GROUP M 4 FUNGICIDE

RIDOMIL® GOLD/BRAVO® 720 Twin-Pak™

FUNGICIDE

EMULSIFIABLE CONCENTRATE

AGRICULTURAL

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	720g/L

The BRAVO 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

KEEP OUT OF THE REACH OF CHILDREN. Harmful if swallowed. Avoid inhalation of spray mist. Avoid contact with skin and eyes. Causes severe eye damage. Avoid contamination of food, feed and domestic or irrigation water supplies, lakes, streams, and ponds. Do not re-use empty container; see DISPOSAL instructions elsewhere on this label.





POISON

<u>WARNING:</u> Causes severe eye damage. The BRAVO in this container may cause temporary allergic side effects, characterized by redness of the eyes, mild bronchial irritation and redness or rash on exposed skin areas.

REGISTRATION NO.: 29238

PEST CONTROL PRODUCTS ACT

NET CONTENTS: 6.4 L

Syngenta Canada, Inc.

140 Research Lane, Research Park, Guelph, Ontario

N1G 4Z3

Telephone: 1-877-964-3682

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 Contro I Product Registration Number with you when seeking medical attention.

If swallowed, call a poison control centre or doctor **IMMEDIATELY** for treatment advice. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give **any** liquid to the person. 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. Treat symptomatically. If swallowed, probable mucosal damage may contraindicate the use of gastric lavage. In the event of an allergic reaction the use of 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

Wear full protective clothing (long sleeved shirt—and long pants, coveralls, chemical resistant gloves, rubber boots) during mixing, loading, application, clean-up and repair; and a respirator, goggles or a face shield during mixing and loading. RIDOMIL GOLD/BRAVO 720 Twin-Pak is toxic to fish. Do not contaminate lakes, streams or ponds. Do not contaminate water 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 treated areas. 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. Store in a cool space

away from feed or foodstuffs. Protect from ex cessive heat. Do not eat, drink or smoke during mixing or 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 website at www.croplife.ca.

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:

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

GENERAL INFORMATION

RIDOMIL GOLD/BRAVO 720 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/BRAVO 720 Twin-Pak several times before pouring into spray tank.

Do not tank mix RIDOMIL GOLD/BRAVO 720 Twin-Pak with a top killer. Top killers prevent the systemic activity of RIDOMIL GOLD/BRAVO 720 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/BRAVO 720 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/BR AVO 720 Twin-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/BRAVO 720 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/BRAVO 720 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 do not apply within 15 metres of surface waterbodies. Provincial buffer zones that are greater than the above buffer zone should be respected.

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.
- Label rates, conditions and precautions are product specific. Read and understand the entire label before opening this product. Apply only at the rate of 1 jug per 4 hectares (10 acres). 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. Apply RIDOMIL GOLD/BRAVO 720 Twin-Pak in a minimum of 50 litres of water/hectare.
- 5. 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.
- 6. Use mechanical flaggers only.

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. 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.
- 4. 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.
- 5. Do not apply during periods of dead calm or when wind velocity and direction pose a risk of spray drift.
- 6. 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 (long sleeved shirt and long pants, coveralls, chemical resistant gloves, rubber boots) during mixing, loading, application, clean-up and repair; and a respirator, goggles or a face shield during mixing and loading.
- 4. All personnel on the job site must wash hands and face thoroughly before eating and drinking.
- 5. Protective clothing, aircraft cockpit and vehicle cabs must be decontaminated regularly.
- 6. Use mechanical flaggers only.

DIRECTIONS FOR USE

DO NOT MAKE MORE THAN THREE APPLICATIONS OF RIDOMIL GOLD/BRAVO 720 TWIN-PAK PER SEASON REGARDLESS OF THE DISEASE BEING TREATED.

Do not apply within 14 days of harvest.

EARLY BLIGHT, BOTRYTIS VINE ROT, LATE BLIGHT, LATE BLIGHT TUBER ROT, PYTHIUM LEAK AND PINK ROT

It is recommended that RIDOMIL GOLD/BRAVO 720 Twin-Pak be used within an Integrated Preventative Pest Management Program.

Apply RIDOMIL GOLD/BRAVO 720 Twin-Pak at the rate of 1 jug per 4 hectares (10 acres). 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. For aerial

application, apply RIDOMIL GOLD/BRAVO 720 Twin-Pak in a minimum of 50 litres of water per hectare. 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/BRAVO 720—Twin-Pak at 14-day intervals. The labelled rate of a registered—contact fungicide should be applied 7-days after each RIDOMIL GOLD/BRAVO 720 Twin-Pak—application. Following the last application of RIDOMIL GOLD/BRAVO 720 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.

NOTE: If applications of RIDOMIL GOLD/BRAVO 720 Twin-Pak are being made for control of foliar diseases, additional applications for tuber disease control are not needed.

RESISTANCE MANAGEMENT RECOMMENDATIONS

For resistance management, please note that RIDOMIL GOLD/BRAVO 720 Twin-Pak contains Group M and Group 4 fungicides. Any fungal population may contain individuals naturally resistant to RIDOMIL GOLD/BRAVO 720 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/BRAVO 720 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/BRAVO 720 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 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 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.

This label transcript service is offered by the Pest Management Regulatory Agency to provide efficient searching for label information. This service and this information do not replace the official hard-copy label. The PMRA does not provide any guarantee or assurance that the information obtained through this service is accurate, current or correct, and is therefore not liable for any loss resulting, directly or indirectly, from reliance upon this service.