2012-0171 2012-01-30

GROUP 4 M FUNGICIDES

RIDOMIL® GOLD MZ 68WG

FUNGICIDE

AGRICULTURAL

Wettable granule fungicide for control of early blight and late blight on the foliage of potatoes; downy mildew in onions and head le ttuce; downy mildew caused by *Plasmopara viticola* in grapes; and the suppression of *Pythium* leak and pink rot in potatoes.

GUARANTEE:

Metalaxyl-M and S-isomer	4%
Mancozeb	64%

READ THE LABEL AND BOOKLET BEFORE USING KEEP OUT OF REACH OF CHILDREN

POTENTIAL SKIN SENSITIZER CAUTION - EYE IRRITANT

REGISTRATION NO.: 28893
PEST CONTROL PRODUCTS ACT

NET CONTENTS: 5 - 10 kg

Syngenta Canada, Inc. 140 Research Lane, Research Park Guelph, Ontario N1G 4Z3

Telephone: 1-877-964-3682

LABEL

NOTICE TO USER

This pest control product is to be used only in accordance with the directions on the label. It is an offence under the *Pest Control Products Act* to use this product in a way that is inconsistent with the directions on the label. The user assumes the risk to persons or property that arises from any such use of this product.

FIRST AID

IN CASE OF POISONING, contact a physician or a poison control centre **IMMEDIATELY**. Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

If swallowed, call a poison control centre or doctor **IMMEDIATELY** for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give anything by mouth to an unconscious person.

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 centre or doctor for treatment advice.

If on skin or clothing, take off contaminated clothing. Rinse skin **IMMEDIATELY** with plenty of water for 15–20 minutes. Call a poison control centre or doctor for treatment advice.

If inhaled, move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control centre or doctor for further treatment advice.

TOXICOLOGICAL INFORMATION

No specific antidote is known. If ingested, induce emesis or initiate gastric lavage. Treat symptomatically.

PRECAUTIONS

KEEP OUT OF REACH OF CHILDREN. Harmful if swallowed. May irritate eyes. Avoid contact with eyes. Harmful if absorbed through the skin. Potential skin sensitizer. Avoid contact with eyes, skin, or clothing. Do not eat, drink or smoke while mixing or during application. Wear protective eyewear, chemical resistant gloves m ade of any waterproof material, coveralls over long-sleeved shirt, long pants, shoes plus socks when mixing/loading and applying and during clean up and repair activities.

Do not apply in such a way that this product will contact workers or other persons, either directly or through drift. Only handlers (mixers, loaders and applicators) wearing personal protective equipment may be in the area being treated during application.

Do not enter or allow worker entry into treated areas for 24 hours following application.

If this pest control product is to be used on a commodity that may be exported to the U.S. and you require information on acceptable residue levels in the U.S., visit CropLife Canada's web site at www.croplife.ca.

ENVIRONMENTAL PRECAUTIONS

Avoid application when weather conditions favour drift from treated areas.

DO NOT apply this product directly to freshwater habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs, ditches and wetlands), estuaries or marine habitats.

DO NOT contaminate irrigation or drinking water supplies or aquatic habitats by cleaning of equipment or disposal of wastes.

Environmental Hazards

The use of this product may result in contamination of groundwater, particularly in areas where soils are permeable (e.g. sandy soil) or the water table is shallow. To reduce runoff from treated areas into aquatic habitats, consider the characteristics and conditions of the site before treatment. Site characteristics and conditions that may lead to runoff include, but are not limited to, heavy rainfall, moderate to steep slope, bare soil, poorly draining soil (e.g. compacted or fine-textured soils such as clay). In order to minimize risk to the environment from the use of this product, do not use on coarse textured gravelly soils, soils with less than 2% organic matter, or in areas where the water table may be high.

Avoid application of this product when heavy rain is forecast.

DECONTAMINATION AND DISPOSAL

For information on disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Contact the manufacturer and the provincial regulatory agency in case of a spill, and for clean up of spills.

PRODUCT DECONTAMINATION AND DISPOSAL:

- 1. Empty bag thoroughly into spray tank.
- 2. Make the empty bag unsuitable for further use.
- 3. Dispose of the bag in accordance with provincial requirements.

IN CASE OF EMERGENCY INVOLVING A MAJOR SPILL, FIRE OR POISONING, CALL 1-800-327-8633 (FASTMED)

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REGISTRATION NO.: 28893
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140 Research Lane, Research Park Guelph, Ontario N1G 4Z3

Telephone: 1-877-964-3682

PAMPHLET

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Do not apply in such a way that this product will contact workers or other persons, either directly or through drift. Only handlers (mixers, loaders and applicators) wearing personal protective equipment may be in the area being treated during application.

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ENVIRONMENTAL PRECAUTIONS

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Environmental Hazards

The use of this product may result in contamination of groundwater, particularly in areas where soils are permeable (e.g. sandy soil) or the water table is shallow. To reduce runoff from treated areas into aquatic habitats, consider the characteristics and conditions of the site before treatment. Site characteristics and conditions that may lead to runoff include, but are not limited to, heavy rainfall, moderate to steep slope, bare soil, poorly draining soil (e.g. compacted or fine-textured soils such as clay). In order to minimize risk to the environment from the use of this product, do not use on coarse textured gravelly soils, soils with less than 2% organic matter, or in areas where the water table may be high.

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IN CASE OF EMERGENCY INVOLVING A MAJOR SPILL, FIRE OR POISONING, CALL 1-800-327-8633 (FASTMED)

INTRODUCTION

RIDOMIL GOLD MZ 68WG is a combination of a systemic and contact fungicide to be used as a foliar spray in a preventative disease control program for the control of early blight and late

blight on the foliage of potatoes; the suppression of *Pythium* leak and pink rot in potatoes; the control of downy mildew in onions and head lettuce; and the control of downy mildew caused by *Plasmopara viticola* in grapes when used as a foliar spray in a preventative disease control program.

USE LIMITATIONS:

Experience has shown that strains of *Phytophthora* resistant to metalaxyl-M and S-isomer may develop. Failure to control the disease will result in crop damage and/or yield losses in the field or in storage. Since the occurrence of resistance cannot be foreseen, Syngenta Canada Inc. accepts no responsibility for any loss of, or damage to crops in the field or in storage, resulting from the failure of RIDOMIL MZ 68WG to control the resistant *Phytophthora* strains.

If disease appears in the field, consult the Government Disease Specialist immediately.

APPLICATION INFORMATION:

- 1. Do not prepare more spray mixture than is needed for the immediate operation.
- 2. Thoroughly clean spray equipment before using this product.
- 3. Vigorous agitation is necessary to disperse the product.
- 4. Maintain maximum agitation throughout the spraying operation.
- 5. 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 200-1400 L/ha. For aerial applications, apply in 50-100 L of water per hectare. To minimize the potential of drift from target area, applications at wind speeds greater than 10 mph are not recommended. DO NOT USE LESS THAN 50 L WATER PER HECTARE.

When a tank mixture is used, consult the labels of the tank-mix partners and observe the largest (most restrictive) buffer zone of the products involved in the tank mixture.

NOTE:

Do not let tank contents stand for prolonged periods of time without agitation. If spraying is interrupted, thoroughly re-agitate the spray solution before resuming application.

GROUND APPLICATION:

- 1. Use well-maintained and calibrated conventional spray equipment to obtain thorough and uniform coverage.
- 2. Spray screens should be no finer than 50 mesh.
- 3. Ensure that the by-pass line discharges at the bottom of the tank to minimize foaming.
- 4. Maintain pressure of at least 275 kPa to ensure good foliage penetration and coverage.
- 5. Do not apply during periods of dead calm. Avoid application of this product when winds are gusty. Do not apply with spray droplets smaller than the American Society of Agricultural Engineers (ASAE) medium classification.

AERIAL APPLICATION (potatoes only):

Apply only by fixed-wing or rotary aircraft equipment which has been functionally and operationally calibrated for the atmospheric conditions of the area and the application rates and conditions of this label.

Label rates, conditions and precautions are product specific. Read and understand the entire label before opening this product. Apply only at the rate recommended for aerial application on this label. Where no rate for aerial application appears for the specific use, this product cannot be applied by any type of aerial equipment.

Ensure uniform application. To avoid streaked, uneven or overlapped application, use appropriate marking devices.

AERIAL APPLICATION USE PRECAUTIONS:

Apply only when meteorological conditions at the treatment site allow for complete and even crop coverage. Apply only under conditions of good practice specific to aerial application as outlined in the National Aerial Pesticide Application Manual, developed by the Federal/Provincial/Territorial Committee on Pest Management and Pesticides.

Do not apply to any body of water. Avoid drifting of spray onto any body of water or other non-target areas. Specified buffer zones should be observed.

Coarse sprays are less likely to drift, therefore, avoid combinations of pressure and nozzle type that will result in fine particles (mist).

DO NOT apply during periods of dead calm. Avoid application of this product when winds are gusty. DO NOT apply when wind speed is greater than 16 km/h at flying height at the site of application. DO NOT apply with spray droplets smaller than the American Society of Agricultural Engineers (ASAE) medium classification. To reduce drift caused by turbulent wingtip vortices, the nozzle distribution along the spray boom length MUST NOT exceed 65% of the wing- or rotorspan. Do not spray when the wind is blowing towards a nearby sensitive crop, garden, terrestrial habitat (such as shelter-belt) or aquatic habitat.

AERIAL APPLICATION OPERATOR PRECAUTIONS:

Do not allow the pilot to mix chemicals to be loaded onto the aircraft. Loading of premixed chemicals with a closed system is permitted. It is desirable that the pilot have communication capabilities at each treatment site at the time of application. The field crew and the mixer/loaders must wear chemical resistant gloves, coveralls and goggles or face shield during mixing/loading, cleanup and repair. Follow the more stringent label precautions in cases where the operator precautions exceed the generic label recommendations on the existing ground boom label.

All personnel on the job site must wash hands and face thoroughly before eating and drinking. Protective clothing, aircraft cockpit and vehicle cabs must be decontaminated regularly.

Do not use human flaggers. Avoid spray drift. Apply only when there is little or no hazard from spray drift. Small quantities of the spray, which may not be visible, may seriously injure susceptible crops and damage sensitive non-target habitats. A method, such as balloons or a

continuous smoke column at or near the spray site or a smoke generator on the spray equipment, must be used to detect air movement, lapse conditions or temperature inversions (stable air). If the smoke develops into layers or indicates a potential for hazardous spray drift, do not spray.

PRODUCT SPECIFIC PRECAUTIONS:

Read and understand the entire label before opening this product. If you have questions call the manufacturer at 1 -87-SYNGENTA (1-877-964-3682) or obtain technical advice from the distributor or your provincial agricultural represent ative. Application of this specific product must meet and/or conform to the following:

- 1. Apply RIDOMIL GOLD MZ 68WG in a minimum of 50 L of water/ha.
- 2. Adjust nozzles to provide a median droplet size of 200-400 microns.
- 3. To ensure proper coverage and distribution of spray solution, and to minimize drift, check to see that swath width and droplet size are adequate, and that wind velocities are low.
- 4. Consult local environmental authorities to determine how large a buffer zone is required around between fields to be aerially sprayed.

DIRECTIONS FOR USE

POTATOES:

<u>Control of Early Blight and Late Blight on the foliage of potatoes, and the suppression of Pythium Leak and Pink Rot in potatoes</u>

RIDOMIL GOLD MZ 68WG should be applied as part of a preventative disease management program. Cultural practices to minimize the sources of disease should be used as well as early preventative applications of fungicides. RIDOMIL GOLD MZ 68WG must be applied before the outbreak of disease.

Apply up to 3 applications of RIDOMIL GOLD MZ 68WG at 2.5 kg/ha in sufficient water to ensure thorough coverage of foliage (for aerial application, apply 2.5 kg of RIDOMIL MZ 68WG in a minimum of 50 L of water per hectare). Start application early - the first application should be applied before the leaves of the plants touch within a particular potato row. Apply a second and third application of RIDOMIL GOLD MZ 68WG at 10-14 day intervals. Apply a contact fungicide, recommended for the control of late blight, 5-7 days after each RIDOMIL GOLD MZ 68WG application. After the final RIDOMIL GOLD MZ 68WG application apply a registered contact fungicide at the recommended rate and interval, to the end of the season. Do not apply within 3 days of harvest.

When conditions are very favourable for late b light development, the shortest interval between fungicide applications is recommended.

Up to 3 applications of RIDOMIL GOLD MZ 68WG may be applied per season. Apply a contact fungicide within 5-7 days of the last RIDOMIL GOLD MZ 68WG application. When potato vines start to visually mature, discontinue use of RIDOMIL GOLD MZ 68WG and return to a contact fungicide program. Excessive tuber bruising or wounding during harvest will reduce

suberization and increase the chances for development of storage disease problems. Consult local potato specialist for late blight forecasting and potato vine maturity advice in your area.

NOTE: If applications of RIDOMIL GOLD MZ 68WG are being made, as recommended for control of foliar diseases, additional applications for tuber disease control are not needed.

Early Blight

RIDOMIL GOLD MZ 68WG, when applied in a program with a contact fungicide recommended for late blight control as outlined above, will control early blight.

GENERAL INFORMATION:

COMPATIBILITY: RIDOMIL GOLD MZ 68WG is compatible with most commonly used potato insecticides. However, compatibility should always be confirmed by pre-mixing small proportional quantities of chemicals in water in advance.

Do not tank mix RIDOMIL GOLD MZ 68WG with a top killer. Top killers prevent the systemic activity of RIDOMIL GOLD MZ 68WG.

GRAPES

Downy Mildew caused by Plasmopara viticola

Apply 2.5 kg of RIDOMIL GOLD MZ 68WG per hectare using ground application equipment in sufficient water to obtain thorough coverage of the foliage. Make only one application per year as a pre-bloom spray.

NOTICE TO USER:

The DIRECTIONS FOR USE for this product for control of Downy Mildew on head lettuce and onions were developed by persons other than Syngenta Canada, Inc. and accepted for registration by Health Canada under the User Requested Minor Use Label Expansion program. Syngenta Canada, Inc. itself makes no representation or warranty with respect to performance (efficacy) and/ or crop tolerance (phytotoxicity) claims for this product when used on onions and head lettuce.

Accordingly, the User assumes all liability arising, and agrees to hold Syngenta Canada, Inc. harmless from any claims based on e fficacy and/or phytotoxicity with the use on onions and head lettuce.

INTRODUCTION:

RIDOMIL GOLD MZ 68WG is a combination of a systemic and contact fungicide to be used as a foliar spray in a preventive program for the control of downy mildew in onions and head lettuce.

HEAD LETTUCE - For Control of Downy Mildew (Bremia lactucae)

RIDOMIL GOLD MZ 68WG must be applied before the outbreak of the disease. Apply RIDOMIL GOLD MZ 68WG at the rate of 2.5 kg/ha in sufficient water to ensure thorough coverage of foliage. Apply every 14 days, beginning at thinning. Make a maximum of 3 applications per season. Do not apply within 14 days of harvest.

ONIONS - For Control of Downy Mildew (Peronospora destructor)

RIDOMIL GOLD MZ 68WG must be applied before the outbreak of the disease. Apply RIDOMIL GOLD MZ 68WG at the rate of 2.5 kg/ha in sufficient water to ensure thorough coverage of foliage. Apply every 7-14 days, beginning when conditions favour the outbreak of downy mildew. Make a maximum of 3 applications per season. Do not apply within 7 days of harvest.

When changing from RIDOMIL GOLD MZ 68WG to a contact fungicide, apply the contact fungicide within 10 days of the last RIDOMIL GOLD MZ 68WG application.

GRAPES - Downy Mildew caused by Plasmopara viticola

Apply 2.5 kg of RIDOMIL GOLD MZ 68WG per hectare as a post-bloom spray using ground application equipment in sufficient water to obtain thorough coverage of the foliage. Make only one application per year, as a post-bloom spray. Do not apply within 66 days of harvest.

Resistance Management Recommendations

For resistance management, RIDOMIL GOLD MZ 68WG contains Group M and 4 fungicides. Any fungal population may contain individuals naturally resistant to R IDOMIL GOLD MZ 68WG and other Group M and 4 fungicides. A gradual or total loss of pest control may occur over time if these fungicides are used repeatedly in the same fields. Other resistance mechanisms that are not linked to site of action but specific for individual chemicals, such as enhanced metabolism, may also exist. Appropriate resistance management strategies should be followed.

To delay fungicide resistance:

Where possible, rotate the use of R IDOMIL GOLD MZ 68WG or other Group M or 4 fungicides with different groups that control the same pathogens.

Avoid application of more than the maximum number listed in the label and consecutive sprays of RIDOMIL GOLD MZ 68WG or other fungicides in the same group in a season.

Fungicide use should be based on an IPM program that includes scouting, historical information related to pesticide use and crop rotation and considers cultural, biological and other chemical control practices.

Monitor treated fungal populations for sign of resistance development. If disease continues to progress after treatment with this product, do not increase the use rate. Discontinue use of this product, and switch to another fungicide with a different target site of action, if available.

Contact your local extension specialist or ce rtified crop advisors for any additional pesticide resistance-management and/or IPM recommendations for specific crops and disease problems in your area.

For further information or to report suspected re sistance, contact company representatives at 1-87-SYNGENTA (1-877-964-3682) or at www.syngenta.ca.

Product names marked $\ensuremath{\mathbb{B}}$ or $\ensuremath{^{\text{TM}}}$ are trademarks of a Syngenta Group Company

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