

# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

April 3, 2020

Odette Alexander-Watkins Regulatory Product Manager Syngenta Crop Protection, LLC P.O. Box 18300 Greensboro, NC 27419

Subject: Registration Review Label Mitigation for Mefenoxam

Product Name: Ridomil Gold MZ EPA Registration Number: 100-803 Application Dates: 7/31/2018

Decision Numbers: 560637

Dear Ms. Alexander-Watkins

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

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

A copy of your label stamped "Accepted" is enclosed. Products shipped after 12 months from the date of this amendment must bear the new revised label. Your release for shipment of the product bearing the amended label constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6.

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If you have any questions about this letter, please contact Darius Stanton by phone at 703-347-0433, or via email at Stanton.Darius@epa.gov.

Sincerely,

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

Enclosure

MEFENOXAM	GROUP	4	FUNGICIDE
MANCOZEB	GROUP	М3	FUNGICIDE

#### Ridomil Gold® MZ

## **Fungicide**

For the control of certain diseases of cucumbers, melons, summer squash, grapes, onions, potatoes, sugar beets, and tomatoes

Active Ingredients:	
Mefenoxam*	4.0%
Mancozeb: A coordination product of zinc i	on and
manganese ethylene bisdithiocarbamate**	64.0%
in which the ingredients are:	
Manganese++	12.8%
Zinc	1.6%
Ethylene bisdithiocarbamate ion	
(C <sub>4</sub> H <sub>6</sub> N <sub>2</sub> S <sub>4</sub> )	49.6%
Other Ingredients:	32.0%
Total:	100.0%

<sup>\*</sup>CAS Nos. 70630-17-0 and 69516-34-3

Ridomil Gold MZ is a wettable powder packaged in a water-soluble bag.

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

#### KEEP OUT OF REACH OF CHILDREN.

## **CAUTION**

See additional precautionary statements and directions for use printed on label.

EPA Reg. No. 100-803

EPA Est.

5 pounds Net Weight ACCEPTED

Apr 03, 2020

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 100-803

<sup>\*\*</sup>Same as the active ingredient found in Dithane® M-45 and Manzate® 200.

FIRST AID			
If on skin or	Take off contaminated clothing.		
clothing	Rinse skin immediately with plenty of water for 15-20 minutes.		
	<ul> <li>Call a poison control center or doctor for treatment advice.</li> </ul>		
If in eyes	<ul> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>		
Have the product container or label with you when calling a poison control center or			
doctor, or going for treatment.			
HOTLINE NUMBER			
For 24 Hour Medical Emerganov Assistance (Human or Animal) or Chemical			

For 24-Hour Medical Emergency Assistance (Human or Animal) or Chemical 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 absorbed through the skin. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. 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. Remove and wash contaminated clothing before reuse.

## Personal Protective Equipment (PPE)

Mixer, loaders, applicators, and other handlers must wear:

- Long-sleeved shirt
- Long pants
- Shoes and socks
- Chemical-resistant gloves made of barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, natural rubber ≥ 14 mils, polyethylene, polyvinyl chloride (PVC) ≥ 14 mils, or Viton® ≥ 14 mils (except pilots, ground boom applicators and airblast applicators).

In addition, handlers performing tasks, such as spill clean-up, that involve contact with the dry wettable powder must wear:

A particulate respirator with an N, R, or P filter, NIOSH approval prefix TC-84-A.

See engineering controls for additional requirements.

**User Safety Requirements** 

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

## **Engineering Controls**

Water-soluble packets when used correctly qualify as a closed mixing/loading system under the Worker Protection Standard for Agricultural Pesticides [40 CFR 170.240(d)(4)]. Mixers and loaders using water-soluble packets must:

- wear the personal protective equipment required in the PPE section of this labeling for mixers/loaders
- be provided, and have immediately available, and wear in an emergency, such as a broken package, spill, or equipment breakdown: a particulate respirator with an N, R, or P filter, NIOSH approval prefix TC-84-A.

Pilots must use an enclosed cockpit that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(6)].

Human flagging is prohibited. Flagging to support aerial application is limited to use of the Global Positioning System (GPS) or mechanical flaggers.

#### Attention

This product contains chemicals (Mancozeb and ETU) known to the State of California to cause cancer. ETU is also known to the State of California to cause birth defects or other reproductive harm.

## **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**

This pesticide is toxic to aquatic organisms. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated area.

For terrestrial uses, do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment washwater or rinsate.

## **Groundwater Advisory**

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

#### 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.

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
- Shoes and socks
- Chemical-resistant gloves made of barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, natural rubber ≥ 14 mils, polyethylene, polyvinyl chloride (PVC) ≥ 14 mils, or Viton≥ 14 mils

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

#### PRODUCT INFORMATION

Ridomil Gold MZ contains 4% Ridomil Gold active ingredient and 64% of the active ingredient mancozeb. Ridomil Gold is a systemic fungicide for use on selected crops to control diseases caused by members of the Phycomycete family of fungi. Mancozeb is effective against a wide range of fungal pathogens.

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

#### RESISTANCE MANAGEMENT

MEFENOXAM	GROUP	4	FUNGICIDE
MANCOZEB	GROUP	M3	FUNGICIDE

Ridomil Gold MZ fungicide is a mixture of a Group 4 (mefenoxam) and a Group M3 (mancozeb) fungicide. Ridomil Gold MZ has two modes of action: (1) a single site specific mode of action affecting RNA synthesis [Group 4], and (2) a multi-site mode of action [Group M3]. When used repeatedly, products with a single site mode of action are subject to the selection and development of insensitive fungal strains. Since resistance development cannot be predicted, use of this product should conform to resistance management strategies established for the crop and use area.

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

- Rotate the use of Ridomil Gold MZ or other Group M3 or Group 4 fungicides within a growing season sequence with different groups that control the same pathogens.
- Use tank mixtures with fungicide from a different group that are equally effective on the target pest when such use is permitted. Use at least the minimum application rate as labeled by the manufacturer.
- Adopt an integrated disease management program for fungicide use that includes scouting, uses historical information related to pesticide use, and crop rotation, and which considers host plant resistance, impact of environmental conditions on disease development, disease thresholds, as well as cultural, biological and other chemical control practices.
- Where possible, make use of predictive disease models to effectively time fungicide applications. Note that using predictive models alone is not sufficient to manage resistance.
- Monitor treated fungal populations for resistance development.
- Contact your local extension specialist or certified crop advisor for any additional pesticide resistance-management and/or IPM recommendations for specific crop and pathogens.
- For further information or to report suspected resistance contact Syngenta at 1-866-Syngent(a) (866-796-4368). You can also contact your pesticide distributor or university extension specialist to report resistance.

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

Do not make applications when weather conditions favor drift from target area. Avoid spray overlap as crop injury may result.

## **Foliar Application**

Where EBDC products used allow the same maximum poundage of active ingredient per acre per season:

If more than one product containing an EBDC active ingredient (maneb, mancozeb, or metiram) is used on a crop during the same growing season and the EBDC products used allow the same maximum poundage of active ingredient per acre per season, then the total poundage of all such EBDC products used must not exceed any of the specified individual EBDC product maximum seasonal poundage of active ingredient allowed per acre.

Where EBDC products used allow different maximum poundage of active ingredient per acre per season:

If more than one product containing an EBDC active ingredient is used on a crop during the same growing season and the EBDC products used allow different maximum poundage of active ingredient per acre per season, then the total poundage of all such EBDC products used must not exceed the lowest specified individual EBDC product maximum seasonal poundage of active ingredient allowed per acre.

#### SPRAY DRIFT MANAGEMENT

## **SPRAY DRIFT ADVISORIES**

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

#### IMPORTANCE OF DROPLET SIZE

An effective way to reduce spray drift is to apply large droplets. Use the largest droplets that provide target pest control. While applying larger droplets will reduce spray drift, the potential for drift will be greater if applications are made improperly or under unfavorable environmental conditions.

## Controlling Droplet Size - Ground Boom

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

Spray Nozzle - Use a spray nozzle that is designed for the intended application.
 Consider using nozzles designed to reduce drift.

## **Controlling Droplet Size – Aircraft**

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

#### **BOOM HEIGHT – Ground Boom**

Use the lowest boom height that is compatible with the spray nozzles that will provide uniform coverage. For ground equipment, the boom should remain level with the crop and have minimal bounce.

#### **RELEASE HEIGHT - Aircraft**

Higher release heights increase the potential for spray drift. When applying aerially to crops, do not release spray at a height greater than 10 ft above the crop canopy, unless a greater application height is necessary for pilot safety.

## SHIELDED SPRAYERS

Shielding the boom or individual nozzles can reduce spray drift. Consider using shielded sprayers. Verify that the shields are not interfering with the uniform deposition of the spray on the target area.

#### **TEMPERATURE AND HUMIDITY**

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

#### **TEMPERATURE INVERSIONS**

Drift potential is high during a temperature inversion. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. The presence of an inversion can be indicated by ground fog or by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing. Avoid applications during temperature inversions.

#### WIND

Drift potential generally increases with wind speed. AVOID APPLICATIONS DURING GUSTY WIND CONDITIONS.

Applicators need to be familiar with local wind patterns and terrain that could affect spray drift.

## **Mixing Instructions**

Prepare no more spray mixture than is needed for the immediate operation. Thoroughly clean spray equipment before using this product. **Vigorous agitation is necessary to** 

dissolve the bag and disperse the product. Maintain maximum agitation throughout the spraying operation. Flush the spray equipment thoroughly with water daily after use and dispose of pesticide rinsate by application to an already treated area.

Amount of water needed per acre will vary according to the amount of plant growth. For dilute ground applications, the water volume will vary from 20-150 gal/A. For aerial applications, apply in 5-10 gallons of water per acre. DO NOT USE LESS THAN 5 GALLONS PER ACRE.

Precaution: Water-soluble prepacks of Ridomil Gold MZ must be completely dissolved and dispersed in water before any other tank mix partner, including micronutrients or other liquid or dry fertilizers, are added to the spray solution. Boron, especially in the form of a micronutrient additive, such as Solubor®, etc., or as a natural component of the mix water, may prevent water-soluble bags from dissolving.

**Ridomil Gold MZ Alone**: Add ¼ of the required amount of water to the spray or mixing tank. With the agitator running, drop the required number of **unopened** soluble bags of Ridomil Gold MZ into the tank all at once. Continue agitation while adding the remainder of the water. Begin application of the spray solution after the bags have dissolved, and the material has completely dispersed into the mix water. Maintain agitation until all of the mixture has been applied.

Ridomil Gold MZ + Tank Mixtures: Ridomil Gold MZ is usually compatible with Bravo® and Dithane M-45. Add ¼ of the required amount of water to the spray or mixing tank. With the agitator running, drop the required number of unopened soluble bags of Ridomil Gold MZ, and any other products packaged in water-soluble bags, into the tank all at once. After the water-soluble bags have dissolved and the products have completely dispersed uniformly into the mix water, continue to fill the tank with water. Then add the desired amount of other products recommended for tank mixture and allow them to become completely dispersed. Continue agitation while adding the remainder of the water and during application to maintain a uniform suspension. Do not tank mix with any product containing a prohibition on tank mixing. Follow more restrictive labeling of any tank mix partner.

**Note**: Do not let spray mixture stand overnight in the spray tank. Rinse spray tank at the end of the day.

## **Application Through Irrigation Systems**

Ridomil Gold MZ alone or in combination with other fungicides which are registered for sprinkler irrigation may be applied through irrigation systems.

Apply this product only through center pivot, solid set, hand move, or moving wheel 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 nonuniform distribution of treated water. If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers, or other experts. Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed

safety devices for public water systems are in place. A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

## **Operating Instructions**

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

## **APPLICATION INSTRUCTIONS**

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

With the exception of potatoes, Ridomil Gold MZ has not been sufficiently tested to assure consistent product performance for all labeled uses when applied through chemigation systems. The following calibration and application techniques are provided for user reference, but do not constitute a warranty of fitness for application through sprinkler irrigation equipment. Users should check with state and local regulatory agencies for potential use restrictions before applying any agricultural chemical through sprinkler irrigation equipment.

## **Center Pivot Irrigation Equipment**

**Notes:** (1) Use only with drive systems which provide uniform water distribution. (2) Do not use end guns when chemigating Ridomil Gold MZ through center pivot systems because of nonuniform application. (3) Plug the first nozzle closest to well head to protect water source.

- 1. Determine the size of the area to be treated.
- 2. Determine the time required to apply ½–½ inch water over the area to be treated when the system and injection equipment are operated at normal pressures as recommended by the equipment manufacturer. Run the system at 80-95% of the manufacturer's rated capacity.
- 3. Using water, determine the injection pump output when operated at normal line pressure.
- 4. Determine the amount of Ridomil Gold MZ required to treat the area covered by the irrigation system.
- 5. Add the required number of Ridomil Gold MZ soluble bags and sufficient water to meet the injection time requirements to the solution tank. (See **Mixing Instructions** section of this label.)
- 6. Make sure the system is fully charged with water before starting injection of the Ridomil Gold MZ solution. Time the injection to last at least as long as it takes to bring the system to full pressure.
- 7. Maintain constant solution tank agitation during the injection period.
- 8. Stop injection equipment after treatment is completed. Continue to operate system until the Ridomil Gold MZ solution has cleared the sprinkler head.

## **Solid Set, Hand Move, and Moving Wheel Irrigation Equipment**

- 1. Determine the acreage covered by the sprinklers.
- 2. Fill injector solution tank with plain water and calibrate the flow rate of the system to deliver the contents of the tank over a 20- to 30-minute time interval.
- 3. Determine the amount of Ridomil Gold MZ required to treat the area covered by the irrigation system.
- Add the required number of Ridomil Gold MZ soluble bags into the same quantity of water used to calibrate the injection period. (See **Mixing Instructions** section of this label.)

- 5. Operate system at the same pressure and time interval established during the calibration.
- 6. Inject Ridomil Gold MZ at the end of the irrigation cycle or as a separate application to maximize retention of the fungicide by the foliage.
- 7. Stop injection equipment after treatment is completed. Continue to operate the system until the Ridomil Gold MZ solution has cleared the last sprinkler head.

#### **IMPORTANT**

Do not allow Ridomil Gold MZ to become wet or overheated during storage as this may lead to the soluble bag rupturing or to chemical changes which will impair the fungicidal effectiveness of Ridomil Gold MZ and which may also generate flammable vapors.

## CUCUMBERS, MELONS\*, AND SUMMER SQUASH

\*Cantaloupe, Casaba, Crenshaw, Honeydew, and Watermelons

Ridomil Gold MZ provides effective control of downy mildew caused by Pseudoperonospora cubensis when used as a foliar spray in a preventive disease control program.

Apply 2.5 lb of Ridomil Gold MZ per acre in sufficient water to obtain thorough coverage. Begin applications when conditions are favorable for disease, but before infection, and continue at 14-day intervals until the threat of disease is over. The full rate of a protectant fungicide should be applied between Ridomil Gold MZ applications. Avoid late season applications when plants reach full maturity or begin senescence. If conditions for downy mildew development are still favorable after making 4 applications of Ridomil Gold MZ, use other fungicides registered for downy mildew control on cucumbers, melons, and summer squash.

**Restrictions:** (1) Do not make the last application within 5 days of harvest. (2) Do not exceed 4 applications of Ridomil Gold MZ per crop. (3) If other registered fungicides containing EBDC active ingredients are used during the growing season, do not exceed a total of 12.8 lb of EBDC active ingredient per acre. If tank mixed with other products containing mancozeb, do not exceed 2.4 lb of mancozeb active ingredient per acre per application. If tank mixed with products containing maneb, do not exceed 1.6 lb of EBDC active ingredient per acre per application. (4) DO NOT exceed 0.5 lb ai/A/year of foliar-applied mefenoxam- and metalaxyl-containing products..

#### **GRAPES**

Ridomil Gold MZ when used as a foliar application in a preventive disease control program will provide effective control of downy mildew caused by *Plasmopara viticola*.

**Note**: Apply only with ground equipment.

Apply 2.5 lb/A of Ridomil Gold MZ. Make up to 4 applications beginning before bloom; do not make an application within 66 days of harvest. For late season downy mildew control, apply other registered fungicides. See local state and extension recommendations for varietal selection and proper spray timings.

Restrictions: (1) Do not apply within 66 days of harvest. (2) Do not exceed 4 applications of Ridomil Gold MZ per crop. (3) If other registered fungicides containing EBDC active ingredients are used during the growing season, do not exceed a total of 19.2 lb of EBDC active ingredient per acre on grapes grown east of the Rocky Mountains or 6 lb of EBDC active ingredient per acre on grapes grown west of the Rocky Mountains. If tank mixed with other products containing EBDC active ingredients, do not exceed 3.2 lb of EBDC active ingredient east of the Rocky Mountains or 2.0 lb of EBDC active ingredient west of the Rocky Mountains per acre per application. (4) DO NOT exceed 0.4 lb ai/A/year of foliar-applied mefenoxam- and metalaxyl-containing products.

## **ONIONS (DRY BULB\*)**

\*Garlic, onions (dry bulb), and shallots (dry bulb).

Ridomil Gold MZ provides effective control of downy mildew caused by *Peronospora destructor* when used as a foliar spray in a preventive disease control program.

Apply 2.5 lb of Ridomil Gold MZ per acre in sufficient water to obtain thorough coverage. Begin applications when conditions are favorable for disease, but before infection, and continue at 14-day intervals until the threat of disease is over. Use a suitable spreader-sticker at rates recommended on the product label. If conditions for downy mildew development are still favorable after making 4 applications of Ridomil Gold MZ, use other fungicides registered for downy mildew control in dry bulb onions.

**Restrictions:** (1) Do not make the last application within 7 days of harvest. (2) Do not exceed 4 applications of Ridomil Gold MZ per crop. (3) If other registered fungicides containing EBDC active ingredients are used during the growing season, do not exceed a total of 24 lb of EBDC active ingredient per acre. If tank mixed with other products containing EBDC active ingredients, do not exceed 2.4 lb of EBDC active ingredient per acre per application. (4) Do not apply to exposed bulbs. (5) **DO NOT** exceed 0.5 lb ai/A/year of foliar-applied mefenoxam- and metalaxyl-containing products.

#### **POTATOES**

Ridomil Gold MZ, when used as a foliar application in a preventive disease control program, will provide effective control of late blight, caused by *Phytophthora infestans*, Pythium leak caused by *Pythium* spp., and pink rot caused by *Phytophthora erythroseptica*. Make applications of Ridomil Gold MZ in sufficient water to obtain thorough coverage for ground applications and in a **minimum of 5 gallons** of water per acre for aerial applications.

It is recommended that this product be used within an Integrated Pest Management Program. Also, vine-kill should occur 14 days before harvest.

Late Blight and Early Blight: Apply 2.5 lb of Ridomil Gold MZ per acre. Begin preventive applications early in the season when conditions are favorable for disease (before infection), but no later than when the plant foliage meets within the row. Make up to 3 applications of Ridomil Gold MZ at 14-day intervals. The full rate of a protectant fungicide should be applied between Ridomil Gold MZ applications. Following the 3 Ridomil Gold MZ applications, apply the labeled rate of a protectant fungicide on a weekly schedule through the remainder of the season. If conditions for late blight development are still favorable after making 3 applications of Ridomil Gold MZ, use other fungicides registered for late blight control in potatoes.

Storage Rots: Pythium Leak (caused by *Pythium* spp.) and Pink Rot (caused by *Phytophthora erythroseptica*): For effective control of these storage rots, Ridomil Gold MZ should be used in conjunction with other management practices such as crop rotation. Apply 2.5 lb of Ridomil Gold MZ per acre. Make the first application at flowering and another one 14 days later. If the field has a history of storage rot problems, make a third application 14 days after the second application.

**Note:** If applications of Ridomil Gold MZ are being made for late blight control that correspond to the timing of applications for storage rot control, additional applications for storage rot control are not needed.

**Restrictions:** (1) Do not apply Ridomil Gold MZ within 3 days of harvest in CT, DE, FL, MA, ME, MI, NH, NY, OH, PA, RI, VT, and WI or at least 14 days elsewhere. (2) Do not exceed 3 applications of Ridomil Gold MZ per crop. (3) If other registered fungicides containing EBDC active ingredients are used during the growing season, do not exceed a total of 11.2 lb of EBDC active ingredient per acre. If tank mixed with other products containing EBDC active ingredients, do not exceed 1.6 lb of EBDC active ingredient per acre per application. (4) **DO NOT** exceed 0.40 lb ai/A/year of foliar-applied mefenoxam- and metalaxyl-containing products.

#### SUGAR BEETS

Ridomil Gold MZ, when used as a foliar application in a preventive disease control program, will provide effective control of downy mildew caused by *Peronospora schachtii*.

Apply 2.5 lb of Ridomil Gold MZ per acre. Begin application when conditions are favorable for disease, but before infection, and continue at 14-day intervals until the threat of disease is over. If conditions for downy mildew development are still favorable after making 4 applications of Ridomil Gold MZ, use other fungicides registered for downy mildew control in sugar beets.

**Restrictions:** (1) Do not apply Ridomil Gold MZ within 14 days of harvest. (2) Do not exceed 4 applications of Ridomil Gold MZ per crop. (3) If other registered fungicides containing EBDC active ingredients are used during the growing season, do not exceed

a total of 11.2 lb of EBDC active ingredient per acre. If tank mixed with other products containing EBDC active ingredients, do not exceed 1.6 lb of EBDC active ingredient per acre per application. (4) Do not feed treated tops to livestock. (5) DO NOT exceed 0.40 lb ai/A/year of foliar-applied mefenoxam- and metalaxyl-containing products.

#### **TOMATOES**

Ridomil Gold MZ, when used as a foliar spray in a preventive disease control program, provides effective control of late blight caused by *Phytophthora infestans*. Make applications of Ridomil Gold MZ in sufficient water to obtain thorough coverage for ground applications and in a **minimum of 5 gallons** of water per acre for aerial applications.

Apply 2.5 lb of Ridomil Gold MZ per acre. Begin applications early season when conditions are favorable for disease (before infection). Make up to 3 applications of Ridomil Gold MZ at 14-day intervals. The full rate of a protectant fungicide should be applied between Ridomil Gold MZ applications. Following the 3 applications of Ridomil Gold MZ, apply the full rate of a protectant fungicide on a weekly schedule through the remainder of the season. If conditions for late blight development are still favorable after making 3 applications of Ridomil Gold MZ, use other fungicides registered for late blight control in tomatoes.

**Note:** When conditions are favorable for development of diseases other than late blight, any registered fungicides which control those diseases may be applied according to their label directions.

Restrictions: (1) Do not apply Ridomil Gold MZ within 5 days of harvest. (2) Do not exceed 3 applications of Ridomil Gold MZ per crop. (3) If other registered fungicides containing EBDC active ingredients are used during the growing season, do not exceed a total of 16.8 lb of EBDC active ingredient per acre on tomatoes grown east of the Mississippi River and 6.4 lb of EBDC active ingredient on tomatoes grown west of the Mississippi River. If tank mixed with other products containing EBDC active ingredients, do not exceed 1.6 lb of EBDC active ingredient west of the Mississippi River or 2.4 lb of EBDC active ingredient east of the Mississippi River per acre per application. (4) DO NOT exceed 0.5 lb ai/A/year of foliar-applied mefenaxom- and metalaxyl-containing products.

## **PLANT BACK RESTRICTIONS**

Do not plant any crop which is not registered for use with the Ridomil Gold active ingredient in soil treated with this active ingredient for a period of 365 days, with the exception of cereal grains. See the following list.

Planting Time From Last Application

	of Ridomil Gold MZ
Alfalfa (including birdsfoot trefoil), Almonds,	
Apples, Asparagus, Avocados	
Blueberries, Broccoli	
Cabbage, Cauliflower,	
Cranberries, Cucurbit Vegetables	
Chinese Broccoli (gai lon, white flowering broccoli),	
Chinese Cabbage (tight-heading varieties only), Citrus	
Deciduous Fruits and Nuts	
Eggplant	
Garlic, Ginseng, Grapes	
Hops	0 days
Leafy Vegetables (other than Brassica),	
Legume Vegetables (beans and peas - succulent	
and dried)	
Onions (dry bulb and seed only)	
Papaya, Peanuts, Peppers, Potatoes	
Raspberries, Root and Tuber Vegetables	
Soybeans, Spinach, Stone Fruits,	
Strawberries, Sugar Beets	
Tobacco, Tomatoes	
Walnuts	
Cereal Grains (other than corn)	40 days
Corn	9 months
Crops Not Intended For Food or Feed	0 days
Other Crops Intended For Food or Feed	365 days

#### STORAGE AND DISPOSAL

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

#### **Pesticide Storage**

Store in a cool, dry place. Do not store this product under wet or hot conditions as this may lead to the soluble bag rupturing or chemical changes which may generate flammable vapors. Handle outer packaging carefully to avoid breakage of inner-soluble bag.

## **Pesticide Disposal**

Pesticide wastes are toxic. 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 for guidance.

## **Container Handling**

Non-refillable container. Do not reuse or refill this container. Offer for recycling if available or dispose of empty outer foil pouch in the trash as long as WSP is unbroken.

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

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Ridomil Gold MZ 803 MAS 0815 AMEND-C-JUL2018-CL 6/11/19 000100-00803.20180730C.RID\_GOLD\_MZ-AMEND-JUL2018-CL.pdf