Melon, Gherkin, Gourd (edible), *Momordica* spp. (balsam apple, balsam pear, bitter melon, Chinese cucumber), and Muskmelons (casaba, crenshaw, golden pershaw, honey balls, mango, Persian, pineapple, Santa Claus, snake melons).

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

 Do not exceed the equivalent of 1.0 lb. a.i./A per crop of soil-applied and 0.5 lb. a.i./A per crop of foliar-applied mefenoxam-containing products.

Crop	Target Diseases (Pathogen)	Product Use Rate (lb. a.i.)	Remarks
Fruiting Vegetables (Except Cucurbits)  Eggplant Groundcherry Pepino Pepper (bell, chili, cooking pepper, pimento, sweet) Tomatillo Tomato (see Tomato section for specific use directions)	Damping Off (Pythium spp.)  Crown Rot (Phytophthora capsici)	1.0 pt./A (0.50)	To control Crown Rot, apply before the plants are infected to obtain satisfactory control. Plants already infected with <i>Phytophthora capsici</i> cannot be cured with Ridomil Gold SL.  Soil spray (broadcast or band): Apply in water or liquid fertilizer preplant or at planting. For direct seeded peppers, apply preplant or prior to emergence.  For banded applications, use a 12- to 16-inch band.  Injection (drip irrigation): Inject Ridomil Gold SL into the irrigation water. Make up to two additional applications on a 30-day schedule following initial application at planting.

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

■ Do-not-apply-within-7-days-of-harvest-(7-day-PHI).

■ Do not exceed the equivalent of 1.5 lb. a.i./A per crop of soil-applied mefenoxam-containing products and 0.5 lb. a.i./A per crop of foliar-applied mefenoxam-containing products.

Ginseng	Phytophthora Root Rot (Phytophthora cactorum)	0.75 pt./A (0.375)	Soil drench: For stand establishment, apply uniformly to the soil surface in the spring before the plants start growing. Apply in 100-400 gals. of water per acre. Follow with additional applications of Ridomil Gold GR (See Ridomil Gold GR label).
Do not make	e additional applications o	f Ridomil Gold SL	- maximum one application per year allowed.
Grapes	Root and Crown Rot ( <i>Phytophthora</i> spp.)	3.6 pt./A (1.8) or	Soil spray (broadcast or band): Apply in the spring before the plants start growing in sufficient water to provide uniform coverage. Two additional applications may be made to coincide with periods most favorable for root

 Do not exceed the equivalent of 5.4 lbs. a.i./A per crop of soil-applied mefenoxam-containing products and 0.4 lb. a.i./A per crop of foliar-applied mefenoxam-containing products.

Do not apply within 60 days of harvest (60-day PHI).

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Crop	Target Diseases (Pathogen)	Product Use Rate (lb. a.i.)	Remarks
Grass, Forage, Fodder, and Hay*	Seedling Diseases ( <i>Pythium</i> spp.)	0.25-1.0 pt./A (0.125-0.50)	Soil spray (broadcast): Apply as a broadcast soil surface spray at planting. If the grass seed was previously treated with mefenoxam or metalaxyl as a seed dressing, use the 0.25-0.50 pt./A rate.

<sup>\*</sup> Includes enclosed pasture grasses or grasses grown for hay or silage such as Bermuda grass, bluegrass, brome grass, or fescue.

Do not apply to range grasses.

• Do not graze, feed green forage, or cut hay for 60 days following application (60-day PHI).

Herbs (Fresh and Dried)	Damping Off (Pythium spp.)	1.0-2.0 pt./A (0.50-1.0)	Preplant incorporated (broadcast or band): Apply in water or liquid fertilizer and mechanically incorporate in the top 2 inches
Basil Chervil (dried) Chive Coriander (leaf) Cilantro (leaf) Dillweed Lemongrass Rosemary			Soil spray (broadcast or band): Apply in sufficient water to provide uniform coverage.  For banded applications, a 7-inch band is recommended.
Sage Savory, Summer and Winter Sweet Bay Tarragon Thyme			
See additional herbs below.			-

Additional Herbs (Fresh and Dried) Crops: Angelica, Balm, Borage, Burnet, Catnip, Chamomile, Chinese Chive, Clary, Costmary, Curry (leaf), Horehound, Hyssop, Lavender, Lovage (leaf), Marigold, Marjoram, Nasturtium, Parsley (dried), Pennyroyal, Rue, Tansy, Wintergreen, Woodruff, and Wormwood.

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

- Do not apply within 21 days of harvest (21-day PHI).
- Do not exceed the equivalent of 2.0 lb. a.i./A per crop of soil-applied mefenoxam-containing products.

Crop	Target Diseases (Pathogen)	Product Use Rate (lb. a.i.)	Remarks
Leafy Vegetables (Except Brassica)	Damping Off ( <i>Pythium</i> spp.)	1.0-2.0 pt./A (0.50-1.0)	Preplant incorporated (broadcast or band): Apply in water or liquid fertilizer and mechanically incorporate in the top 2 inches of soil.
Celery Endive (Escarole) Lettuce (Head and Leaf)			Soil spray (broadcast or band): Apply in water or liquid fertilizer at planting.
Parsley Rhubarb Spinach			For banded applications, a 7-inch band is recommended.
Swiss Chard  See additional  leafy vegetables below.			Make no more than one soil application.

Additional Leafy Vegetable Crops: Amaranth, Arugula, Cardoon, Celtuce, Chervil, Chinese Celery, Chrysanthemum (edible-leaved), Chrysanthemum (garland), Corn Salad, Cress (garden), Cress (Upland), Dandelion, Dock (Sorrel), Florence Fennel (finochio), Orach, Purslane (garden), Purslane (winter), Radicchio (red chicory), Spinach (New-Zealand), and Spinach (vine).

Spinach Only	White Rust (Albugo occidentalis)  Downy Mildew	0.25 pt./A (0.125)	Shank application: Shank in Ridomil Gold SL 21 days after planting or after the first cutting. Another application may be shanked in after the next cutting. A total of 2 shanked applications may be made on a 21-day
	(Peronospora effusa)		interval.

For additional applications to Lettuce (Head and Leaf), see Part 2 of Directions for Use: Soil Directed and Other Foliar Applications.

- For leafy vegetables: Do not apply within 7 days of harvest (7-day PHI).
- For lettuce: Do not exceed the equivalent of 1.0 lb. a.i./A per crop of soil-applied and 0.4 lb. a.i./A per crop of foliar-applied mefenoxam-containing products.
- For spinach: Spinach can be harvested with a 3-day PHI only if soil application does not exceed 1.0 lb. a.i./A/season and foliar application of Ridomil Gold Copper (EPA registration #100-804) formulation does not exceed 0.25 lb. a.i. mefenoxam/A/season. Otherwise, the PHI is 21 days for spinach.
- For spinach: Do not exceed the equivalent of 1.0 lb. a.i./A per crop of soil-applied mefenoxam-containing products at planting and 0.25 lb. a.i./A per crop of soil-applied post planting, shanked-in applications of mefenoxam-containing products **OR** do not exceed the equivalent of 1.0 lb. a.i./A per crop of soil-applied mefenoxam-containing products at planting and 0.4 lb. a.i./A per crop of foliar-applied mefenoxam-containing products.

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Crop	Target Diseases (Pathogen)	Product Use Rate (lb. a.i.)	Remarks
Legume Vegetables (Succulent or Dried)	Damping Off Root Rot ( <i>Pythium</i> spp.)	0.50-1.0 pt./A (0.25-0.50)	Preplant incorporated (broadcast or band): Apply in water or liquid fertilizer and mechanically incorporate in the top 2 inches of soil.
Bean ( <i>Lupinus</i> spp.) Bean ( <i>Phaseolus</i>			Soil spray (broadcast or band): Apply in water or liquid fertilizer at planting.
spp.) Bean (Vigna spp.) Broad Bean (fava bean) Chickpea (garbanzo bean) Lentil			For banded applications, a 7-inch band is recommended.
Pea ( <i>Pisum</i> spp.) Pigeon Pea Soybean (immature seed) (See also			
Soybean section for specific use directions.)			
Including hybrids, cultivars, and varieties of these.			,
See additional legume vegetables below.		-	

Additional Legume Vegetable (Succulent or Dried) Crops: Bean (*Lupinus* spp.) - grain lupin, sweet lupin, white lupin, white sweet lupin; Bean (*Phaseolus* spp.) - field, kidney, lima, navy, pinto, runner, snap, tepary, wax; Bean (*Vigna* spp.) - adzuki, asparagus, blackeyed pea, catjang, Chinese longbean cowpea, crowder pea, moth, mung, rice, southern pea, urd, yardlong; Guar; Jackbean; Lablab bean (hyacinth bean); Pea (*Pisum* spp.) - dwarf, edible-pod, English, field, garden, green, snow, sugar snap; and Sword bean.

Crop	Target Diseases (Pathogen)	Product Use Rate (lb. a.i.)	Remarks
Onions  Dry Bulb Garlic Onions (dry bulb) Shallots (dry bulb)  Green Green Eschalots Green Onions Green Shallots Japanese Bunching Onions Leeks Spring Onions Scallions	Damping Off ( <i>Pythium</i> spp.)	0.50-1.0 pt./A (0.25-0.50)	Preplant incorporated (broadcast or band): Apply in water or liquid fertilizer and mechanically incorporate in the top 2 inches of soil.  Soil spray (broadcast or band): Apply in water or liquid fertilizer at planting.  For banded applications, a 7-inch band is recommended.
Including hybrids, cultivars, and varieties of these.			

Other-Dry-Bulb Crops: Great-headed-Garlic, Serpent Garlic, Lily Bulb, Chinese Onion Bulb, Pearl Onion, Potato Onion Bulb.

**Other Green Bulb Crops:** Chive (fresh leaves), Chinese Chive (fresh leaves), Hosta Elegans, Fritillaria (leaves), Kurrat, Lady's Leek, Beltsville Bunching Onions, Onion (fresh), Macrostem Onion, Tree Tops Onion, Welsh Onion (tops), and Shallot (fresh leaves).

- Onions (dry bulb): Do not exceed the equivalent of 1.0 lb. a.i./A per crop of soil-applied and 0.5 lb. a.i./A per crop of foliar-applied mefenoxam-containing products.
- Onions (green): Do not exceed the equivalent of 1.0 lb. a.i./A per crop of soil-applied and 0.3 lb. a.i./A
  per crop of foliar-applied mefenoxam-containing products.

Crop	Target Diseases (Pathogen)	Product Use Rate (lb. a.i.)	Remarks
Peanuts	Pythium Root Rot (Pythium spp.)	0.25 pt./A (0.125)	In-furrow spray: For seedling disease control, position the spray so the fungicide is mixed with the soil covering the seed. Avoid spraying the seed directly or crop injury may occur.  Soil spray (banded): For banded
			applications, apply over the row. A 7-inch band is recommended.
For additional Foliar Applicat		uts in Part 2 of Di	rections for Use: Soil Directed and Other
Pineapple	Heart Rot Disease ( <i>Phytophthora</i> spp.)	0.50-1.0 pt. in 100 gals. water (0.25-0.50)	Crown dip: Apply as a crown dip before planting. Amount of dip solution per acre will depend on crown size, plant density, and dipping techniques. Use 75-100 gallons of the mixture per acre for dipping.
<ul> <li>If there is cro animal feed.</li> </ul>	pp failure within one year	of planting treated	crowns, do not harvest plant material for
Potatoes	Pythium Leak ( <i>Pythium</i> spp.)	0.42 fl. oz./ 1,000 row ft.	In-furrow spray: Apply directly over the seed pieces in furrow as a 6- to 8-inch band prior to row-closure or use markout application
	Pink Rot (Phytophthora erythroseptica)  Pythium Seedling Disease (Pythium spp.)		method (incorporated).  You may need to follow this in-furrow application with a Ridomil Gold prepack foliar application at tuber initiation:  • When conditions are conducive for disease development.  • When the variety is susceptible or moderately susceptible to Pink Rot/Pythium leak.  • In areas with a long growing season.
	·		Ridomil Gold SL may be impregnated on dry fertilizer or applied in combination with liquid

- Do not use the "dribble" application method.

  Do not apply Ridomil Gold SL beyond the at-planting stage.

  Do not exceed the equivalent of 0.34 lb. a.i./A per crop of soil-applied and 0.40 lb. a.i./A per crop of foliar-applied mefenoxam-containing products.

fertilizers.

Crop	Target Diseases (Pathogen)	Product Use Rate (lb. a.i.)	Remarks
Root and Tuber Vegetables	Pythium Root Rot (Pythium spp.)	1.0-2.0 pts./A (0.50-1.0)	Preplant incorporated (broadcast or band): Apply in water or liquid fertilizer and mechanically incorporate in the top 2 inches
Artichoke (Chinese and	Phytophthora Root Rot (Phytophthora		of soil. Use sufficient water to provide uniform coverage of soil.
Jerusalem) Beet, Garden Beet, Sugar (See	spp.)		Soil spray (broadcast or band): Apply in water or liquid fertilizer at planting.
Sugar Beet section for specific use			For banded applications, a 7-inch band is recommended.
directions.) Carrots (See			
Carrots section for specific use directions.)			
Ginseng (See Ginseng section			·
for specific use directions.)			
Horseradish Parsley, Turnip-			
rooted Parsnip			
Potato (See Potato section			
for specific use directions.)			
Radish, Oriental (daikon)			
Rutabaga Sweet Potato			
Turnip Yam Bean (jicama, manoic			
pea) Yam, True			
See additional root and tuber vegetables below.	,		

Additional Root and Tuber Vegetable Crops: Arracacha, Arrowroot, Burdock (edible), Canna (edible), Cassava (bitter and sweet), Celeriac (celery root), Chayote (root), Chervil (turnip-rooted), Chicory, Chufa, Dasheen (taro), Ginger, Leren, Salsify (oyster plant, black, Spanish), Skirret, Tanier (cocoyam), Turmeric

Crop	Target Diseases (Pathogen)	Product Use Rate (lb. a.i.)	Remarks
Soybeans	Phytophthora Root and Stem Rot (Phytophthora megasprema) Pythium Damping	0.08-0.28 fl.oz./ 1,000 row ft. (0.0025 to 0.0087)	In-furrow spray: Apply in-furrow with water or liquid fertilizer. Position the spray so the fungicide is mixed with the soil covering the seed. Avoid spraying the seed directly or crop injury may occur. Use the high rate for full season control. Use 0.08-0.15 fl. oz. for early-to mid-season control.
	Pythium Damping Off (Pythium spp.)	0.37-1.25 pts./A (0.18-0.63)	Soil spray (broadcast or band): Apply in water or liquid fertilizer. Use the high rate for full season control. Use 0.37-0.75 pt. for early- to mid-season control. For banded applications, a 7-inch band is recommended.

For best results, use soybean varieties that have some degree of resistance to the races of Phytophthora present in the field.

Use the higher rate in areas with a history of heavy *Phytophthora* damage.

Under heavy late season *Phytophthora* pressure, Ridomil Gold SL may not provide complete control.

Strawberries	Red Stele (Phytophthora fragariae)	1.0 pt/A (0.50)	<b>Drip irrigation application only</b> (see Part 2 for other application methods).
	Vascular Collapse (P. cactorum)  Leather Rot (P. cactorum)		Annual plantings: Apply up to 3 times per crop. Make the first application after transplanting. Make the second application 30 days before the beginning of harvest or at fruit set. Apply the third application during harvest, depending on disease pressure and environmental conditions.
			Established plantings: Apply up to 3 times per crop. Make the first application in the spring after the ground thaws and before first bloom. Make a second application after harvest in the fall. For control of leather rot, make an additional application during the growing season at fruit set.
	5		When applying through drip irrigation, calculate the rate as a band application with a band width equal to the root zone width. Inject Ridomil Gold SL into the irrigation water.

Ridomil Gold SL may be applied the day of harvest.

Do not exceed the equivalent of 1.5 lbs. a.i./A per crop of soil-applied mefenoxam-containing products.

Crop	Target Diseases (Pathogen)	Product Use Rate (lb. a.i.)	Remarks
Sugar Beets	Pythium Root Rot ( <i>Pythium</i> spp.)	1.0-2.0 pts./A (0.50-1.0)	Preplant incorporated (broadcast or band): Apply in water or liquid fertilizer and mechanically incorporate in the top 2 inches of soil.
		-	Soil spray (broadcast or band): Apply in water or liquid fertilizer at planting.
			For banded applications, a 7-inch band is recommended.

Crop	Target Diseases (Pathogen)	Product Use Rate (lb. a.i.)	Remarks
Tobacco	Damping Off (Pythium spp.)	0.50-1.0 pt./A (0.25-0.50) or 0.25-0.50 fl. oz./ 150 sq. yds.	Soil spray (broadcast): Apply as a preplant soil application before or at time of planting. Use higher application rate on broadleaf tobacco. Use 50 gals./A of water (2 gals. water/150 sq. yds.).
	Blue Mold (Peronospora tabacina)	0.50-1.0 pt./A (0.25-0.50) For no-till tobacco: 0.50-1.0 pt./A (0.25-0.50)	Soil spray (broadcast): Apply as a broadcast soil application prior to transplanting and incorporate in the top 2-4 inches of soil before forming beds. Use the low rate for low disease pressure or early-season control. Use the high rate for high disease pressure, extended control, and burley and other tobacco types other than flue-cured.
	Black Shank (Phytophthora parasitica var nicotianae)	1.0-3.0 pt./A (0.50-1.5) For no-till tobacco: 0.50-1.0 pt./A (0.25-0.50)	Soil spray (broadcast): Apply to the soil within one week of planting. Incorporate in the top 2-4 inches of soil. Use the high rate if the disease epidemic is expected to be severe. In FL and GA, use 3 pt./A where black shank is severe.
		(0.20-0.00)	Apply preventively for effective black shank control. If black shank is expected early in the season, apply as near as possible to transplanting followed by sequential applications.

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

- Consult local extension bulletins for additional use directions.
- For best results against black shank, use tobacco varieties that have high resistance to black shank and use crop rotation.
- In fields with a history of severe black shank, use the highest rate and plant a variety resistant to the race of *Phytophthora* present (Burley L8 hybrids are resistant to only *Phytophthora* Race 0).
- Do not use in high black shank areas on highly susceptible flue-cured varieties.
- Failure to adequately control nematodes in fields treated with Ridomil Gold SL may result in poor control of black shank.
- Do not use Ridomil Gold SL for black shank control in PA.
- Do not exceed the equivalent of 1.5 lb. a.i./A per crop of mefenoxam-containing products.

Crop	Target Diseases (Pathogen)	Product Use Rate (lb. a.i.)	Remarks
Tomato	Damping Off ( <i>Pythium</i> spp.)	1.0-2.0 pts./A (0.50-1.0)	Soil spray (broadcast or band): Apply at planting in water or liquid fertilizer.  For banded applications, a 7-inch band is recommended.
	Root and Fruit Rot (Phytophthora spp.) (Pythium spp.)	1.0 pt./A (0.50)	Injection (drip irrigation): Initiate control of Root and Fruit Rot with a soil application as described above. Make subsequent applications through drip irrigation. Make the first drip application 4-6 weeks after planting. Apply the second drip application as needed up to 4 weeks before harvest, but before the last irrigation.  For injected applications, base rate calculations on a 7-inch band.

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

■ Do not exceed the equivalent of 1.5 lb. a.i./A per crop of soil-applied mefenoxam-containing products and 0.5 lb. a.i./A per crop of foliar-applied mefenoxam-containing products.

#### **DIRECTIONS FOR USE - PART 2**

#### SOIL-DIRECTED AND OTHER FOLIAR APPLICATIONS

The restricted-entry interval (REI) for soil-directed or foliar applications is 48 hours.

Crop	Target Diseases (Pathogen)	Product Use Rate (lb. a.i.)	Remarks
Alfalfa (including birdsfoot trefoil)	Damping Off (Pythium spp.)  Root Rot (Phytophthora spp.)	0.25 pt./A (0.12)	Soil spray (broadcast): Apply as a broadcast soil surface spray at planting when inter-seeding into existing stands for renovation.

For additional applications, see Alfalfa in Part 1 of Directions for Use: Soil-Injected or Soil-Incorporated Applications.

Do not feed green forage or cut hay for 60 days following application (60-day PHI).

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Apple Bearing and Nonbearing Trees	Crown Rot Collar Rot Root Rot (Phytophthora spp.)	2 qts./A (2.0) or 1.5 fl. oz./ 1,000 sq. ft.	Soil spray (broadcast of the soil in the early spring starts and in the fall after before the ground freezes is based on the area unde or the area of the sprayed sufficient water volume to coverage of the soil.	before growth harvest, but The treated area the tree canopy row. Use
		Diluted Mixture: 0.50 pt. in 100 gals. water (0.25)	Soil drench: Apply the di around the trunk of each is spring before growth start after harvest, but before t freezes. On new planting application until 2 weeks	tree in the early is and in the fall he ground is, delay the first
			Trunk diameter at 12	
			inches above	Quantity of
			the soil line	Diluted Mixture
			<1 inch	1 qt.
			1-3 inches	3 qts.
			>5 inches	4 qts.

- Apply before symptoms appear. Ridomil Gold SL will not revitalize trees showing moderate to severe disease symptoms.
- Use Ridomil Gold SL in conjunction with good cultural practices and rootstocks that are most tolerant to disease.
- Do not graze or feed cover crops in treated orchards.

Crop	Target Diseases (Pathogen)	Product Use Rate (lb. a.i.)	Remarks
Asparagus	Crown Rot Spear Rot ( <i>Phytophthora</i> spp.)	1.0 pt./A (0.50)	Soil spray (broadcast or band) Cutting beds: Apply 30 to 60 days before the first cutting. Apply again just before the beginning of harvest.
			<b>New plantings:</b> Apply after planting seedlings or after covering one-year old crowns.
<ul><li>Do not apply</li></ul>	within one day of harve	est (1-day PHI).	
Avocados	Root Rot (Phytophthora cinnamomi)	1.0-4.0 pt./A (0.50-2.0)	Sprinkler irrigation: Apply as a soil surface spray to the soil surface under the tree canopy. Begin applications at the start of the growing season or at transplanting. Two additional applications may be made at 3-month intervals. Applications are not needed during the winter months of November through February.  Use 1.0 pt./A if the trees have a canopy diameter of 2 ft. Increase the rate as the canopy diameter increases. For canopy diameters of 15 ft. or more, use the 4.0 pt./A rate.
			Soil spray: Apply to the soil directly under the drip emitter. Use irrigation to incorporate the material into the soil. If there is more than one emitter, distribute the amount of Ridomil Gold SL among the emitters. Use the same rate and application regime described above under sprinkler irrigation.

For additional applications, see Avocados in Part 1 of Directions for Use: Soil-Injected or Soil-Incorporated Applications.

- Begin applications as soon as soil tests indicate the presence of Phytophthora.
- For new plantings, use *Phytophthora*-resistant rootstocks.

  Mature trees in moderate to advanced stages of decline cannot be cured with Ridomil Gold SL.
- Do not apply within 28 days of harvest (28-day PHI).
- Do not exceed the equivalent of 6.0 lb. a.i./A per crop of soil-applied mefenoxam-containing products.

Crop	Target Diseases (Pathogen)	Product Use Rate (lb. a.i.)	Remarks
Bushberry Subgroup:  Blueberries (High and Low Bush) Currants Elderberry Gooseberry Highbush Cranberry Lingonberry Including hybrids, cultivars, and varieties of these.  See below for additional berries included in subgroup.	Root Rot (Phythophthora spp.)	3.6 pt./A (1.8)	Soil Spray (band) New Plantings: After initial at-planting application (Part 1), reapply once during a period favorable for root rot.  Established Plantings: Make a soil-directed application towards the base of the plant in a 3-ft. band over the row before the plants start to grow in the spring. One additional application may be made to coincide with the period most favorable for root rot development.

Other Bushberries in Subgroup: Aronia Berry, Highbush Blueberry, Lowbush Blueberry, Buffalo Currant, Chilean Guava, Black Currant, Red Currant, Elderberry, European Barberry, Gooseberry, Highbush Cranberry, Honeysuckle (Edible), Huckleberry, Jostaberry, Juneberry, Lingonberry, Native Currant, Salal, Sea Buckthorn.

- Ridomil Gold SL will not revitalize plants showing moderate to severe root rot symptoms.
- Use Ridomil Gold SL in conjunction with good cultural practices to minimize disease.
- Ridomil Gold SL may be applied the day of harvest (0-day PHI).
- Do not exceed the equivalent of 3.6 lb. a.i./A per crop of soil-applied mefenoxam-containing products.

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Crop	Target Diseases (Pathogen)	Product Use Rate (lb. a.i.)	Remarks
Caneberry (Blackberry and Raspberry) Subgroup:	Root Rot (Phytophthora spp.)	3.6 pt./A (1.8)	Soil Spray (band) New Plantings: After initial at-planting application (Part 1), reapply once during a period favorable for root rot.
Blackberry Loganberry Raspberry (Red and Black) Wild Raspberry Cultivars			Established Plantings: Make a soil-directed application towards the base of the plant in a 3-ft. band over the row before the plants start to grow in the spring.
Including hybrids, cultivars, and varieties of these.			
See below for additional types of caneberries.			

Subgroup includes: Andean Blackberry, Arctic Blackberry, Bingleberry, Black Satin Berry, Boysenberry, Brombeere, California Blackberry, Cherokee Blackberry, Chesterberry, Cheyenne Blackberry, Common Blackberry, Coryberry, Darrowberry, Dewberry, Dirksen Thornless Berry, Evergreen Blackberry, Himalayaberry, Hullberry, Lavacaberry, Loganberry, Lowberry, Lucretiaberry, Mammoth Blackberry, Marionberry, Mora, Mures Deronce, Nectarberry, Northern Dewberry, Colallieberry, Oregon Evergreen Berry, Phenomenalberry, Rangeberry, Ravenberry, Rossberry, Shawnee Blackberry, Southern Dewberry, Tayberry, Youngberry, and Zarzamora.

- Ridomil Gold SL will not revitalize plants showing moderate to severe root rot symptoms.
- Use Ridomil Gold SL in conjunction with good cultural practices to minimize disease.
- Do not use an adjuvant.
- Ridomil Gold SL may be applied up to 45 days prior to harvest (45-day PHI).
- Do not exceed the equivalent of 1.8 lb. a.i./A per crop of soil-applied and 0.2 lb. a.i./A per crop of foliar-applied mefenoxam-containing products for a maximum seasonal application rate of 2.0 lb. a.i./A.
- If a foliar-directed application of a mefenoxam product is used, do not exceed the equivalent of 1.8 lb a.i./A per crop of soil-applied and 0.2 lb a.i./A per crop of foliar-applied mefenoxam-containing products for a maximum seasonal application rate of 2.0 lb. a.i./A.

Crop	Target Diseases (Pathogen)	Product Use Rate (lb. a.i.)	Remarks
Carrots	Cavity Spot Root Dieback ( <i>Pythium</i> spp.)	0.25-1.0 pt./A (0.125-0.5)	For post planting applications: Begin 28-50 days after planting. Apply on a 14- to 21-day interval by chemigation, by ground equipment with a spray directed to the base of the plant, or shanked in with liquid fertilizer. All ground applications must be followed by irrigation by one inch of water to promote movement of material into the root zone.  Directed spray (broadcast or band): Make up to 4 applications beginning 40-60 days after planting on a 14- to 21-day interval. Apply as a spray directed to base of plant. Use sufficient water to provide uniform coverage of soil.  For banded applications, a 7-inch band is recommended.  Irrigation: Inject Ridomil Gold SL into the irrigation water.

For additional applications, see Carrots in Part 1 of Directions for Use: Soil-Injected or Soil-Incorporated Applications.

- For best control of cavity spot, use a preventive disease control program that incorporates an atplanting or seed treatment use of Ridomil Gold SL or Apron XL followed by one or more additional applications.
- If a seed treatment containing mefenoxam or metalaxyl is used, do not use a soil application.
- DO NOT exceed a total of 1.5 pt./A (0.75 lb. a.i./A) on post planting applications.
- DO NOT exceed a total of 1 pt./A (0.5 lb. a.i./A) per single post planting application.
- To avoid illegal residues, DO NOT apply more than 2.8 pt. (1.4 lb. a.i./A) of Ridomil Gold SL per acre per crop season. The total can be split as instructed below.
- Do not exceed the equivalent of 1.4 lb. a.i./A (2.8 pt./A) per crop of total mefenoxam-containing products. The total can be split as instructed below.
- Do not exceed the equivalent of 0.65 lb. a.i./A (1.3 pt./A) per crop of soil-applied and 0.75 lb. a.i./A (1.5 pt./A) per crop of foliar-applied mefenoxam-containing products.
- DO NOT apply within 7 days of harvest (7-day PHI).

Crop	Target Diseases (Pathogen)	Product Use Rate (lb. a.i.)	Remarks
Citrus  Calamondin Citrus Citron Citrus Hybrids (chironja, tangelo, tangor) Grapefruit Kumquat Lemon Lime Mandarin (tangerine)	Citrus Foot Rot Root Rot Trunk Canker Brown Rot Gummosis (Phytophthora spp.)	1.0-2.0 qt./A (1.0-2.0)	Citrus Resets or New Plantings: Make the first application at the time of planting. Apply to soil beneath the tree canopy or apply through irrigation water (microsprinkler or drip). Make up to 2 additional applications per year at 3 month intervals or when root growth flushes occur.  In FL, PR, and TX, apply 1.0 qt./A as a soil spray or ½ pt. per grove acre through injection. Make two or three applications per year (spring + summer, summer + fall, or spring + summer + fall).
Orange (sour and sweet) Pummelo Satsuma		1.0-1.5 fl. oz./ 100 gals. water	Water ring drench: Apply 5 gals. of the mix around the base of each tree within the watering ring of resets or new plantings.
Mandarin		1.0 – 1.5 fl. oz./20 trees	Individual Tree Treatment for Resets/New Plantings: Mix desired amount of Ridomil Gold SL in a water solution. Apply as a directed spray to individual trees (generally 8-12 fl. oz./tree) around the base of the tree and outwards to
			cover the fibrous root system. Follow with sprinkler irrigation to move product into the root zone. May be tank mixed with other approved pesticides.
		1.0 pt3.0 qt./A (0.5-3.0)	Established Plantings: Apply to soil beneath the tree canopy or apply through irrigation water (micro-sprinkler or drip). Begin Ridomil Gold SL applications during the spring root flush period. One or two additional applications may be made to coincide with flushes of root growth. Use 1.0-2.0 qt./A when 3 applications are planned and 3.0 qt./A for 2 applications.
			In FL, PR, and TX, apply 1.0 pt./A as a spray or ½ pt. per grove acre through injection to groves that have a <i>Phytophthora</i> propagule count of 10-20 per cubic centimeter of soil. Where propagule counts are above 20 per cubic centimeter, apply 1 qt./A as a spray or 1.0 pt. per grove acre through injection. Time applications as in the <i>Citrus Resets</i> or <i>New Plantings</i> section above.

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Citrus, continued	1 qt. in 3 gals. water (1.0)	Trunk Spray for Gummosis: Spray the trunks to thoroughly wet the cankers. Apply up to 3 times per year.
		In FL, add 1.0 qt. to 10 gals. of water.

- Consult local extension bulletins for additional use directions.
- Do not apply to bare roots.
- Do not apply rates higher than 1 qt./A to citrus resets or new plantings (less than 5 years old) in FL,
   PR and TX to prevent potential phytotoxicity.
- Do not use on the highly susceptible sweet orange rootstock in FL.
- Do not make trunk gummosis sprays and soil applications to the same tree in the same cropping season.
- Do not apply tank mixes of Ridomil Gold SL and residual herbicides to trees less than 3 years old.
   Apply the herbicide first; then wait 3-4 weeks to apply Ridomil Gold SL.
- Do not exceed the equivalent of 6.0 lb. a.i./A per crop of mefenoxam-containing products.

Crop	Target Diseases (Pathogen)	Product Use Rate (lb. a.i.)	Remarks
Cole Crops  Broccoli Brussels Sprouts Cabbage Cauliflower Collards Mustard Greens Turnip Greens (greens only)  Including hybrids, cultivars, and varieties of these.  See additional cole crops below.	Downy Mildew (Peronospora parasitica)	0.125-0.25 pt./A (0.063-0.125)	Foliar spray (ground or air): Ridomil Gold SL must be used in a tank mix with other fungicides registered for control of downy mildew. Apply with the full label rate of the tank mix partner fungicide.  Apply when conditions are favorable for disease, but before infection on a 14-day schedule.

Additional Cole (Brassica) Crops: Broccoli Raab (rapini), Cavalo Broccolo, Chinese Broccoli (gai lon), Chinese Cabbage, (bok choy and napa), Chinese Mustard Cabbage (gai choy), Kale, Kohlrabi, Mizuna, Mustard Spinach, and Rape Greens.

 Foliar applications to turnip plants may not be made to dual purpose turnip cultivars or varieties which produce a harvestable root.

For additional applications, see Cole Crops in Part 1 of Directions for Use: Soil-Injected or Soil-Incorporated Applications.

- Do not apply foliar sprays of Ridomil Gold SL without a labeled tank mix partner.
- Do not apply the Ridomil Gold SL mixture in fields where downy mildew is already established.
- Do not apply Ridomil Gold SL within 7 days of harvest (7-day PHI). However, refer to the label of the tank mix partner and follow the more restrictive PHI.
- Do not exceed the equivalent of 1.0 lb. a.i./A per crop of soil-applied and 0.50 lb. a.i./A per crop of foliar-applied mefenoxam-containing products.

Cranberries	Phytophthora Root Rot ( <i>Phytophthora</i> spp.)	1.0-1.75 pts./A (0.50-0.90)	Soil spray (broadcast): Apply 3 times by ground or chemigation equipment. Make the first application in the fall after harvest. Make the second application in the spring, and the final application up to, but no later than, 45 days before harvest.
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- Do not apply by air.
- Do not apply within 45 days of harvest (45-day PHI).
- Do not exceed the equivalent of 2.65 lb. a.i./A per crop of soil-applied mefenoxam-containing products.

Crop	Target Diseases (Pathogen)	Product Use Rate (lb. a.i.)	Remarks
Cucurbits  Cantaloupe Cucumber Honeydew Pumpkin Squash, Summer Squash, Winter Watermelon  Including hybrids, cultivars, and varieties of these.  See additional cucurbit crops below.	Root Rot (Pythium spp.)	0.25-0.4 pt./A (0.125-0.20)	Soil spray (directed): If soil applications of Ridomil Gold SL were made at planting, two additional applications at 20- to 30-day intervals may be made during the season.  Direct the spray to the base of the plants and cover 6-8 inches of the soil on either side of the plants. Incorporate mechanically or sprinkler-irrigate to move the Ridomil Gold SL into the root zone.  Injection (drip irrigation): Inject Ridomil Gold SL into the irrigation water at the labeled rates.

Additional Cucurbit Crops: Chayote, Chinese Waxgourd, Citron Melon, Gherkin, Gourd (edible), *Momordica* spp. (balsam apple, balsam pear, bitter melon, Chinese cucumber), and Muskmelons (casaba, crenshaw, golden pershaw, honey balls, mango, Persian, pineapple, Santa Claus, snake melons).

For additional applications, see Cucurbits in Part 1 of Directions for Use: Soil-Injected or Soil-Incorporated Applications.

- Do not apply within 5 days of harvest (5-day PHI).
- Do not exceed the equivalent of 1.0 lb. a.i./A per crop of soil-applied and 0.5 lb. a.i./A per crop of foliar-applied mefenoxam-containing products.

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Crop	Target Diseases (Pathogen)	Product Use Rate (lb. a.i.)	Remarks
Fruiting Vegetables (Except Cucurbits)  Eggplant Groundcherry Pepino Pepper (bell, chili, cooking pepper, pimento, sweet) Tomatillo Tomato (see Tomato section for specific use directions)	Crown Rot (Phytophthora capsici)	1.0 pt./A (0.50)	Banded spray: Make 2 post-directed applications at 30-day intervals following transplanting. Direct the spray to the base of the plants and cover 6-8 inches of the soil on either side of the plants. Incorporate mechanically or sprinkler-irrigate to move the Ridomil Gold SL into the root zone.  Shank application: Apply in liquid fertilizer, shanked in as a banded treatment to either side of the plant.

For additional applications, see Fruiting Vegetables in Part 1 of Directions for Use: Soil-Injected or Soil-Incorporated Applications.

- May cause some yellowing of pepper leaves.
- Apply before the plants are infected to obtain satisfactory control. Plants already infected with Phytophthora cannot be cured with Ridomil Gold SL.
- The-foliar-blight-phase-of-*Phytophthora*-cannot-be-controlled-with-foliar applications of Ridomil Gold SL.
- Do not apply within 7 days of harvest (7-day PHI).
- Do not exceed the equivalent of 1.5 lb. a.i./A per crop of soil-applied mefenoxam-containing products and 0.5 lb. a.i./A per crop of foliar-applied mefenoxam-containing products.

Crop	Target Diseases (Pathogen)	Product Use Rate (lb. a.i.)	Remarks
Herbs (Fresh and Dried)  Basil Chervil (dried) Chive Coriander (leaf) Cilantro (leaf) Dillweed Lemongrass Rosemary Sage Savory, Summer and Winter Sweet Bay Tarragon Thyme	Damping Off (Pythium spp.)	1.0-2.0 pt./A (0.50-1.0)	Banded spray: Apply as a basally directed spray at 28 days after planting or after the first cutting. Direct the spray toward the base of the plants and cover 6-8 inches on each side of the plants (12- to 16-inch band width/row).
See additional			

Additional Herbs (Fresh and Dried) Crops: Angelica, Balm, Borage, Burnet, Catnip, Chamomile, —Chinese-Chive,-Clary,-Costmary,-Curry-(leaf),-Horehound, Hyssop, Lavender, Lovage (leaf), Marigold, Marjoram, Nasturtium, Parsley (dried), Pennyroyal, Rue, Tansy, Wintergreen, Woodruff, and Wormwood.

For additional applications, see Herbs in Part 1 of Directions for Use: Soil-Injected or Soil-Incorporated Applications.

- Do not apply within 21 days of harvest (21-day PHI).
- Do not exceed the equivalent of 2.0 lb. a.i./A per crop of soil-applied mefenoxam-containing products.

Hops	Downy Mildew (Pseudoperonos pora humuli)	0.50 pt./A (0.25)	<b>Soil drench:</b> Apply in water or liquid fertilizer to the soil over the crowns after pruning but before training. Apply early when shoots are 6 inches or less.
			Foliar spray: At the first sign of a secondary infection (primary infection persists after the soil drench and/or there is evidence of foliar infection), apply in combination with copper fungicides. Apply by ground with a minimum of 50 gals. of water per acre.

- Do not apply foliar sprays of Ridomil Gold SL without a copper fungicide registered for hops.
- Do not apply within 45 days of harvest (45-day PHI).
- Do not exceed the equivalent of 0.25 lb. a.i./A per crop of soil-applied and 0.5 lb. a.i./A per crop of foliar-applied mefenoxam-containing products.

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Crop	Target Diseases (Pathogen)	Product Use Rate (lb. a.i.)	Remarks
Legume Vegetables, Succulent (Shelled)  Bean, Broad Bean, Lima Cowpea Pea, Blackeyed Pea, English Pea, Garden Pea, Pigeon Pea, Southern	Downy Mildew (Phytophthora parasitica)	0.125 - 0.2 pt./A (0.063 - 0.1)	Foliar spray (ground or air): Ridomil Gold SL must be used in a tank mix with other fungicides registered for control of downy mildew. Apply with the full label rate of the tank mix partner fungicide.  Apply on a 14-day schedule when conditions are favorable for disease, but before infection.

- For use only on succulent beans east of the Mississippi River.
- Do not apply within 3 days of harvest (3-day PHI).
- Do not exceed the equivalent of 0.5 lb. a.i./A per crop of soil-applied and 0.4 lb. a.i./A per crop of foliar-applied mefenoxam-containing products.

Lettuce Head and Leaf	Downy Mildew _(Bremia	Foliar spray (ground or air): Ridomil Gold SL must be used in a tank mix with other fungicides registered for control of downy mildew. Apply with the full label rate of the tank-mix-partner-fungicide.
		Apply when conditions are favorable for disease, but before infection on a 14-day schedule.

For additional applications to Lettuce (Head and Leaf), see Leafy Vegetables (Except Brassica) in Part 1 of Directions for Use: Soil-Injected or Soil-Incorporated Applications.

- Do not apply foliar sprays of Ridomil Gold SL without a labeled tank mix partner.
- Do not apply the Ridomil Gold SL mixture in fields where downy mildew is already established.
- Do not apply within 7 days of harvest (7-day PHI). However, refer to the label of the tank mix partner and follow the more restrictive PHI.
- A maximum of 4 foliar applications per crop may be made.
- Do not exceed the equivalent of 1.0 lb. a.i./A per crop of soil-applied (pre-plant or at-planting) and 0.4 lb. a.i./A per crop of foliar-applied mefenoxam-containing products.



Crop	Target Diseases (Pathogen)	Product Use Rate (lb. a.i.)	Remarks
Peanuts	Pod Rot ( <i>Pythium</i> spp.)	0.5-1.0 pt./A (0.25-0.50)	Apply at early pod set as a soil spray or at pegging as a foliar spray (overhead irrigation).

For additional applications, see Peanuts in Part 1 of Directions for Use: Soil-Injected or Soil-Incorporated Applications.

Crop	Target Diseases (Pathogen)	Product Use Rate (lb. a.i.)	Remarks
Potatoes	Storage Rots  Pythium leak (Pythium spp.)  Pink rot (Phytophthora – erythroseptica)	3.2 oz./A (0.1)	Make the first application after tuber initiation, when the largest tubers are the size in diameter of a nickel. This period generally coincides with the initiation of flowering. Make a second application 14 days later. If the field has a history of storage rot problems, make a third application 14 days after the second application. If foliar diseases are expected, then a tank mix with a labeled rate of mancozeb or chlorothalonil products is required.  Use in conjunction with other management practices such as crop rotation and resistant varieties.

Do not exceed the equivalent of 0.34 lb. a.i./A per season of soil-applied and 0.4 lb. a.i./A per season of foliar applied mefenoxam-containing products.

Do not apply within 14 days of harvest (14 day PHI).

Crop	Target Diseases (Pathogen)	Product Use Rate (lb. a.i.)	Remarks
Stone Fruits  Apricot Cherry (sweet and tart) Nectarine Peach Plum (Chickasaw, Damson, Japanese) Plumcot Prune (fresh) Including hybrids, cultivars, and varieties of these.	Crown Rot Collar Rot Root Rot (Phytophthora spp.)	2.0 qt./A (2.0) or 1.5 fl. oz./ 1,000 sq. ft.	Soil spray (broadcast or band): Apply under the tree canopy to cover the root zone two weeks after planting (new plantings) or in the spring before growth begins (established plantings).  Additional applications may be made at 2-to 3-month intervals, depending on disease pressure. Make up to 3 applications per year.  Apply before symptoms appear. Ridomil Gold SL will not revitalize trees showing moderate to severe disease symptoms.  For intense plantings (2-3 times the normal planting rate), apply on a per area basis (1,000 sq. ft.).

- Do not concentrate spray around tree trunks. Do not apply to trees-under stress.
- In CA, do not apply to newly planted trees within 45 days of planting. On some varieties, chlorosis may occur on leaf margins.
- Do not graze livestock in treated areas
- Do not graze or feed cover crops grown in treated orchards.
- Do not exceed the equivalent of 6.0 lb. a.i./A per crop of soil-applied mefenoxam-containing products.

Crop_	Target Diseases (Pathogen)	Product Use Rate (lb. a.i.)	Remarks
Strawberries	Red Stele (Phytophthora fragariae)  Vascular Collapse (P. cactorum)  Leather Rot (P. cactorum)	1.0 pt./A (0.50)	Annual Plantings: Apply up to 3 times per crop by ground (banded), drip, or overhead chemigation. Make first application after transplanting. Make the second application 30 days before the beginning of harvest or at fruit set. Apply the third application during harvest, depending on disease pressure and environmental conditions.  Established Plantings: Apply up to 3 times per crop by ground (banded), drip, or overhead chemigation. Make first application in the spring after the ground thaws and before first bloom. Make a second application after harvest in the fall. For control of leather rot, make an additional application during the growing season at fruit set.  If applying through drip irrigation, calculate the rate as a band application with a band width equal to the root zone width. Inject Ridomil Gold SL into the irrigation water.

Ridomil Gold SL may be applied the day of harvest.

Do not exceed the equivalent of 1.5 lb. a.i./A per crop of soil-applied mefenoxam-containing products.

Crop	Target Diseases (Pathogen)	Product Use Rate (lb. a.i.)	Remarks
Strawberry plant production in field nurseries	Red Stele (Phytophthora fragariae)  Vascular Collapse	1.0 pt./A (0.50)	Field Nurseries: Apply to young plants in field nurseries by ground, drip, or overhead chemigation.
	( <i>P. cactorum</i> )  Leather Rot  ( <i>P. cactorum</i> )		If applying through drip irrigation, calculate the rate as a band application with a band width equal to the root zone width. Inject Ridomil Gold SL into the irrigation water.

Do not exceed the equivalent of 1.0 lb. a.i./A per plant production cycle of mefenoxam-containing products.

Crop	Target Diseases (Pathogen)	Product Use Rate (lb. a.i.)	Remarks
Tobacco	Blue Mold (Peronospora tabacina)	0.50 pt./A (0.25) For no-till tobacco: 0.50-1.0 pt./A (0.25-0.50)	Soil spray (band): If Ridomil Gold SL was applied prior to transplanting, make an additional application at lay-by or the last cultivation. Position the nozzles so the spray is deposited under the plants and is covered by the soil in cultivation.
	Black Shank (Phytophthora parasitica var. nicotianae)	1.0-2.0 pt./A (0.50-1.0) For no-till tobacco: 0.50-1.0 pt./A (0.25-0.50)	Soil Spray (broadcast or band): Position the nozzles so the spray is deposited under the plants and covered with soil by the cultivator. Use the high rate if the disease epidemic is expected to be severe. Make one application at lay-by or make one application at the first cultivation and a second application at lay-by.  Apply preventively for effective black shank control. If black shank is expected early in the season, apply as near as possible to transplanting followed by sequential applications.

For additional applications, see Tobacco in Part 1 of Directions for Use: Soil-Injected or Soil-Incorporated Applications.

- Consult local extension bulletins for additional use directions.
- For best results against black shank, use tobacco varieties that have high resistance to black shank and use crop rotation.
- In fields with a history of severe black shank, use the highest rate and plant a variety resistant to the race of *Phytophthora* present (Burley L8 hybrids are resistant to only *Phytophthora* Race 0).
- Do not use in high black shank areas on highly susceptible flue-cured varieties.
- Failure to adequately control nematodes in fields treated with Ridomil Gold SL may result in poor control of black shank.
- Do not use Ridomil Gold SL for black shank control in PA.
- Do not exceed the equivalent of 1.5 lb. a.i./A per crop of mefenoxam-containing products.

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Crop	Target Diseases (Pathogen)	Product Use Rate (lb. a.i.)	Remarks
Tomato	Root and Fruit Rot (Phytophthora spp.) (Pythium spp.)	1.0 pt./A (0.50)	Soil spray (broadcast or band) or soil injection: Apply as a directed soil surface spray under the vines or injected into the beds with water or liquid fertilizer.  Make application 4-6 weeks after planting. If needed, make a second application up to 4 weeks before harvest, but before the last irrigation.

For additional applications, see Tomato in Part 1 of Directions for Use: Soil-Injected or Soil-Incorporated Applications.

 Do not exceed the equivalent of 1.5 lb. a.i./A per crop of soil-applied mefenoxam-containing products and 0.5 lb. a.i./A per crop of foliar-applied mefenoxam-containing products.

Tree Nuts	Crown Rot Collar Rot	2.0 qt./A (2.0)	Soil spray (broadcast or band): Apply under the tree canopy to cover the root
Almonds Walnuts	Root Rot	or	zone two weeks after planting (new plantings) or in the spring before growth
	spp.)	1.5 fl. oz./	begins (established plantings).
-		1,000 sq. ft.	Additional applications may be made at 2- to 3-month intervals, depending on disease pressure. Make up to 3 applications per year.
			Apply before symptoms appear. Ridomil Gold SL will not revitalize trees showing moderate to severe disease symptoms.
			For intense plantings (2-3 times the normal planting rate), apply on a per area basis (1,000 sq. ft.).

- Do not concentrate spray around tree trunks.
- Do not apply to trees under stress.
- In CA, do not apply to newly planted trees within 45 days of planting. On some varieties, chlorosis may occur on leaf margins.
- Do not graze livestock in treated areas.
- Do not graze or feed cover crops grown in treated orchards.
- Do not exceed the equivalent of 6.0 lb. a.i./A per crop of soil-applied mefenoxam-containing products.

Crop	Target Diseases (Pathogen)	Product Use Rate (lb. a.i.)	Remarks
Tropical Fruit  Papaya Black Sapote Star Apple Canistel Mamey Sapote Mango Sapodilla	Damping Off (Pythium spp.)  Root Rot (Phytophthora spp.)	1.5-3.0 pt./A (0.75-1.5)	Soil Drench: Add Ridomil Gold SL to water or a liquid fertilizer solution at the rate of 1.5-3.0 pt./A. Apply this solution to the base of the plants to deliver approximately 5 gallons per plant.  Two applications may be made per growing season. Make the first application at transplanting or in the spring at root growth flush. Make a second application at least 1 day before harvest.

- Do not apply more than 6.0 pt./A (3.0 lb. a.i./A) pe Do not apply within 1 day of harvest (1-day PHI).

Tropical Fruit	Pythium Root and Crown Rot	1.5-3.0 pt./A (0.75-1.5)	Soil Drench: Apply in sufficient water or liquid fertilizer to provide an adequate soil
Sugar Apple Atemoya Custard Apple	Damping Off ( <i>Pythium</i> spp.)		drench. Make one application in the spring when root growth begins and a second application in the fall. Direct applications to
Cherimoya Ilama	Phytophthora Root and Crown		the soil surface under the canopy of the trees.
Soursop Birida	Rot ( <i>Phytophthora.</i> spp.)		

Do not apply within 30 days of harvest (30-day PHI).

Tropical Fruit	Phytophthora Root and Crown	1.5-3.0 pt./A (0.75-1.5)	<b>Soil Drench:</b> Apply in sufficient water or liquid fertilizer to provide an adequate soil
Starfruit	Rot (Phytophthora spp.)		drench. Make one application in the spring when root growth begins and a second application in the fall. Direct applications to the soil surface under the canopy of the
	Pythium Root and Crown Rot (Pythium spp.)		trees.

Do not apply within 30 days of harvest (30-day PHI).

Crop	Target Diseases (Pathogen)	Product Use Rate (lb. a.i.)	Remarks
Tropical Fruit Kiwifruit	Root and Crown Rot ( <i>Pythium and</i> <i>Phytophthora</i> spp.)	5.6-11.2 fl. oz./ 40 gals. of water (0.175-0.35)	Soil Drench: Apply 1.0 qt. of Ridomil Gold SL solution as a soil drench in a one square foot area around the base of each vine. At the labeled rate of 5.6-11.2 fl. oz., this will apply 0.175-0.350 lb. a.i./A if the planting density is 160 vines per acre.  Make the first application in the fall after harvest or in February or early March. Make a second application in spring or approximately 60 days after the February or March application.
		11.2 fl. oz. (0.35)	Banded Soil Application: Make up to five applications as a spray toward the soil in a 2- to 3-ft band on each side of the row. Begin applications in April and follow with two additional applications on a 30-day interval. Make the fourth application in September and the final application approximately 30 days later, which must be at least 7 days before harvest.

Do not apply within 7 days of harvest (7-day PHI).

Do not apply more than 3.5 pt./A (1.75 lb. a.i./A) Ridomil Gold SL per growing season.

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#### STORAGE AND DISPOSAL

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

#### **Pesticide Storage**

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

#### **Pesticide Disposal**

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

# **Container Handling**

Non-refillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use and disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures if approved by state and local authorities.

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

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Viton® is a trademark of E.I. DuPont de Nemours and Company.

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# For non-emergency (e.g., current product information) call Syngenta Crop Protection at 1-800-334-9481.

Manufactured for: Syngenta Crop Protection, LLC P.O. Box 18300 Greensboro, North Carolina 27419-8300

SCP 1202A-L1G 1112 [1 pint front booklet/base - Product ID 34128] SCP 1202A-L1.1G 1112 [1 pint back booklet/base - Product ID 34128]

SCP 1202A-L2G 1112 [1 gallon booklet/base - Product ID 34129]

#### [Base Label]

GROUP 4 FUNGICIDE

# Ridomil Gold® SL

## **Fungicide**

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

Active Ingredients:

 Mefenoxam\*
 45.3%

 Other Ingredients:
 54.7%

 Total:
 100.0%

\*CAS Nos. 70630-17-0 and 69516-34-3

Contains 4 lbs. active ingredient per gallon.

KEEP OUT OF REACH OF CHILDREN.

# CAUTION

See additional precautionary statements and directions for use inside booklet.

#### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. Refer to supplemental labeling under "Agricultural Use Requirements" in the Directions for Use section for information about this standard.

EPA Reg. No. 100-1202 EPA Est. 39578-TX-1

SCP 1202A-L1F 0211 [1 pint front booklet/base - Product ID 34128] SCP 1202A-L1.1F 0211 [1 pint back booklet/base - Product ID 34128]

SCP 1202A-L2F 0211 [1 gallon booklet/base - Product ID 34129]

1 pint Net Contents

1 gallon Net Contents

	FIRST AID		
If in eyes	<ul> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>		
If on skin or clothing	<ul> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>		
If swallowed	<ul> <li>Call a poison control center or doctor immediately for treatment advice.</li> <li>Have person sip a glass of water if able to swallow.</li> <li>Do not induce vomiting unless told to do so by the poison control center or doctor.</li> <li>Do not give anything by mouth to an unconscious person.</li> </ul>		
If inhaled	<ul> <li>Move person to fresh air.</li> <li>If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.</li> <li>Call a poison control center or doctor for treatment advice.</li> <li>container or label with you when calling a poison control center or</li> </ul>		
doctor, or going f	· · · · · · · · · · · · · · · · · · ·		
	HOT LINE NUMBER  -Hour Medical Emergency Assistance (Human or Animal) or nical Emergency Assistance (Spill, Leak, Fire, or Accident)  Call		
	1-800-888-8372		

# **Precautionary Statements**

# **Hazards to Humans and Domestic Animals**

# **CAUTION**

Causes moderate eye irritation. Harmful if swallowed or absorbed through skin. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.

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#### **Environmental Hazards**

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

## **Groundwater Advisory**

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

## **Surface Water Advisory**

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

# **Physical or Chemical Hazards**

Do not use or store near heat or open flame.

#### STORAGE AND DISPOSAL

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

#### **Pesticide Storage**

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

#### **Container Handling**

Non-refillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use and

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disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities.

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

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Manufactured for: Syngenta Crop Protection, LLC P.O. Box 18300 Greensboro, North Carolina 27419-8300

RID GOL SL 1202 MAS 1112 AMEND-D 0313-CLEAN – sw – 5/19/14 000100-01202.20130321.RID\_GOL\_SL-AMEND-D-0313-CL.PDF

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# SUPPLEMENTAL LABELING

Syngenta Crop Protection, LLC P. O. Box 18300 Greensboro, North Carolina 27419-8300 SCP 1202A-S5

GROUP 4 FUNGICIDE

Ridomil Gold® SL

# **Fungicide**

This supplemental label expires on 05/19/2017 and must not be used or distributed after this date.

Active Ingredient:	,
Mefenoxam*	45.3%
Other Ingredients:	54.7%
Total:	100.0%

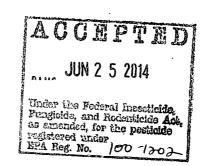
\*CAS Nos. 70630-17-0 and 69516-34-3

Contains 4 lbs. active ingredient per gallon.

KEEP OUT OF REACH OF CHILDREN.

# CAUTION

EPA Reg. No. 100-1202



All applicable directions, restrictions and precautions on the EPA-registered label are to be followed. Before using Ridomil Gold SL as permitted according to this Supplemental Labeling, read and follow all applicable directions, restrictions, and precautions on the EPA-registered label on or attached to the pesticide product container. This Supplemental Labeling contains revised use instructions and/or restrictions that may be different from those that appear on the container label. This Supplemental Labeling must be in the possession of the user at the time of pesticide application. It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

# **DIRECTIONS FOR USE**

Crop	Target Diseases (Pathogen)	Product Use Rate (lb. a.i.)	Remarks
Potatoes	Storage Rots  Pythium leak (Pythium spp.)  Pink rot (Phytophthora erythroseptica)	3.2 oz./A (0.1)	Make the first application after tuber initiation, when the largest tubers are the size in diameter of a nickel. This period generally coincides with the initiation of flowering. Make a second application 14 days later. If the field has a history of storage rot problems make a third application 14 days after the second application. If foliar diseases are expected, then a tank mix with a labeled rate of mancozeb or chlorothalonil products is required.  Use in conjunction with other management practices such as crop rotation and resistant varieties.

- Do not exceed the equivalent of 0.34 lb. a.i./A per season of soil-applied and 0.4 lb. a.i./A per season of foliar applied mefenoxam-containing products.

  Do not apply within 14 days of harvest (14 day PHI).

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