

2015-0843
2016-05-06

Booklet

INSIGNIA® SC Fungicide

GROUP	11	FUNGICIDE
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Broad spectrum fungicide for disease control on golf course turf

SUSPENSION CONCENTRATE

COMMERCIAL (AGRICULTURAL)

GUARANTEE: Pyraclostrobin 250 g/L

Contains 1,2-benzisothiazolin-3-one at 0.0038% and 2-methyl-4-isothiazolin-3-one at 0.0038%, as preservatives

OR

Contains 1,2-benzisothiazolin-3-one at 0.0075%, 2-methyl-4-isothiazolin-3-one at 0.0075%, and 2-bromo-2-nitropropane-1,3-diol at 0.024%, as preservatives

REGISTRATION NO. 32247PEST CONTROL PRODUCTS ACT

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



DANGER

POISON

SKIN IRRITANT

READ THE LABEL AND BROCHURE BEFORE USING

NET CONTENTS: 0.1 L - Bulk

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

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GENERAL INFORMATION

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

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

DIRECTIONS FOR USE

INSIGNIA SC FUNGICIDE is a broad-spectrum fungicide recommended for the control of many important diseases of turf grass. For maximum efficacy, **INSIGNIA SC 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, pythium root dysfunction, 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 SC FUNGICIDE is recommended for the control of Brown patch, Gray leaf spot, Gray snow mold, Leaf spot, Pink snow mold, Pythium blight, Pythium root dysfunction, Rust, Anthracnose, and for the suppression of Take-all patch and Dollar spot. For optimum control of Pink snow mold, tankmix **INSIGNIA SC FUNGICIDE** with another snow mold fungicide (non-strobilurin). Apply **INSIGNIA SC 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 SC FUNGICIDE** can safely be used on all turf grasses under all conditions. Therefore, it is recommended that the user determine if **INSIGNIA SC FUNGICIDE** can be used safely before broad use. Apply the recommended use rate of **INSIGNIA SC 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 (mL/ 1000 sq. m.)	Use Rate (mL/ha)	Application Interval (days)	Comments
Anthraxnose (<i>Colletotrichum graminicola</i>)	123 – 224	1230 – 2240	14 – 28	Apply when conditions are favourable for disease development.
Brown patch (<i>Rhizoctonia solani, zeaе</i>)	112 – 200	1120 – 2000	14 – 21	Apply when conditions are favourable for disease development.
Dollar spot (<i>Sclerotinia homeocarpa</i>) - Suppression only	123 – 224	1230 – 2240	14-28	INSIGNIA SC Fungicide applied at 123 - 224 mL/1000 sq. m. for 14 to 28 day intervals will provide suppression of dollar spot.
Gray leaf spot (<i>Pyricularia grisea</i>)	112	1120	14	Apply preventative applications and continue applications while conditions are favourable for disease development.
	224	2240	28	
Gray snow Mould/Typhula blight (<i>Typhula spp.</i>)	136	1360	single application	Make a single application of 136 mL or two applications at 68 mL, 14-28 days apart in late fall just prior to snow cover.
	68	680	14- 28	
Leaf spot (<i>Drechslera spp. Bipolaris spp.</i>)	123	1230	14	Apply when conditions are favourable for disease development.
Microdochium patch (Fusarium patch) and Pink snow mould (<i>Microdochium nivale</i>)	200	2000	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 (<i>Pythium aphanidermatum</i>)	180	1800	14	Begin preventative application when conditions are favourable for disease development.
Pythium root dysfunction (<i>Pythium volutum, Pythium arrhenomanes, Pythium aristosporum</i>)	224	2240	14-28	Apply preventively for control. Irrigate immediately following application. After each application of Insignia SC Fungicide rotate with at least one application of a non-group 11 fungicide registered for this disease prior to additional Insignia application.

Disease (Pathogen)	Use Rate (mL/ 1000 sq. m.)	Use Rate (mL/ha)	Application Interval (days)	Comments
Rust (<i>Puccinia spp.</i>)	100	1000	14	Apply when conditions are favourable for disease development.
Take-all patch (<i>Gaeumannomyces graminis</i>) – suppression only	224	2240	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 SC FUNGICIDE** can be used safely with all additives.

RESISTANCE-MANAGEMENT RECOMMENDATIONS

Mode of Action

Pyraclostrobin, the active ingredient of **INSIGNIA SC 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

For resistance management, **INSIGNIA SC FUNGICIDE** contains a Group 11 fungicide. Any (fungal/bacterial) population may contain individuals naturally resistant to **INSIGNIA SC FUNGICIDE** and other Group 11 fungicide. 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 **INSIGNIA SC FUNGICIDE** or other Group 11 fungicides with different groups that control the same pathogens.
- Use tank mixtures with fungicide 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.
- To maintain the performance of **INSIGNIA SC FUNGICIDE** in the field, do not exceed the total number of sequential applications of **INSIGNIA SC FUNGICIDE** and the total number of applications of **INSIGNIA SC FUNGICIDE** per season as stated below. Do not exceed (6) six applications per season. Do not make sequential applications of **INSIGNIA SC FUNGICIDE** or another Group 11 fungicide for control of Pythium root disfunction, Pythium blight, Gray leaf spot or Anthracnose. Do not make more than two (2) consecutive applications of **INSIGNIA SC 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.

- Where possible, make use of predictive disease models to effectively time fungicide applications.
- Monitor treated fungal populations for resistance development. Notify BASF Canada Inc. if reduced sensitivity of the pathogen to INSIGNIA SC 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 company representatives at 1-877-371-2273.

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 SC 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.

PRECAUTIONS

1. **KEEP OUT OF REACH OF CHILDREN.** Fatal or Poisonous if swallowed. May irritate the skin. Avoid contact with skin.
2. Wash thoroughly after handling and before eating, drinking or smoking.
3. Wear protective equipment and clothing, including chemical-resistant gloves, coveralls over long-sleeved shirt, long pants, and shoes plus socks during mixing/loading, sprayer clean-up, repair and application.
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.
7. 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.

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.

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.

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.
4. Protect from freezing.

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.

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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.

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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.

2015-0843
2016-05-06

Sleeve

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GUARANTEE: Pyraclostrobin 250 g/L

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NET CONTENTS: 0.1 L - Bulk

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