RIDOMIL GOLD® 480EC

FUNGICIDE

AGRICULTURAL

For the control of certain diseases caused by the Oomycete class of fungi in Apples (non-bearing), Field and Greenhouse Cucumbers, Ginseng, Hops, Raspberries, Blueberries, Snap Beans, Strawberries, Tobacco and Potatoes.

GUARANTEE:
Metalaxyl-M and S-isomer ........................................ 480 g/L

READ THE LABEL AND PAMPHLET BEFORE USING
KEEP OUT OF REACH OF CHILDREN.

CAUTION POISON

WARNING – EYE IRRITANT

Harmful if swallowed. Avoid inhalation of spray mist. Avoid contact with skin and eyes. Avoid contamination of food and feed and domestic or irrigation water supplies, lakes, streams and ponds.

REGISTRATION NO.: 25384
PEST CONTROL PRODUCTS ACT

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

PAMPHLET
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: call a physician or poison control centre IMMEDIATELY. Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

If swallowed, give the patient 1-2 glasses of water, and contact a physician or a poison control centre IMMEDIATELY. Never give anything by mouth to an unconscious person. DO NOT INDUCE VOMITING.

If in eyes, flush repeatedly with plenty of water for 15 minutes and contact a physician or a poison control centre IMMEDIATELY.

If on skin, remove contaminated clothing IMMEDIATELY. Wash thoroughly with soap and water. If irritation occurs, contact a physician.

If inhaled, move to fresh air. If not breathing, give artificial respiration and contact a physician or a poison control centre IMMEDIATELY.

TOXICOLOGICAL INFORMATION

No specific antidote is known. If ingested, treat symptomatically. This product contains a petroleum distillate solvent. Do not induce vomiting; there is a risk of material being aspirated into the lungs causing chemical pneumonia. Contact with eyes may require specialized ophthalmologic attention.

PRECAUTIONS

Do not get in eyes, on skin or on clothing. Wear chemical resistant gloves, and goggles or a face shield, coveralls over long-sleeved shirt, and long pants and rubber boots during mixing/loading and application or during clean up or repair activities. Change clothing after use. Wash with soap and water after use. Do not contaminate streams, lakes, ponds, irrigation water, water used for livestock or domestic purposes by cleaning of equipment or disposal of wastes. In order to minimize risk to the environment from the use of this product, do not use on coarse textured gravely soils, soils with less than 2% organic matter, or in areas where the water table may be high. Avoid application when weather conditions favour drift from treated areas. Do not eat, drink or smoke while mixing or during 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.
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)

GENERAL INFORMATION

RIDOMIL GOLD 480EC is a systemic fungicide for use in a preventative program for the control of:
- Collar rot in apples (non-bearing),
- *Pythium* damping-off in field cucumbers,
- *Pythium* sp. in greenhouse cucumbers
- *Pythium* damping-off and *Phytophthora* root rot in ginseng,
- *Downy Mildew* in hops,
- *Pythium* and *Phytophthora* root rot in raspberries,
- *Phytophthora* root rot in highbush blueberries
- *Pythium* damping-off and *Phytophthora* root rot in snap beans,
- Red stele in strawberries,
- *Pythium* spp. in tobacco greenhouse seedbeds,
- Blue mold in tobacco, and
- Suppression of Pink Rot in potatoes

RIDOMIL GOLD 480EC is readily absorbed by the roots and provides protection against attack from these diseases under varied weather conditions.

USE LIMITATIONS:

DO NOT USE RIDOMIL GOLD 480EC Fungicide AS A FOLIAR APPLICATION UNLESS SPECIFIED ON THIS LABEL. Do not dip plants or roots, spray bare roots, or use a transplant water treatment with solutions containing RIDOMIL GOLD 480EC Fungicide.

Experience has shown that strains of fungus resistant to metalaxyl-M and S-isomer may develop. Failure to control the disease will result in crop damage and/or yield losses. Since the
occurrence of the resistance cannot be foreseen, Syngenta Crop Protection Canada, Inc. accepts no responsibility for any loss of, or damage to, crops resulting from the failure of RIDOMIL GOLD 480EC to control the resistant fungus strains. If disease appears in a treated field, consult your local government extension specialist immediately.

DO NOT APPLY BY AIRCRAFT.

**APPLES (Non-Bearing):**

Control of *Phytophthora* Collar Rot
Apply 1 mL of RIDOMIL GOLD 480EC in 5 litres of water per tree. RIDOMIL GOLD 480EC should be applied as a thorough drench to the surface of the soil around the base of the tree. Make the first application at the time of planting, as a preventative treatment and make a second application in late August. In subsequent non-bearing years, apply RIDOMIL GOLD 480EC in the spring before new growth begins (usually late April) and again in late August.

**HOPS:**

Control of Downy Mildew
Apply 570 mL of RIDOMIL GOLD 480EC in 200 L of water per hectare in early April. Apply as a soil drench at the root site. Make only one application per season. The pre-harvest interval is 135 days.

**RASPBERRIES:**

Control of *Pythium* and *Phytophthora* Root Rot

**NEW PLANTINGS:**

Apply 37 mL of RIDOMIL GOLD 480EC per 100 metres of row to the soil surface in a one-metre wide band centred over the row, as a post planting soil drench. Make a second application at the same rate in the fall prior to freeze-up (no later than November 30).

**ESTABLISHED PLANTINGS:**

Apply 37 mL of RIDOMIL GOLD 480EC per 100 metres of row to the soil surface in a one-metre wide band centred over the row in the fall prior to freeze-up (no later than November 30). RIDOMIL GOLD 480EC will readily move into the soil root zone following rain or irrigation. RIDOMIL GOLD 480EC SHOULD NOT BE APPLIED IN THE SPRING ON ESTABLISHED PLANTINGS.

**STRAWBERRIES: Ontario, Quebec and Maritime Provinces:**

Control of Red Stele

**NEW PLANTINGS:**

First Application - Apply 1 L of RIDOMIL GOLD 480EC per hectare in early September.
Second Application - Apply 1 L of RIDOMIL GOLD 480EC per hectare in late October but not later than October 31.
ESTABLISHED PLANTINGS:

FALL APPLICATION:
First Application - Apply 1 L of RIDOMIL GOLD 480EC per hectare in early September.  
Second Application - Apply 1 L of RIDOMIL GOLD 480EC per hectare in late October but not later than October 31.

RIDOMIL GOLD 480EC SHOULD NOT BE APPLIED IN THE SPRING ON ESTABLISHED PLANTINGS.

APPLICATION INSTRUCTIONS:
Apply as a broadcast application in sufficient water to ensure even coverage. If dry conditions occur at the time of application, use sufficient water volume (2500 L/ha) to ensure movement of RIDOMIL GOLD 480EC into the root zone.

STRAWBERRIES: Western Canada:
Control of Red Stele

NEW PLANTINGS:
Apply 20 mL of RIDOMIL GOLD 480EC per 100 metres of row to the soil surface in a one-metre wide band centred over the row, as a post planting soil drench. Make a second application at the same rate in the fall prior to freeze-up (no later than November 30).

ESTABLISHED PLANTINGS:
Apply 20 mL of RIDOMIL GOLD 480EC per 100 metres of row to the soil surface in a one-metre wide band centred over the row, in the fall prior to freeze-up (no later than November 30).

RIDOMIL GOLD 480EC will readily move into the soil root zone following rain or irrigation.

RIDOMIL GOLD 480EC SHOULD NOT BE APPLIED IN THE SPRING ON ESTABLISHED PLANTINGS.

WARNING:
FAILURE TO FOLLOW LABEL DIRECTIONS MAY RESULT IN FAILURE TO CONTROL RED STELE. IF HERBICIDE SPRAYERS ARE NOT THOROUGHLY CLEANED BEFORE APPLYING RIDOMIL GOLD 480EC, SEVERE CROP DAMAGE MAY OCCUR. CONSULT THE LOCAL FRUIT SPECIALIST ON PROPER SPRAYER CLEANING TECHNIQUES.

TOBACCO GREENHOUSE SEEDBEDS:
Control of *Pythium* spp.
Mix 12 mL of RIDOMIL GOLD 480EC in 100 litres of water and apply to 100 square metres of plant bed. Apply within 72 hours prior to seeding. DO NOT APPLY RIDOMIL GOLD 480EC WITH EQUIPMENT THAT HAS BEEN USED PREVIOUSLY FOR HERBICIDE APPLICATION.
FIELD APPLICATION IN TOBACCO:

Control of Blue Mold

Mixing and Spraying Instructions:
1. Fill spray tank 1/2 to 3/4 full with water.
2. With agitation system engaged, add the required amount of RIDOMIL GOLD 480EC (see application rates section of the label) and then continue filling the tank with water.
3. Maintain sufficient agitation during the mixing and spraying operation.
4. Sprayer equipment should be thoroughly flushed with clean water and drained before and after use of RIDOMIL GOLD 480EC.

NOTE: Do not let tank contents stand for long periods of time without agitation. If spraying is interrupted, thoroughly re-agitate the spray solution before application. RIDOMIL GOLD 480EC SPRAY SOLUTION MUST NOT BE STORED OVERNIGHT.

Sprayer Information:

Use 50 mesh or larger nozzle screens. Keep by-pass line on or near bottom of tank to minimize foaming.

Spray pressure: 200 to 300 kPa.

Spray volume per hectare: 200 to 300 litres of water.

COMPATIBILITY:

RIDOMIL GOLD 480EC SHOULD NOT BE TANK-MIXED WITH ANY NEMATICIDE, INSECTICIDE, HERBICIDE, FUNGICIDE, OR FERTILIZER.

APPLICATION RATES:

FLUE-CURED TOBACCO:

Apply RIDOMIL GOLD 480EC at 600 mL to 1.2 litres of product per hectare prior to transplanting. If dry weather persists after application, irrigation or cultivation is required to move RIDOMIL GOLD 480EC into the root zone. The 600 mL/ha rate may give a maximum of five weeks prevention against blue mold. To date, experience in Ontario indicates that blue mold usually becomes a problem in the last two weeks of July, and the first week of August. If season-long control of blue mold is desired, apply the 1.2 litre rate of RIDOMIL GOLD 480EC.

Supplemental Application - for Flue-Cured Tobacco

For prolonged control of blue mold in field planted tobacco, make a supplemental application of RIDOMIL GOLD 480EC at 600 mL/ha as a broadcast soil application before the last cultivation. If dry weather persists after application, irrigation must be applied to move RIDOMIL GOLD 480EC into the root zone. Do not make this lay-by application if more than 600 mL of RIDOMIL GOLD 480EC were applied before transplanting. Do not use RIDOMIL GOLD 480EC as a foliar application on field grown tobacco or injury may occur.
BURLEY TOBACCO:

Use the 1.2 litre per hectare rate of RIDOMIL GOLD 480EC only. May be applied as a single application prior to transplanting or as a split application of 600 mL/ha prior to transplanting followed by 600 mL applied to the soil just prior to the final cultivation. If dry weather persists after application, irrigation must be applied to move RIDOMIL GOLD 480EC into the root zone. Do not use RIDOMIL GOLD 480EC as a foliar application on field grown tobacco or injury may occur.

APPLICATION AND INCORPORATION INSTRUCTIONS:

Apply RIDOMIL GOLD 480EC close to and preferably within 24 hours prior to transplanting. Spray evenly over the entire soil surface. For proper incorporation, cultivate between the rows with S-Tine or Konskilde-type teeth set to work the soil 10 cm deep, making sure the sides of the fumigant hill are removed. Travel at a ground speed of 10-13 km/hr. Minimize soil movement from the top of the fumigant hill during transplanting so that young seedlings are not surrounded by untreated soil. DO NOT BAND. DO NOT APPLY IN TRANSPLANT WATER. DO NOT APPLY RIDOMIL GOLD 480EC BY AIRCRAFT.

WARNING:

FAILURE TO FOLLOW LABEL DIRECTIONS MAY RESULT IN FAILURE TO CONTROL BLUE MOLD. IF HERBICIDE SPRAYERS ARE NOT THOROUGHLY CLEANED BEFORE APPLYING RIDOMIL GOLD 480EC, SEVERE CROP DAMAGE MAY OCCUR. CONSULT THE LOCAL TOBACCO SPECIALIST ON PROPER SPRAYER CLEANING TECHNIQUES.

POTATOES

RIDOMIL GOLD 480EC Fungicide Tank Mixed with QUADRIS® Flowable Fungicide:

RIDOMIL GOLD 480EC Fungicide can be tank mixed with QUADRIS Flowable Fungicide for the control of Rhizoctonia stem and stolon canker and black scurf (Rhizoctonia solani) and the suppression of pink rot (Phytophthora erythroseptica) when applied as an in-furrow application on potatoes.

Apply RIDOMIL GOLD 480EC Fungicide at a rate of 4 ml /100 m row in tank mix with QUADRIS Flowable Fungicide at a rate of 4 ml /100 m row. Apply once as an in-furrow spray in 50 to 140 L per hectare of water at planting. Mount spray nozzle so the spray is directed into the furrow as a 15-20 cm band just before the seed is covered.

- Read all the labels and follow the precautionary statement, directions for use (rates, diseases controlled and application intervals) and other restrictions.
- Always check the compatibility of RIDOMIL GOLD 480EC Fungicide tank mix using a jar test with proportionate amounts of QUADRIS Flowable Fungicide, and the water, before mixing in the spray tank.
- Provide sufficient jet or mechanical agitation during filling and application to keep the tank mix uniformly suspended.
- Fill tank at least 1/2 full of clean water.
- Add first QUADRIS Flowable Fungicide then RIDOMIL GOLD 480EC Fungicide next.
- Do not leave tank mix combinations in the spray tank for prolonged periods without
agitation. Mix and apply in the same day.

- Do not apply within 90 days of harvest. Do not apply more than one application per season.

A plant back interval of 30 days for potatoes (root crops) is required.

NOTE TO BUYER/USER:

The DIRECTIONS FOR USE for this product for the uses described below were developed by persons other than Syngenta Crop Protection Canada, Inc. and accepted for registration by Health Canada under the User Requested Minor Use Label Expansion program. Syngenta Crop Protection 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 the crops listed below.

Accordingly, the Buyer and User assume all liability arising, and agree to hold Syngenta Crop Protection Canada, Inc. harmless, from any claims based on efficacy and/or phytotoxicity in connection with the uses described below.

DIRECTIONS FOR USE:

GINSENG:

Control of *Pythium* Damping-Off and *Phytophthora* Root Rot

For the control of *Pythium* damping-off in the seedling year apply 650 mL of product per hectare just prior to emergence of the seedlings. For the control of *Phytophthora* root rot in subsequent years apply 650 mL of product per hectare as a soil broadcast application in the spring prior to the emergence of the ginseng. Apply in a minimum of 2500 L of water per hectare. Do not apply RIDOMIL GOLD 480EC more than once a year.

NOTE: DO NOT USE RIDOMIL GOLD 480EC DURING THE GROWING SEASON. Use up to 2 applications of RIDOMIL 2G during the growing season following the directions on the RIDOMIL 2G label. Do not apply products containing metalaxyl or metalaxyl-M and S-isomer within 9 days prior to harvesting ginseng. Do not make more than 3 applications in total per year of products containing either metalaxyl or metalaxyl-M and S-isomer.

FIELD CUCUMBERS:

Control of *Pythium* Damping-Off

For the control of *Pythium* damping-off in cucumbers, apply 2.25 to 4.5 mL of RIDOMIL GOLD 480EC per 100 m of row as a 18 cm band, centred over the row. Apply immediately after seeding or just before transplanting. RIDOMIL GOLD 480EC should be incorporated mechanically into the top 5 cm of soil before transplanting, or moved into the seed zone shortly after seeding with 15-25 mm of rainfall or irrigation. Use the high rate when disease pressure is high. Apply in a minimum of 200 L water per hectare. Apply RIDOMIL GOLD 480EC to cucumbers only once per year with ground application equipment only. RIDOMIL GOLD 480EC must only be applied as a spray to the soil surface. Do not use RIDOMIL GOLD 480EC for disease control in greenhouse crops. Do not apply over the top of transplants, as a drench, or dip transplants in solutions containing RIDOMIL GOLD 480EC.
RIDOMIL GOLD 480EC is readily absorbed by the roots of and provides protection against attack from this disease under varied weather conditions.

**GREENHOUSE CUCUMBERS:**

Control of *Pythium* spp.

**GROWERS USING THIS TREATMENT ARE REQUIRED TO SIGN A WAIVER OF LIABILITY AND INDEMNIFICATION CERTIFICATE BEFORE PURCHASING AND USING RIDOMIL GOLD 480EC ON CUCUMBERS GROWN IN GREENHOUSES.**

Apply 250 ml of the Ridomil Gold 480EC mixture (0.75-1.25 ml product/10L water) once, immediately after transplanting as a drench to the growing media at the base of each plant.

- **DO NOT APPLY RIDOMIL GOLD 480EC TO THE FOLIAGE.**
- **MAKE ONLY ONE APPLICATION PER PLANTING CYCLE.**
- **DO NOT USE IN THE PROPAGATION HOUSE.**
- **DO NOT APPLY WITHIN 21 DAYS OF HARVEST.**
- **DO NOT APPLY TO CUCUMBERS INTENDED FOR TRANSPLANT OUT TO FIELDS.**
- **DO NOT APPLY TO CUCUMBERS GROWN IN SOIL.**

**SNAP BEANS:**

Control of *Pythium* Damping-Off and *Phytophthora* Root Rot

RIDOMIL GOLD 480EC applied at planting will control *Pythium* damping-off and *Phytophthora* root rot in snap beans. Apply RIDOMIL GOLD 480EC at the rate of 2.3 mL of product per 100 metres of row based on a 20 cm spray band and 76 cm row spacing. This is equivalent to an application rate of 300 mL of RIDOMIL GOLD 480EC per treated hectare. Adjust the spray nozzles so that one third of the band is applied to each side of the seed furrow and one third directly into the seed furrow.

Make only one application per year.

**HIGHBUSH BLUEBERRY:**

Control of root rot (*Phytophthora cinnamoni*)

Apply 37 mL of RIDOMIL GOLD 480EC per 100 metres of row to the soil surface in a one-metre wide band centred over the row in early spring prior to growth. Apply in a minimum of 2000 L of water per hectare. Do not apply RIDOMIL GOLD 480EC more than once a year.

The pre-harvest interval is 80 days.

**POTATOES:**

Suppression of Pink Rot (*Phytophthora erythroseptica*)

Apply 4 ml of RIDOMIL GOLD 480EC per 100 metres of row directly over the seed pieces in furrow as a 15-20 cm band prior to row closure. Apply in a minimum of 30L of water per hectare.

Do not apply within 80 days of harvest. Do not apply more than one application per season. Do not apply Ridomil Gold 480EC beyond the at-planting stage.
RESISTANCE MANAGEMENT

For resistance management, please note that RIDOMIL Gold 480EC Fungicide contains a Group 4 fungicide. Any fungal population may contain individuals naturally resistant to RIDOMIL Gold 480EC Fungicide and other 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/bactericide resistance:

Where possible, rotate the use of RIDOMIL Gold 480EC Fungicide or other Group 4 fungicides with different groups that control the same pathogens. In order to minimize the potential for the development of resistance among the labeled disease organisms do not use RIDOMIL Gold 480EC Fungicide in any two consecutive seed generations.

Fungicide/bactericide 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/bacterial populations for 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/bactericide) 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 and to report suspected resistance, contact Syngenta Crop Protection Canada, Inc. at 1-87-SYNGENTA (1-877-964-3682) or at www.syngenta.ca.

Product names marked ® or ™ are registered trademarks of a Syngenta Group Company