

U.S. ENVIRONMENTAL PROTECTION AGENCY Office of Pesticide Programs Registration Division (7505P) Ariel Rios Building 1200 Penusylvania Ave., NW Washington, D.C. 20460

EPA Registration. Number: Date of Issuance:

100-1269

MAY 1 8 2007

### NOTICE OF PESTICIDE:

\_x Registration
\_ Reregistration
(under FIFRA, as amended)

Term of Issuance: Conditional

Name of Pesticide Product: Ridomil Gold MZ WG

Name and Address of Registrant (include ZIP Code):

Syngenta Crop Protection, Inc. P.O. Box 18300 Greensboro, NC 27419-8300

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

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

This product is conditionally registered in accordance with FIFRA sec. 3 (c) (7) (A) provided that you:

- 1. Submit/cite all data required for the registration/ reregistration of your product when the Agency requires all registrants of similar products to submit data; and submit acceptable responses required for reregistration of your product under FIFRA section 4.
- 2. Make the following label changes:
- a. Page 1 EPA Registration Number Change the EPA Registration Number to 100-1269

(Continued)

Signature of Approving Official:

Date:

Mary L. Waller, Product Manager 21

Mary J. Waller

Fungicide Branch

Registration Division (7505P)

5/16/2007

Continued from first page

EPA Registration Number 100-1269

## b. Page 2 - Personal Protective Equipment

- Change the heading "Handlers who may be exposed to the diluted product through application or other tasks must wear:" to "Mixers, loaders and other applicators must wear."
- Delete the heading "Handlers who may be exposed to the concentrate through mixing, loading, application or other tasks must wear:" and delete the three bullets immediately following.

## c. Page 4 – Environmental Hazards:

At the beginning of the third sentence, delete the three words "For terrestrial uses,".

## d. Page 5 - Conditions of Sale and Limitation of Warranty and Liability:

- In the paragraph beginning "Syngenta warrants" change the sentence "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 Buyer and User assume the risk of any such use." to "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 to the extent consistent with applicable law Buyer and User assume the risk of any such use."
- Change the first sentence of the next paragraph to "It is the intention of Syngenta and Seller that, to the extent consistent with applicable law, Syngenta shall not be liable for any incidental, consequential or special damages resulting from the use or handling of this product."

## e. Page 6 - Agricultural Use Requirements:

- In the second bullet of the early-entry PPE requirements, delete "(except pilots, groundboom applicators and airblast applicators)"
- 3. Provide the following as conditions of registration:
  - a. OPPTS number 830.6316 storage stability due December 1, 2008.
- b. OPPTD number 830.1800 enforcement analytical method due June 1, 2008. Note that the request for a corrosion characteristics study in the April 9, 2007 product chemistry review is in error.
- 4. Submit one (1) copy of the revised final printed label before the product is released for shipment.

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

A stamped copy of the label is enclosed for your records. If you have any questions, contact Lisa Jones of my team at (703) 308-9424 or at jones.lisa@epa.gov.

Sincerely,

Mary L. Waller

Product Manager (21)

Fungicide Branch

Registration Division (7505P)

Mary J. Waller

Enclosures: Stamped copy of label

28 March 2007 Acute Toxicity Review 9 April 2007 Product Chemistry Review



## Ridomil Gold® MZ WG

### **Fungicide**

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

Active Ingredients:	
Mefenoxam*	4.0%
A coordination product of zinc ion 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 WG is a dry flowable containing 0.04 lbs of mefenoxam and 0.64 lbs of mancozeb per pound of product.

### KEEP OUT OF REACH OF CHILDREN.

### CAUTION

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

EPA Reg	g. No. 100-XXXX
	·
	Net Weight

ACCEPTED with COMMENTS In EPA Letter Dated:
MAY 1 6 2007

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

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

	FIRST AID
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>
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>
Have the pro	oduct container or label with you when calling a poison control center or doctor, or going for treatment.
	HOT LINE NUMBER
	ur Medical Emergency Assistance (for incidents involving Humans 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. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

# 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 A on an EPA chemical-resistance category selection chart.

Handlers who may be exposed to the diluted product through application or other tasks must wear:

- · Long-sleeved shirt and long pants
- Chemical resistant gloves made of any waterproof material (except pilots, groundboom applicators, and airblast applicators)
- · Shoes plus socks

Handlers who may be exposed to the concentrate through mixing, loading, application, or other tasks must wear:

- · Long-sleeved shirt and long pants
- Chemical resistant gloves made of any waterproof material (except pilots, groundboom applicators, and airblast applicators)
- · Shoes plus socks

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

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

## **Engineering Control Statements**

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 applications is limited to the use of the Global Positioning System (GPS) or mechanical flaggers.

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the 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.

### Attention

This product contains chemical (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 PPE clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

### **Environmental Hazards**

This product is toxic to aquatic organisms. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. 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. Apply only as specified on this label. Do not apply when weather conditions favor drift from treated area. Do not contaminate water when cleaning equipment or disposing of equipment wash water or rinsate.

## **Groundwater Advisory**

This chemical 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 should 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, INC. or Seller. To the extent consistent with 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. 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 Buyer and User assume the risk of any such use. 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.

It is the intention of SYNGENTA and Seller that 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 CONSISTENT WITH 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.

### 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 over long-sleeved shirt and long pants
- Chemical resistant gloves made of any waterproof material (except pilots, groundboom applicators, and airblast applicators)
- Shoes plus socks

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

### **GENERAL INFORMATION**

Ridomil Gold MZ WG is a combination product containing 4% mefenoxam and 64% mancozeb. Mefenoxam is a systemic fungicide that controls diseases caused by the Phycomycete family of fungi. Mancozeb is effective against a wide range of fungal pathogens. All applications should be made according to the use directions that follow.

### **GENERAL USE INSTRUCTIONS**

**Application:** Thorough coverage is necessary to provide good disease control. Make up no more spray solution than is needed for application. Avoid spray overlap, as crop injury may occur.

**Efficacy:** Under certain conditions conducive to extended infection periods, use another registered fungicide for additional applications if maximum amount of Ridomil Gold MZ WG has been used. If resistant isolates to Group 4 fungicides are present, efficacy can be reduced.

**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. 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 (<a href="http://www.syngentacropprotection-us.com/enviro/driftmanagement/index.asp?nav=drift\_management)">http://www.syngentacropprotection-us.com/enviro/driftmanagement/index.asp?nav=drift\_management)</a>.

**IPM:** Ridomil Gold MZ WG 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.

**Seed Treatment and At Planting Uses**: In addition to the maximum number of foliar applications permitted in the directions, a seed treatment or at planting use may be made on crops which have registered seed treatment or soil applied uses.

## Maximum EBDC poundage:

• 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 on 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.

### PLANT BACK RESTRICTIONS

Do not plant any crop which is not registered for use with mefenoxam in soil treated with this active ingredient for a period of 12 months, unless a shorter interval is specified on the following list.

**Rotational Crops:** 

Rotational Crops:	
Rotation Crop	Planting Time From Last Ridomil Gold MZ
	WG Application
Alfalfa (including birdsfoot trefoil)	
Asparagus  Respice Vegetables (e.g. bresseli eabbage equificular)	
Brassica Vegetables (e.g., broccoli, cabbage, cauliflower) Clover	
Cotton	
Cucurbit Vegetables (e.g., cucumber, melons, squash) Fruiting Vegetables (e.g., tomatoes, peppers, eggplant) Globe Artichoke	
Herbs (fresh and dried) Leafy Vegetables, except Brassica (e.g., lettuce, spinach, celery)	0 days
Legume Vegetables (e.g., beans and peas, succulent and dried)	
Onions (dry bulb, including garlic, and green)	1
Peanuts	
Pineapples  Root and Tubor Variatebles (a.g. patertage agreets guarantees)	
Root and Tuber Vegetables (e.g. potatoes, carrots, sugar beets)	
Soybeans Strawberries	13
Sunflower	l'
Cereal Grains (other than Corn)	40 days
Corn	9 months
	<del></del>
Crops Not Intended for Food or Feed	0 days
All Other Crops Intended for Food or Feed	12 months

### **RESISTANCE MANAGEMENT**

GROUP 4 M FUNGICIDES

Ridomil Gold MZ WG is a combination product of mefenoxam, a phenylamide in Group 4. and mancozeb, an EBDC, in Group M. Mefenoxam acts by selectively interfering with the synthesis of ribosomal RNA which inhibits both mycelial growth and spore formation. This specific mode of action is subject to the development of resistant strains of fungi. Fungal pathogens can develop resistance to products with the same mode of action when used repeatedly. Mancozeb has a multi-site mode of action. Because resistance development cannot be predicted, use of this product should conform to resistance management strategies established for the crop and use area. If treatment is not effective following the use of Ridomil Gold MZ WG as recommended, a resistant strain may be present. Consideration should then be given to the prompt use of other types of suitable fungicides. 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 Crop Protection encourages responsible resistance management to ensure effective long-term control of the fungal diseases on this label. Ridomil Gold MZ WG 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 MZ WG Alone (no tank mix):

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

Ridomil Gold MZ WG + Tank Mixtures: Ridomil Gold MZ WG is usually compatible with Bravo® and Dithane® M-45. To determine the physical compatibility of Ridomil Gold MZ WG with other products, use a jar test. Using a quart jar, add the proportionate amounts of the products to 1 quart 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 5 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.

## Mixing in the Spray Tank

- Add 1/4 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.
- 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.
- No label dosage rate should be exceeded, and the most restrictive label precautions and limitations should be followed.
- This product should not be mixed with any product which prohibits such mixing.

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

### APPLICATION PROCEDURES

## **Ground Application:**

Apply in a minimum of 10 gallons of water per acre, unless specified otherwise.

## Aerial Application:

- Apply in a minimum of 5 gallons 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, or moving wheel/side (wheel) roll 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.
- Apply in 0.1-0.25 inches/A of water. Excessive water may reduce efficacy.
- 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.

# Application Instructions for Chemigation Systems Connected to Public Water Systems

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.

### **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.
- 8. 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 flow 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. 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.

# **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 WG through center pivot systems because of non-uniform application.

- Determine the size of the area to be treated.
- Determine the time required to apply 1/8-1/2 inch of water over the area to be treated when the system and injection equipment are operated at normal pressures as recommended by the equipment manufacturer. When applying Ridomil Gold MZ

WG through irrigation equipment use the lowest obtainable water volume while maintaining uniform distribution. Run the system at 80-95% of the manufacturer's rated capacity.

- Using water, determine the injection pump output when operated at normal line pressure.
- Determine the amount of Ridomil Gold MZ WG required to treat the area covered by the irrigation system.
- Add the required amount of Ridomil Gold MZ WG and sufficient water to meet the injection time requirements to the solution tank.
- Make sure the system is fully charged with water before starting injection of the Ridomil Gold MZ WG solution. Time the injection to last at least as long as it takes to bring the system to full pressure.
- Maintain constant solution tank agitation during the injection period.
- Continue to operate the system until the Ridomil Gold MZ WG solution has cleared the sprinkler head.

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

- Determine the acreage covered by the sprinklers.
- Fill injector solution tank with water and adjust flow rate to use the contents over a 20 to 30-minute interval. When applying Ridomil Gold MZ WG through irrigation equipment use the lowest obtainable water volume while maintaining uniform distribution.
- Determine the amount of Ridomil Gold MZ WG required to treat the area covered by the irrigation system.
- Add the required amount of Ridomil Gold MZ WG into the same quantity of water used to calibrate the injection period.
- Operate the system at the same pressure and time interval established during the calibration.
- Stop injection equipment after treatment is completed. Continue to operate the system until the Ridomil Gold MZ WG solution has cleared the last sprinkler head.

### **DIRECTIONS FOR USE**

Crop	Target Diseases	Use Rate Pounds Product/A	Remarks
Cucumber Cantaloupe Casaba Crenshaw Honeydew Melon Watermelon Summer Squash	Downy Mildew (Pseudoperonospora cubensis)	2.5	Begin applications when conditions are favorable for disease, but before infection, and continue at 14-day intervals until the threat of disease is over. Apply the ful rate of a protectant fungicide between Ridomii Gold MZ WG applications. Avoid late season applications when plants reach full maturity and begin senescence. If conditions for downy mildew development are still favorable after making 4 applications of Ridomii Gold MZ WG, use other registered fungicides for downy mildew control on these crops.

- Ridomil Gold MZ WG may be applied up to 5 days before harvest (5-day PHI).
   A maximum of 10 lbs. Ridomil Gold MZ WG may be made per crop/acre/season.
   Do not exceed a maximum of 19.2 lbs. a.i./A/crop of EBDC fungicides.
- (4) If tank mixed with other products containing mancozeb, do not exceed 2.4 lbs. of mancozeb a.i./ acre/application.
- (5) If tank mixed with products containing maneb, do not exceed 1.6 lbs. of EBDC a.i./acre/ application.
  (6) Do not exceed the equivalent of 0.5 lbs. a.i./A per season of foliar-applied mefenoxam containing products.

Crop	Target Diseases	Use Rate Pounds Product/A	Remarks
Grapes	Downy Mildew (Plasmopora viticola)	2.5	Begin applications when conditions are favorable for disease, but before infection, and continue at 7 to 10 day intervals until the threat of disease is over.
			For late season downy mildew control, apply other registered fungicides.

- (1) Ridomil Gold MZ WG may be applied up to 66 days before harvest (66 day PHI).
- (2) A maximum of 10 lbs. Ridomil Gold MZ WG may be made per crop/acre/season.
- (3) If other registered fungicides containing EBDC active ingredients are used during the growing season, do not exceed a total of 19.2 lbs. of EBDC a.i./A on grapes grown east of the Rocky Mountains or 6 lbs. of EBDC a.i./A on grapes grown west of the Rocky Mountains.
- (4) If tank mixed with other products containing EBDC active ingredients, do no exceed 3.2 lbs. of EBDC active ingredient east of the Rocky Mountains or 2.0 lbs. of EBDC active ingredient west of the Rocky Mountains per acre per application.
- (5) Do not exceed the equivalent of 0.4 lbs. a.i./A/season of foliar-applied metenoxam containing products.
- (6) Apply only with ground equipment.

Crop	Target Diseases	Use Rate Pounds Product/A	Remarks
Onion (dry bulb) Garlic Shallots (dry bulb)	Downy Mildew (Peronospora destructor)	2.5	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 WG, use other fungicides registered for downy mildew in these crops.

- (1) Ridomil Gold MZ WG may be applied up to 7 days before harvest (7 day PHI).
- (2) A maximum of 10 lbs. Ridomil Gold MZ WG may be made per crop/acre/season.
- (3) If other registered fungicides containing EBDC active ingredients are used during the growing season, do not exceed a total of 24 lbs. of EBDC active ingredient per acre.
- (4) If tank mixed with other products containing EBDC active ingredients, do not exceed 2.4 lbs. of EBDC a.i./A/application.
- (5) Do not exceed the equivalent of 0.4 lbs. a.i./A/season of foliar-applied metenoxam containing products.
- (6) Do not apply to exposed bulbs.

Crop	Target Diseases	Use Rate Pounds product/A	Remarks
Potatoes	Early Blight (Alternaria solani)  Late Blight (Phytophthora infestans)	2.5	Integrated Pest (Disease) Management: Integrate Ridomil Gold MZ WG into an overall disease management strategy that includes selection of varieties with disease tolerance, optimum plant populations, proper fertilization, plant residue management, crop rotation, and proper timing and placement of irrigation.  For Early Blight and Late Blight, 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 uniformly across the field. Make up to 4 applications of Ridomil Gold MZ WG at 14-day intervals. Apply the labeled rate of a protectant fungicide between Ridomil Gold MZ WG applications. Following the Ridomil Gold MZ WG applications, apply the labeled rate of a protectant fungicide on a weekly schedule through the remainder of the season.
	Storage Rots  Pink Rot (Phytophthora erythroseptica)  Leak (Pythium spp.)	2.5	For effective control of Storage Rots, Use Ridomil Gold MZ WG in conjunction with other management practices such as crop rotation and resistant varieties. Make the first application following 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 applications of Ridomil Gold MZ WG for Late Blight control correspond to the timing of applications for Storage Rot control, additional applications for Storage Rot control are not needed.

- (1) Ridomil Gold MZ WG may be applied up to 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) Vine-kill should occur 14 days before harvest.
- (3) A maximum of 10 lbs. Ridomil Gold MZ WG may be made per crop/acre/season.
- (4) If other registered fungicides containing EBDC active ingredients are used during the growing season, do not exceed a total of 11.2 lbs. of EBDC a.i./A.
- (5) If tank mixed with other products containing EBDC active ingredients, do not exceed 1.6 lbs. of EBDC a.i./A/application.
- (6) Do not exceed the equivalent of 0.40 lbs. a.i./A/season of foliar-applied mefenoxam containing products.

Сгор	Target Diseases	Use Rate Pounds product/A	Remarks
Sugar Beets	Downy Mildew (Peronospora schachtii)	2.5	Begin applications 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 WG, use other fungicides registered for downy mildew control in sugar beets.

- (1) Ridomil Gold MZ WG may be applied up to 14 days before harvest (14 day PHI).
- (2) A maximum of 10 lbs. Ridomil Gold MZ WG may be made per crop/acre/season.
- (3) If other registered fungicides containing EBDC active ingredients are used during the growing season, do not exceed a total of 11.2 lbs. of EBDC a.i./A.
- (4) If tank mixed with other products containing EBDC active ingredients, do not exceed 1.6 lbs. of EBDC a.i./A/application.
- (5) Do not exceed the equivalent of 0.4 lbs. a.i./A/season of foliar-applied melenoxam containing products.
- (6) Do not feed treated tops to livestock.

Crop	Target Diseases	Use Rate Pounds product/A	Remarks
Tomatoes	Late Blight (Phytophthora infestans)	2.5	Begin preventive applications early in the season when conditions are favorable for disease (before infection), and continue at 14-day intervals until the threat of disease is over. Apply the labeled rate of a protectant fungicide between Ridomil Gold MZ WG applications. If conditions are favorable after making 3 applications of Ridomil Gold MZ WG, use other fungicides registered for control of late blight control in tomatoes.

- (1) Ridomil Gold MZ WG may be applied up to 5 days before harvest (5 day PHI).
- (2) A maximum of 10 lbs. Ridomil Gold MZ WG may be made per crop/acre/season
- (3) If other registered fungicides containing EBDC active ingredients are used during the growing season, do not exceed a total of 16.8 lbs. of EBDC a.i/A on tomatoes grown east of the Mississippi River and 6.4 lbs. of EBDC active ingredient on tomatoes grown west of the Mississippi River.
- (4) If tank mixed with other products containing EBDC active ingredients, do not exceed 1.6 lbs. of EBDC active ingredient west of the Mississippi River or 2.4 lbs. of EBDC active ingredient east of the Mississippi River per acre per application.
- (5) Do not exceed the equivalent of 0.5 lb. a.i./A/season of foliar-applied mefenoxam containing products.

Equivalent Amounts of the Active Ingredients in Other Products:

Lbs. A.I. in 2.5 Lbs. Ridomil Gold MZ WG	Equivalent Amount in:
0.1 of mefenoxam	2.5 pts of Ridomil Gold Bravo SC or 2 lbs. of Ridomil Gold Copper
	(1 pack/2.5A)
1.6 of mancozeb	2 lbs. of Dithane M45

### STORAGE AND DISPOSAL

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

## **Pesticide Storage**

Store in a cool, dry secure place.

### **Pesticide Disposal**

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

### **Container Disposal**

Do not reuse empty container. Triple rinse (or equivalent) and offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by state and local authorities, by burning. If burned, keep out of smoke.

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.

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

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Dithane® is a trademark of Dow AgroSciences, LLC.

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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, Inc. Greensboro, North Carolina 27409 www.syngenta-us.com

### **BASE LABEL**



### Ridomil Gold® MZ WG

## Fungicide

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

Active Ingredients: Mefenoxam*	4 0%
A coordination product of zinc ion 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 WG is a dry flowable containing 0.04 lbs of mefenoxam and 0.64 lbs of mancozeb per pound of product.

### KEEP OUT OF REACH OF CHILDREN.

### CAUTION

See directions for use in attached 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 EPA Est.	. No.	100-XX	(X) 
ì	Net \	Weight	

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

FIRST AID		
If in eyes	Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.	
	Call a poison control center or doctor for treatment advice.	
lf on skin or	Take off contaminated clothing.	
clothing	Rinse skin immediately with plenty of water for 15-20 minutes.	
	Call a poison control center or doctor for treatment advice.	
Have the pro	oduct container or label with you when calling a poison control center or	
	doctor, or going for treatment.	
	HOT LINE NUMBER	

For 24 Hour Medical Emergency Assistance (for incidents involving Humans or Animals) 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. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

### **Environmental Hazards**

This product is toxic to aquatic organisms. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. 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. Apply only as specified on this label. Do not apply when weather conditions favor drift from treated area. Do not contaminate water when cleaning equipment or disposing of equipment wash water or rinsate.

### **Groundwater Advisory**

This chemical 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.

### STORAGE AND DISPOSAL

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

### Pesticide Storage

Store in a cool, dry secure place.

### **Pesticide Disposal**

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

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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.

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

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Manufactured for: Syngenta Crop Protection, Inc. Greensboro, North Carolina 27409 www.syngenta-us.com

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