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|-------|---|---|-----------|
| GROUP | M | 4 | FUNGICIDE |
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RIDOMIL GOLD[®] SL/BRAVO[®] ZN TWIN-PAK[™]

SUSPENSION

AGRICULTURAL FUNGICIDE

For the control of Early Blight, Botrytis Vine Rot, Late Blight, Late Blight Tuber Rot and the suppression of Pythium Leak and Pink Rot in Potatoes

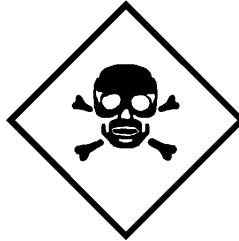
GUARANTEE:

Metalaxyl-M and S-isomer 480g/L
Chlorothalonil..... 500g/L

The BRAVO ZN component of this TWIN-PAK contains 1,2-benzisothiazolin-3-one at 0.01% as a preservative.

READ THE ENTIRE LABEL AND ATTACHED PAMPHLET BEFORE USING

WARNING



POISON

EYE & SKIN IRRITANT

The BRAVO ZN in this container may be a potential skin sensitizer and cause temporary allergic side effects, characterized by redness of the eyes, mild bronchial irritation and redness or rash on exposed skin areas.

REGISTRATION NO.: **31552**
PEST CONTROL PRODUCTS ACT

NET CONTENTS: **8.83 L** (1 jug)

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 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.

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.

TOXICOLOGICAL INFORMATION

There is no specific antidote known. Treat symptomatically. In the event of an allergic reaction the use of oral antihistamines and steroid creams and/or systemic steroids is indicated. If in eyes, specialized ophthalmologic attention may be required.

PRECAUTIONS

KEEP OUT OF REACH OF CHILDREN

Causes eye irritation. DO NOT get in eyes. Harmful or fatal if swallowed. Harmful if inhaled. Avoid inhaling/breathing spray. May irritate the skin. Avoid contact with skin or clothing. This product may produce temporary allergic side effects, characterized by redness of the eyes, mild bronchial irritation and redness or rash on exposed skin areas.

Wear coveralls over long pants, and a long-sleeved shirt, chemical resistant gloves and goggles or a face shield, apron, socks and chemical resistant footwear during mixing, loading, application, clean-up and repair activities.

Remove clothing/Personal Protective Equipment (PPE) immediately if pesticide gets inside. Then wash thoroughly with soap and warm water 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 with soap and warm water and change into clean clothing.

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.

Do not eat, drink or smoke while mixing or during application. All users should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.

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 re-enter treated areas within 48 hours. If required, individuals may re-enter treated areas within 48 hours for short-term tasks not involving hand labour only if at least 12 hours has passed since application, and long pants, long-sleeved shirt, hat and chemical-resistant gloves are worn.

Do not use near heat or open flame. Protect from excessive heat.

If this pest control product is to be used on a commodity that may be exported to other countries in the world and you require information on acceptable residue levels in these countries, please contact Syngenta Canada Inc. at 1-87-SYNGENTA / 1-877-964-3682.

ENVIRONMENTAL HAZARDS

This product is toxic to aquatic organisms and non-target terrestrial plants. Runoff from treated areas may be hazardous to aquatic organisms in neighbouring areas. Observe buffer zones specified under GENERAL INFORMATION.

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

DO NOT contaminate irrigation or drinking water supplies or aquatic habitats by cleaning of equipment, or disposal of wastes. DO NOT apply where runoff is likely to occur.

DO NOT apply when weather conditions favour drift from areas being treated.

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.

STORAGE

Keep in original container, tightly closed, during storage. Store in a cool, dry, well-ventilated area away from heat or open flame, from feed and foodstuffs, and out of the reach of children and animals.

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.

CONTAINER DISPOSAL:

For returnable containers:

Do not reuse this container for any purpose. For disposal, this empty container may be returned to the point of purchase (distributor/dealer).

For refillable containers:

For disposal, this container may be returned to the point of purchase (distributor/dealer). It must be refilled by the distributor/dealer with the same product. Do not reuse this container for any other purpose.

For recyclable containers:

Do not reuse this container for any purpose. This is a recyclable container, and is to be disposed of at a container collection site. Contact your local distributor/dealer or municipality for the location of the nearest collection site. Before taking the container to the collection site:

1. Triple- or pressure-rinse the empty container. Add the rinsings to the spray mixture in the tank.
2. Make the empty, rinsed container unsuitable for further use.

If there is no container collection site in your area, dispose of the container 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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| GROUP | M 4 | FUNGICIDE |
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RIDOMIL GOLD® SL/BRAVO® ZN TWIN-PAK™

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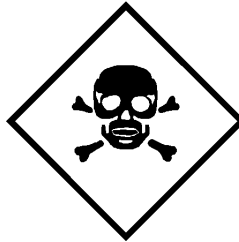
GUARANTEE:

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REGISTRATION NO.: **31522**
PEST CONTROL PRODUCTS ACT

Syngenta Canada Inc.
140 Research Lane, Research Park
Guelph, Ontario
N1G 4Z3
Telephone : 1-877-964-3682

PAMPHLET

NOTICE TO USER

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ENVIRONMENTAL HAZARDS

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DO NOT apply when weather conditions favour drift from areas being treated.

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).

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STORAGE

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4. Make the empty, rinsed container unsuitable for further use.

If there is no container collection site in your area, dispose of the container in accordance with provincial requirements.

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

GENERAL INFORMATION

RIDOMIL GOLD® SL/BRAVO® ZN TWIN-PAK is a combination of a systemic and contact fungicide for use in a preventative disease control program for Early Blight, Botrytis Vine Rot, Late Blight and Late Blight Tuber Rot and suppression of Pythium Leak and Pink Rot in potatoes.

Slowly invert RIDOMIL GOLD SL/BRAVO ZN TWIN-PAK several times before pouring into spray tank.

Do not tank mix RIDOMIL GOLD SL/BRAVO ZN TWIN-PAK with a top killer. Top killers prevent the systemic activity of RIDOMIL GOLD SL/BRAVO ZN TWIN-PAK.

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 GOLD SL/BRAVO ZN TWIN-PAK to control the resistant *Phytophthora* strains. If disease appears in the field, consult the Government Disease Specialist immediately.

Do not use RIDOMIL GOLD SL/BRAVO ZNTWIN-PAK for disease control in greenhouses.

APPLICATION INFORMATION:

1. Spray equipment should be thoroughly flushed with clean water and drained before and after application of RIDOMIL GOLD SL/BRAVO ZN TWIN-PAK.
2. Fill the spray tank one-half full with clean water.
3. With the agitation system engaged, add the required number of jugs of RIDOMIL GOLD SL/BRAVO ZN TWIN-PAK to the spray tank. **DO NOT ATTEMPT TO MEASURE FROM THIS JUG.** The entire contents must be added to the spray tank or an improper mixture will result.
4. Complete filling the spray tank with water while maintaining constant agitation.

NOTE:

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

GROUND APPLICATION- GENERAL INFORMATION:

1. Use well-maintained and calibrated conventional spray equipment which provides adequate 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 at no less than 275 kPa to ensure good foliage penetration and coverage.
5. For ground application a buffer zone of 15 metres between the application zone and surface waterbodies should be observed. Provincial buffer zones that are greater than the above buffer zone should be respected.

6. 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 – GENERAL INFORMATION:

1. 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.
2. Label rates, conditions and precautions are product specific. 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 representative.
3. Ensure uniform application. To avoid streaked, uneven or overlapped application, use appropriate marking devices.
4. Use mechanical flaggers only.
5. Apply RIDOMIL GOLD SL/BRAVO ZN TWIN-PAK in a minimum of 50 litres of water/hectare.
6. To ensure proper coverage and distribution and to minimize drift, check to see that swath width and droplet size are adequate, and that wind velocities are low.

AERIAL APPLICATION – USE PRECAUTIONS:

1. Apply only when meteorological conditions at the treatment site allow for complete and even crop coverage.
2. 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.
3. Do not apply to any body of water. Avoid drifting of spray onto any body of water or other non-target areas.
4. For aerial application, a buffer zone of 100 metres between the application zone and surface waterbodies should be observed. Provincial buffer zones that are greater than the above buffer zone should be respected.
5. Coarse sprays are less likely to drift, therefore, avoid combinations of pressure and nozzle type that will result in fine particles (mist). Adjust nozzles to provide a medium droplet size of 200-400 microns.
6. 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.
7. Do not spray when wind is blowing towards a nearby sensitive crop, garden, terrestrial habitat (such as a shelter-belt) or aquatic habitat.

AERIAL APPLICATION – OPERATOR PRECAUTIONS:

1. Do not allow the pilot to mix chemicals to be loaded onto the aircraft. Loading of premixed chemicals with a closed system is permitted.
2. It is desirable that the pilot have communication capabilities at each treatment site at the time of the application.

3. The field crew and the mixer/loaders must wear full protective clothing: coveralls over long pants, and a long-sleeved shirt, chemical resistant gloves and goggles or a face shield, apron, socks and chemical resistant footwear during mixing, loading, clean-up and repair activities. All personnel on the job site must wash hands and face thoroughly before eating, drinking, chewing gum, using tobacco or using the toilet.
4. Protective clothing, aircraft cockpit and vehicle cabs must be decontaminated regularly.
5. Use mechanical flaggers only.

USE DIRECTIONS

| | |
|---|---|
| Crops | Potatoes |
| Diseases Controlled | Early Blight (<i>Alternaria solani</i>), Botrytis vine rot (<i>Botrytis cinerea</i>), Late blight (<i>Phytophthora infestans</i>), |
| Diseases Supressed | Pythium Leak (<i>Pythium</i> spp.) and Pink Rot (<i>Phytophthora erythroseptica</i>) |
| Use rate –for both ground and aerial application methods | 1 jug per 4 hectares (10 acres) 0.208 L/ha RIDOMIL GOLD 480SL + 2.0 L/ha BRAVO ZN |
| Application Timing/Instructions | <p>Begin preventative applications early in the season when conditions are favourable for disease (before infection) but no later than when the plant foliage meets within the row uniformly across the field. Apply a second and third application of RIDOMIL GOLD SL/BRAVO ZN TWIN-PAK at 14-day intervals. The labelled rate of a registered contact fungicide should be applied 7-days after each RIDOMIL GOLD SL/BRAVO ZN TWIN-PAK application. Following the last application of RIDOMIL GOLD SL/BRAVO ZN TWIN-PAK, apply the labelled rate of a registered contact fungicide at its recommended timing throughout the remainder of the season. Excessive tuber bruising or wounding during harvest will reduce suberization and increase the chances for development of storage disease problems. Consult your local potato specialist for disease forecasting and potato vine maturity advice in your area.</p> <p>NOTE: If applications of RIDOMIL GOLD SL/BRAVO ZN TWIN-PAK are being made for control of foliar diseases, additional applications for tuber disease control are not needed.</p> <p>For ground application, apply in sufficient water to ensure thorough coverage of foliage. Spray volumes will range from 225 to 1600 litres per hectare depending on amount of foliage.</p> <p>For aerial application, apply RIDOMIL GOLD SL/BRAVO ZN TWIN-PAK in a minimum of 50 litres of water per hectare.</p> |
| Specific Use Restrictions: | |
| <ol style="list-style-type: none"> 1. Do not apply within 14 days of harvest (14-day PHI). 2. Do not apply more than 3 applications per season regardless of disease being treated. 3. It is recommended that RIDOMIL GOLD SL/BRAVO ZN TWIN-PAK be used within an Integrated Preventative Pest Management Program. | |

RESISTANCE MANAGEMENT RECOMMENDATIONS

For resistance management, RIDOMIL GOLD SL/BRAVO ZN TWIN-PAK contains Group M and Group 4 fungicides. Any fungal population may contain individuals naturally resistant to

RIDOMIL GOLD SL/BRAVO ZN TWIN-PAK and other Group M and Group 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 RIDOMIL GOLD SL/BRAVO ZN TWIN-PAK or other Group M and Group 4 fungicides with different groups that control the same pathogens.

Avoid application of more than 3 (three) consecutive sprays of RIDOMIL GOLD SL/BRAVO ZN TWIN-PAK or other fungicides in the same group in a season.

Use tank mixtures with fungicides from a different group when such use is permitted.

Fungicide use should be based on an IPM program that includes scouting, historical information related to pesticide use and crop rotation and 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.

Monitor treated fungal populations for sign of resistance development. Notify Syngenta Canada Inc. If reduced sensitivity of the pathogen to RIDOMIL GOLD SL/BRAVO ZN TWIN-PAK is suspected. 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 certified crop advisors for any additional pesticide resistance-management and/or IPM recommendations for specific crops and pathogens.

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

BRAVO[®] ZN and RIDOMIL GOLD[®] are trademarks of a Syngenta Group Company.