Container

GROUP 7 11 FUNGICIDE

### HONOR® Fungicide

Broad spectrum fungicide for disease control on golf course turf

WETTABLE GRANULES

COMMERCIAL (AGRICULTURAL)

ACTIVE INGREDIENTS:	Pyraclostrobin	16.8%
	Boscalid	11.2%

Warning, contains the allergen sulfites

**REGISTRATION NO. 32329** 

PEST CONTROL PRODUCTS ACT

IN CASE OF EMERGENCY ENDANGERING LIFE OR PROPERTY INVOLVING THIS PRODUCT, CALL DAY OR NIGHT 1-800-454-2673



POISON

READ THE LABEL AND BROCHURE BEFORE USING

WARNING

**NET CONTENTS:** 1 kg - Bulk

BASF Canada Inc. 5025 Creekbank Road Building A, 2nd Floor Mississauga, Ontario L4W 0B6 1-877-371-2273

HONOR is a registered trade-mark of BASF SE, used under license by BASF Canada Inc.

### PRECAUTIONS

- 1. KEEP OUT OF REACH OF CHILDREN.
- 2. **DO NOT** take internally. Harmful if swallowed.
- 3. Wash thoroughly after handling and before eating, drinking or smoking.
- 4. Wear protective equipment and clothing, including gloves (rubber, PVC, neoprene or nitrile), long-sleeved shirt, long pants, and shoes plus socks during mixing/loading, sprayer clean-up, repair and application.
- 5. If clothing becomes contaminated, remove and wash separately from household laundry before reuse.
- 6. Clean spray equipment thoroughly after use.
- 7. Do not contaminate domestic or irrigation water, lakes, streams or ponds by the cleaning of equipment or the disposal of wastes.

### FIRST AID

**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.

Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

# TOXICOLOGICAL INFORMATION

The patient should be treated symptomatically.

# STORAGE

- 1. Store in original tightly closed container.
- 2. Do not ship or store near food, feed, seed and fertilizers.
- 3. Store in cool, dry, locked, well-ventilated area without floor drain.

### DISPOSAL

#### 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 any further use.

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

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.

#### For Non-Returnable Containers

- 1. Triple or pressure-rinse the empty container. Add the rinsings to the spray mixture in the tank.
- 2. Follow provincial instructions for any required additional cleaning of the container prior to its disposal.
- 3. Make the empty container unsuitable for further use.
- 4. Dispose of the container in accordance with provincial requirements.
- 5. For information on the 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.

#### For Returnable-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 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.

# 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.

Booklet

GROUP 7 11 FUNGICIDE

### HONOR® Fungicide

Broad spectrum fungicide for disease control on golf course turf

WETTABLE GRANULES

COMMERCIAL (AGRICULTURAL)

ACTIVE INGREDIENTS: Pyraclostrobin ...... 16.8% Boscalid ...... 11.2%

Warning, contains the allergen sulfites

**REGISTRATION NO. 32329** 

PEST CONTROL PRODUCTS ACT

IN CASE OF EMERGENCY ENDANGERING LIFE OR PROPERTY INVOLVING THIS PRODUCT, CALL DAY OR NIGHT 1-800-454-2673



POISON

READ THE LABEL AND BROCHURE BEFORE USING

WARNING

NET CONTENTS: 1 kg - Bulk

BASF Canada Inc. 5025 Creekbank Road Building A, 2nd Floor Mississauga, Ontario L4W 0B6 1-877-371-2273

HONOR is a registered trade-mark of BASF SE, used under license by BASF Canada Inc.

#### **GENERAL INFORMATION**

This package contains **HONOR Fungicide**, a water dispersible granule (WG). The active ingredients in **HONOR Fungicide** are pyraclostrobin, a member of the strobilurin (QoI) class of chemistry, and boscalid, a member of the carboxamide (anilide) class of chemistry. **HONOR Fungicide** has two modes of action that may be effective against pathogens resistant to other Fungicides groups.

**HONOR Fungicide** inhibits spore germination and mycelial growth and sporulation of the fungus on the leaf surface. However, optimum disease control is achieved when **HONOR Fungicide** is applied in a regularly scheduled protective spray program and is used in a rotation program with other Fungicides.

# ENVIRONMENTAL PRECAUTIONS

TOXIC to aquatic organisms, non-target terrestrial plants and small wild mammals. Observe buffer zones specified under DIRECTIONS FOR USE. To reduce runoff from treated areas into aquatic habitats avoid application to areas with a moderate to steep slope, compacted soil, or clay. Avoid application when heavy rain is forecast. Contamination of aquatic areas as a result of runoff may be reduced by including a vegetative strip between the treated area and the edge of the water body.

#### DIRECTIONS FOR USE

**HONOR Fungicide** is a broad-spectrum fungicide recommended for the control of many important diseases of turf grass. For maximum efficacy, **HONOR Fungicide** should be applied preventively.

As this product is not registered for the control of pests in aquatic systems, DO NOT use to control aquatic pests.

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

Apply only when the potential for drift to areas of human habitation or areas of human activity (excluding golf courses) such as houses, cottages, schools and recreation areas including parks, school grounds, and playing fields is minimal, taking into consideration wind speed, wind direction, temperature inversions, application equipment and sprayer settings.

Do not use in residential areas. Residential areas are defined as any use site where bystanders including children could be exposed during or after application with the exception of golf courses. This includes homes, schools, parks, playgrounds, playing fields, public buildings, or any other areas where the general public including children could be exposed.

#### Field sprayer application

**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 S572.1) medium classification. Boom height must be 60 cm or less above the crop or ground.

### DO NOT APPLY BY AIR.

### Spray Buffer Zones

Use of the following spray methods or equipment **DO NOT** require a spray buffer zone: handheld or backpack sprayer and spot treatment.

The spray buffer zones specified in the table below are required between the point of direct application and the closest downwind edge of sensitive terrestrial habitats (such as grasslands, forested areas, shelter belts, woodlots, hedgerows, riparian areas and shrublands), sensitive freshwater habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs and wetlands) and estuarine/marine habitats.

When tank mixes are permitted, consult the labels of the tank-mix partners and observe the largest (most restrictive) spray buffer zone of the products involved in the tank mixture and apply using the coarsest spray (ASAE) category indicated on the labels for those tank mix partners.

Method of application			Spray Buffer Zones (metres) Required for the Protection of:				
approation			Freshwater Habitat of Depths:		Estuarine/Marine Habitats of Depths:		Terrestrial Habitat
	Grams/ 100 sq. m	Grams/ha	Less than 1 m	Greater than 1 m	Less than 1 m	Greater than 1 m	
Field	10.0 to 15.0	1000 to 1500	10	3	3	1	1
sprayer	15.1 to 25.0	1501 to 2500	15	5	4	2	1
	25.1 to 35.0	2501 to 3500	20	5	5	3	1

For field sprayer application, buffer zones can be reduced with the use of drift reducing spray shields. When using a spray boom fitted with a full shield (shroud, curtain) that extends to the crop canopy, the labelled buffer zone can be reduced by 70%. When using a spray boom where individual nozzles are fitted with cone-shaped shields that are no more than 30 cm above the crop canopy, the labelled buffer zone can be reduced by 30%.

All applications should be made according to the use directions indicated on Table 1. Failure to follow directions and precautions on this label may result in turf grass injury and/or inferior disease control.

**HONOR Fungicide** is recommended for the control of Anthracnose, Bent grass dead spot, Brown patch, Brown ring patch, Dollar spot, Fairy ring, Fusarium Patch and Pink snow mold, Gray leaf spot, Gray snow mold, Leaf spot, Melting out, Powdery mildew, Pythium blight, Pythium root dysfunction, Rapid blight, Red thread, Rhizoctonia leaf or sheath spot, Rust, Summer patch and Take-all patch. **Honor Fungicide** is intended to broaden the disease spectrum. **Honor Fungicide** should be used to target dollar spot on turf and concurrently treat other diseases. If not treating for dollar spot, use **INSIGNIA SC Fungicide** or another fungicide registered for the target disease.

Apply **HONOR Fungicide** in 5 - 15 litres of water per 100 square meters (500-1500 litres per hectare).

Rate: Use the application rates specified for each disease listed in Table 1.

# Turf Grass Tolerance

Due to variability within turf grass species and application techniques, neither the manufacturer nor the seller has determined whether or not **HONOR Fungicide** can safely be used on all turf grasses under all conditions. Therefore, it is recommended that the user determine if **HONOR Fungicide** can be used safely before broad use. Apply the recommended use rate of **HONOR Fungicide** on a small test area under conditions expected to be encountered. Monitor for any adverse effects during a 14-day period after application.

Please refer to the Resistance Management section for guidance on maximum seasonal applications and recommended alternation with different mode of action fungicides.

Disease (Pathogen)	Product Use Rate (grams/ 100 sq. m.)	Product Use Rate (grams/ha)	Application Interval (days)	Comments
Anthracnose (Colletotrichum cereale)	18.3 – 33.3	1833 – 3333	14 – 28	Apply when conditions are favourable for disease development.
Bentgrass dead spot (Ophiosphaerella agrostis)	16.8 – 33.6	1678 – 3357	14–28	Use preventively. Begin applications when conditions are favourable for fungal infection, prior to disease symptom development.
Brown patch ( <i>Rhizoctonia solani,</i> zeae)	16.7 – 29.8	1667 – 2976	14 – 21	Apply when conditions are favourable for disease development.
Brown ring patch (Rhizoctonia circinata var. cir- cinata) (previously called 'Waitea patch')	33.6	3357	14 – 28	Begin applications preventively or when early ring development is evident. Late curative applications will not be effective. Use 800 to 1500 L spray volume per hectare. Provide short irrigation cycle directly following treatment to move Fungicide through thatch. Brown ring patch symptoms may take 2 to 3 weeks to disappear following application.

 Table 1. Application Rates and Intervals for Turf Grass

Disease (Pathogen)	Product Use Rate (grams/ 100 sq. m.)	Product Use Rate (grams/ha)	Application Interval (days)	Comments
Dollar spot ( <i>Sclerotinia</i>	20.0 – 25.0	2000 – 2500	14	Begin applications prior to or in the early stages of disease
homeocarpa)	35.0	3500	28	development. Use the higher specified rate when prolonged favourable disease conditions exist.
Fairy ring ( <i>Basidiomycete</i> <i>fungi</i> )	33.6	3357	28	Apply as soon as possible after Fairy ring symptom development. Fairy ring symptoms may take 2 to 3 weeks to disappear following application. Use 800 to 1500 L spray volume per hectare. Reapplication after 28 days may be required. Provide short irrigation cycle directly following treatment to move Fungicide through thatch.
Fusarium patch (Microdochium patch) and Pink snow mold ( <i>Microdochium</i> <i>nivale</i> )	29.8	2976	single application	Make an application in the late fall just prior to snow cover. Tank mix with another effective fungicide from a different target site group. When used in a tank mix, follow all use directions and the most restrictive precautions on the individual product labels.
Gray leaf spot (Pyricularia grisea)	16.7	1667	14	Apply preventative applications and continue applications while
	33.3	3333	28	conditions are favourable for disease development.
Gray snow mold/Typhula blight	20.2	2024	single application	Make applications just prior to snow cover.
(Typhula incarnata, T. ishikariensis)	10.1	1012	14 – 28	
Leaf spot (Drechslera spp., Bipolaris spp.)	18.3	1833	14	Apply when conditions are favourable for disease development.
Melting out ( <i>Drechslera poae</i> )	16.8 – 33.6	1678 – 3357	14 – 28	Apply when conditions are favourable for disease development.
Powdery mildew ( <i>Erysiphe graminis</i> )	16.8 – 33.6	1678 – 3357	14 – 28	Use preventively. Begin applications when conditions are favourable for disease development.

Disease (Pathogen)	Product Use Rate (grams/ 100 sq. m.)	Product Use Rate (grams/ha)	Application Interval (days)	Comments
Pythium blight (Pythium aphanidermatum)	26.8	2679	14	Begin preventative application when conditions are favourable for disease development.
Pythium root dysfunction ( <i>Pythium volutum,</i> <i>Pythium</i> <i>arrhenomanes,</i> <i>Pythium</i> <i>aristosporum</i> )	33.3	3333	14 – 28	Apply preventively for control. Irrigate immediately following application. After each application rotate with at least one application of a non-group 11 Fungicide registered for this disease.
Rapid blight ( <i>Labyrinthula</i> <i>terrestris</i> )	16.8 – 33.6	1678 – 3357	14 – 28	Use preventively. Begin applications when conditions are favourable for disease development.
Red thread ( <i>Laetisaria</i> <i>fuciformis</i> )	16.8 – 33.6	1678 – 3357	14 – 28	Apply when conditions are favourable for disease development.
Rhizoctonia leaf or sheath spot ( <i>R. oryzae, R. zea</i> )	16.8 – 33.6	1678 – 3357	14 – 28	Apply when conditions are favourable for disease development.
Rust ( <i>Puccinia</i> spp.)	14.9	1488	14	Apply when conditions are favourable for disease development.
Summer patch ( <i>Magnaporthe</i> <i>poae</i> )	16.8 – 33.6	1678 – 3357	14 – 28	Initiate applications in the spring when soil temperatures reach 15.6 to 18.3°C at a 5.1 cm soil depth, or as dictated by local recommendations.
Take-all patch ( <i>Gaeumannomyces</i> <i>graminis</i> ) – suppression only	33.3	3333	28	Make 1 application in the fall and 1 application in the spring.

# TANK MIXING

This product may be tank mixed with a fertilizer, a supplement or with registered pest control products, whose labels also allow tank mixing, provided the entirety of both labels, including Directions For Use, Precautions, Restrictions, Environmental Precautions, and Spray Buffer Zones are followed for each product. In cases where these requirements differ between the tank mix partner labels, the most restrictive label must be followed. Do not tank mix products containing the same active ingredient unless specifically listed on this label.

In some cases, tank mixing pest control products can result in reduced pesticide efficacy or increased host crop injury. The user should contact BASF Canada Inc. at 1-877-371-2273 for information before mixing any pesticide that is not specifically recommended on this label.

Physical incompatibility, reduced disease control or turf injury may result from mixing **Honor Fungicide** with other products. Therefore, before using any tank mix (fungicides, insecticides, liquid fertilizers, biological control products, adjuvant and additives) test a small portion of the turf to be treated to ensure that a phytotoxic response will not occur.

### Additives

Do not use with organosilicate based adjuvants or turf grass injury may occur. Due to the large number of additives or adjuvants that may be used, neither the manufacturer nor the seller has determined whether **HONOR Fungicide** can be used safely with all additives.

### **RESISTANCE-MANAGEMENT RECOMMENDATIONS**

Please note that **HONOR Fungicide** contains both a Group 7 (boscalid) and Group 11 (pyraclostrobin) Fungicide. Any fungal population may contain individuals naturally resistant to **HONOR Fungicide** and other Group 7 and Group 11 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 are specific for individual chemicals, such as enhanced metabolism, may also exist. Appropriate resistance-management strategies should be followed.

The following recommendations may be considered to delay the development of Fungicide resistance:

Where possible, rotate the use of **HONOR Fungicide** or other Group 7 and Group 11 fungicides with different groups that control the same pathogens.

Use tank mixtures with fungicides from a different group that is effective on the target pathogen when such use is permitted.

Fungicide use should be based on an integrated disease management 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 resistance development. Notify BASF Canada if reduced sensitivity of the pathogen to **HONOR Fungicide** 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 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 BASF Canada Inc. at 1-877-371-2273 or at www.betterturf.ca.

# MIXING

- 1. Clean spray tank following sprayer clean-up recommendations on the previous product label.
- 2. Fill the spray tank one-half full of water and start agitation.
- 3. Add the required amount of **HONOR Fungicide** to the tank.
- 4. Add the required amount of tank mix partner, if required.
- 5. Continue agitation while filling the remainder of the spray tank.
- 6. After use, clean the spray tank.

# **RESTRICTIONS AND LIMITATIONS**

- 1. Do not re-enter treated area until sprays have dried.
- 2. Do not apply more than four applications per season.
- 3. Do not apply **HONOR Fungicide** through any type of irrigation equipment.

# PRECAUTIONS

- 1. KEEP OUT OF REACH OF CHILDREN.
- 2. **DO NOT** take internally. Harmful if swallowed.
- 3. Wash thoroughly after handling and before eating, drinking or smoking.
- 4. Wear protective equipment and clothing, including gloves (rubber, PVC, neoprene or nitrile), long-sleeved shirt, long pants, and shoes plus socks during mixing/loading, sprayer clean-up, repair and application.
- 5. If clothing becomes contaminated, remove and wash separately from household laundry before reuse.
- 6. Clean spray equipment thoroughly after use.
- 7. Do not contaminate domestic or irrigation water, lakes, streams or ponds by the cleaning of equipment or the disposal of wastes.

# FIRST AID

**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.

Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

### TOXICOLOGICAL INFORMATION

The patient should be treated symptomatically.

# STORAGE

- 1. Store in original tightly closed container.
- 2. Do not ship or store near food, feed, seed and fertilizers.
- 3. Store in cool, dry, locked, well-ventilated area without floor drain.

### DISPOSAL

#### 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 any further use.

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

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.

#### For Non-Returnable Containers

- 1. Triple or pressure-rinse the empty container. Add the rinsings to the spray mixture in the tank.
- 2. Follow provincial instructions for any required additional cleaning of the container prior to its disposal.
- 3. Make the empty container unsuitable for further use.
- 4. Dispose of the container in accordance with provincial requirements.
- 5. For information on the 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.

#### For Returnable-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 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.

# 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.