GROUP	11	FUNGICIDE

INSIGNIA™ EG Fungicide

Broad spectrum fungicide for disease control on golf course turf

WETTABLE GRANULES

COMMERCIAL (AGRICULTURAL)

GUARANTEE: Pyraclostrobin …… 20%

Warning, contains the allergen sulfites

REGISTRATION NO. 28859 **PEST CONTROL PRODUCTS ACT**

READ THE LABEL AND BROCHURE BEFORE USING

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

NET CONTENTS: 1 kg - 10 kg

BASF Canada Inc.
100 Milverton Drive
5th Floor
Mississauga, Ontario
L5R 4H1
1-877-371-2273

INSIGNIA™ is a trademark of BASF.

GENERAL INFORMATION

This package contains **INSIGNIA EG Fungicide**, a water dispersible granule (EG). The active ingredient in **INSIGNIA EG Fungicide** belongs to the class of fungicides, the strobilurins. Strobilurins are synthetic derivatives of a natural antifungal substance. **INSIGNIA EG FUNGICIDE** has a mode of action that is effective against pathogens resistant to other fungicides groups.

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

DIRECTIONS FOR USE

INSIGNIA EG FUNGICIDE™ is a broad-spectrum fungicide recommended for the control of many important diseases of turf grass. For maximum efficacy, **INSIGNIA EG 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.

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

DO NOT apply by air.

Buffer Zones

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

The 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.

Method of application	Pest	Buffer zones (metres) required for the protection of:				
		Freshwater habitat of depths:		Estuarine/marine habitats of depths:		Terrestrial Habitat
		Less than 1 m	Greater than 1 m	Less than 1 m	Greater than 1 m	
Field sprayer*	Gray snow mold, typhula blight (low rate)	10	1	1	1	0
	Gray snow mold, typhula blight (high rate)	10	3	3	1	1
	Rust, gray leaf spot (low rate)	10	5	4	2	1
	Pink snow mold	15	2	2	1	0
	Leaf spot	15	5	4	2	1
	Anthracnose, take-all patch, dollar spot (low rate)	15	5	4	2	1
	Pythium blight	20	5	5	3	1
	Brown patch, gray leaf spot, anthracnose, take-all patch, dollar spot (high rate)	20	10	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.

INSIGNIA EG FUNGICIDE is recommended for the control of brown patch, gray leaf spot, gray snow mold, leaf spot, pink snow mold, pythium blight, rust, anthracnose, take-all patch and dollar spot. For optimum control of pink snow mold, program **INSIGNIA EG FUNGICIDE** with another snow mold fungicide (non-strobilurin). Apply **INSIGNIA EG FUNGICIDE** in 40-120 litres of water per 1,000 square meters (400-1200 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 **INSIGNIA EG FUNGICIDE** can safely be used on all turf grasses under all conditions. Therefore, it is recommended that the user determine if **INSIGNIA EG FUNGICIDE** can be used safely before broad use. Apply the recommended use rate of **INSIGNIA EG FUNGICIDE** on a small test area under conditions expected to be encountered. Monitor for any adverse effects during a 14-day period after application.

Table 1. Application Rates and Intervals for Turf Grass

Disease (Pathogen)	Use Rate (grams/ 1000 sq. m.)	Use Rate (grams/ha)	Application Interval (days)	Comments
Anthracnose (*Colletotrichum graminicola*)	154 – 280	1540 – 2500	14 – 28	Apply when conditions are favourable for disease development.
Brown Patch *(Rhizoctonia solani, zeae)*	140 – 250	1400 – 2500	14 – 21	Apply when conditions are favourable for disease development.
Dollar Spot (*Sclerotinia homeocarpa*) - Suppression only	154-280	1540-2800	14-28	**INSIGNIA EG Fungicide** applied at 154 - 280 grams/1000 sq. m. for 14 to 28 day intervals will provide suppression of dollar spot.
Gray Leaf Spot *(Pyricularia grisea)*	140	1400	14	Apply preventative applications and continue applications while conditions are favourable for disease development.
	280	2800	28	
Gray Snow Mold/Typhula Blight *(Typhula spp.)*	170	1700	single application	Make a single application of 170 grams or two applications at 85 grams, 14-28 days apart in late fall just prior to snow cover.
	85	850	14- 28	
Leaf Spot *(Dreschslera spp. Bipolaris spp.)*	154	1540	14	Apply when conditions are favourable for disease development.
Microdochium Patch and Pink Snow Mold *(Microdochium nivale)*	250	2500	single application	Make a single application in the late fall just prior to snow cover.
				Tankmix with PREMIS 200F Fungicide at 32 mL/100 sq. m. for improved control if severe disease pressure is anticipated.
Pythium Blight *(Pythium aphanidermatum)*	225	2250	14	Begin preventative application when conditions are favourable for disease development.
Rust *(Puccinia spp.)*	125	1250	14	Apply when conditions are favourable for disease development.
Take-all patch (*Gaeumannomyces graminis*) – suppression only	280	2800	28	Make 1 application in the fall and 1 application in the spring.

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 **INSIGNIA EG FUNGICIDE** can be used safely with all additives.

RESISTANCE-MANAGEMENT RECOMMENDATIONS

Mode of Action
Pyraclostrobin, the active ingredient of **INSIGNIA EG FUNGICIDE,** belongs to the group of cellular respiration inhibitors classified by the EPA and PMRA as Quinone Outside Inhibitors (QoI), or Target Site of Action Group 11 Fungicides.

Resistance management
INSIGNIA EG FUNGICIDE contains pyraclostrobin, a group 11 fungicide, and is effective against pathogens resistant to fungicides with modes of action different from those of QoI fungicides (Target site group 11), such as for example dicarboximides, sterol inhibitors, benzimidazoles, or phenylamides. Fungal isolates with acquired resistance to group 11 fungicides, such as pyraclostrobin, azoxystrobin, trifloxystrobin, and kresoxim-methyl, may eventually dominate the fungal population if group 11 fungicides are used predominantly and repeatedly in the same field in successive years as the primary method of control for the targeted pathogen species. This may result in reduction of disease control by **INSIGNIA EG FUNGICIDE** or other group 11 fungicides.

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

1. **Applications:** Adhere to the label instructions regarding the consecutive use of **INSIGNIA EG FUNGICIDE** or other target site of action group 11 fungicides that have a similar site of action on the same pathogens. To maintain the performance of **INSIGNIA EG FUNGICIDE** in the field, do not exceed the total number of sequential applications of **INSIGNIA EG FUNGICIDE** and the total number of applications of **INSIGNIA EG FUNGICIDE** per season as stated below. Do not exceed (6) six applications per season. Do not make sequential applications of **INSIGNIA EG FUNGICIDE** or another Group 11 fungicide for control of pythium blight, grey leaf spot or anthracnose. Do not make more than two (2) consecutive applications of **INSIGNIA EG FUNGICIDE** or another Group 11 fungicide for all other diseases. Alternate to an effective non-strobilurin fungicide with a different mode of action for at least two (2) applications.

2. **IPM: INSIGNIA EG FUNGICIDE** should be integrated into an overall disease and pest management program. Cultural practices known to reduce disease development should be followed. Consult your local extension specialist, certified crop advisor and/or BASF for additional IPM strategies established for your area. **INSIGNIA EG FUNGICIDE** may be used in Agricultural Extension advisory (disease forecasting) programs, which recommend application timing based on environmental factors favorable for disease development.

3. **Monitor:** Monitor efficacy of all fungicides used in the disease management program against the targeted pathogen and record other factors that may influence fungicide performance and/or disease development.

4. **Reporting:** If a group 11 target site fungicide, such as **INSIGNIA EG FUNGICIDE,** appears to be less or no longer effective against a pathogen that it previously controlled or suppressed, contact a BASF-representative, local extension specialist, or certified crop advisor to assist in determining the cause of reduced performance.

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 **INSIGNIA EG FUNGICIDE** to the tank.

4. If required, add the required amount of PREMIS 200F Fungicide to tank.

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 a six applications per season.

3. Do not apply to areas likely to be grazed by livestock and do not feed clippings to livestock or poultry.

ENVIRONMENTAL HAZARDS

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.

PRECAUTIONS

1. **KEEP OUT OF REACH OF CHILDREN.**

2. Wash thoroughly after handling and before eating, drinking or smoking.

3. 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. When using low pressure turf gun application equipment, mixer/loaders and applicators must wear a respirator with a NIOSH/MSHA/BHSE approved organic-vapour-removing cartridge with a pre-filter approved for pesticides or a NIOSH/MSHA/BHSE approved canister approved for pesticides.

4. If clothing becomes contaminated, remove and wash separately from household laundry before reuse.

5. Clean spray equipment thoroughly after use.

6. 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

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.

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. The user assumes the risk to persons or property that arises from any such use of this product.