GROUP 12 FUNGICIDE

## **INSTRATA® II A Fungicide**

FUNGICIDE

SUSPENSION

COMMERCIAL

For control of fusarium patch and pink snow mould on turf.

## **ACTIVE INGREDIENT:**

Fludioxonil ..... 125 g/L

Contains 1,2-benzisothiazolin-3-one at 0.037% and 2-bromo-2-nitropropane-1,3-diol at 0.036% OR 5-chloro-2-methyl-4-isothiazolin-3-one at 0.00091%, 2-methyl-4-isothiazolin-3-one at 0.00030% and 2-bromo-2-nitropropane-1,3-diol at 0.036% as preservatives.

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

REGISTRATION NO.: **32712** PEST CONTROL PRODUCTS ACT

NET CONTENTS: 0.5 L - Bulk

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

Label

## 1.0 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.

## 2.0 FIRST AID

**IF POISONING IS SUSPECTED, IMMEDIATELY** contact a physician or a poison control centre. Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

**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.

#### 3.0 TOXICOLOGICAL INFORMATION

There is no specific antidote known. Treat symptomatically.

#### 4.0 **PRECAUTIONS**

#### KEEP OUT OF REACH OF CHILDREN.

**DO NOT** enter or allow entry into treated turf areas until INSTRATA® II A Fungicide is dry.

## 5.0 PERSONAL PROTECTIVE EQUIPMENT (PPE)

Wear coveralls or long sleeved shirt and long pants, chemical resistant gloves, and goggles when mixing, loading or during equipment clean up or repair. Goggles and chemical resistant gloves are not required during application.

Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

All users should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.

## 6.0 ENVIRONMENTAL PRECAUTIONS

TOXIC to aquatic organisms, birds, small wild mammals and non-target terrestrial plants. Observe buffer zones specified under DIRECTIONS FOR USE.

Fludioxonil is persistent and may carryover. It is recommended that any products containing fludioxonil not be used in areas treated with this product during the previous season.

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.

## 7.0 STORAGE

Store in original container in a cool, dry place. **DO NOT** use or store near heat or open flame.

**DO NOT** store this product under wet conditions. Keep container closed when not in use. To prevent contamination, store this product away from food or feed.

#### 8.0 DISPOSAL

For information on disposal of unused, unwanted product, or in the case of a spill or spill clean-up, contact the manufacturer or provincial regulatory agency.

#### For Recyclable Containers

**DO NOT** reuse this container for any other 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 or dispose of the rinsings in accordance with provincial requirements.
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## IN CASE OF EMERGENCY INVOLVING A MAJOR SPILL, FIRE OR POISONING, CALL 1-800-327-8633 (1-800-FASTMED)

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Pamphlet

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## 9.0 **PRODUCT INFORMATION**

INSTRATA II A Fungicide is a contact and protective fungicide for control of listed diseases in turf. It is a suspension concentrate formulation containing 125 g/L fludioxonil. Fludioxonil is a long lasting contact fungicide belonging to the phenyl pyrrole chemistry group that provides broad-spectrum activity against a wide range of diseases through the inhibition of fungal mycelial growth.

INSTRATA II A Fungicide provides control of turf diseases when used in an integrated disease management program.

For optimum turfgrass quality and disease control, use INSTRATA II A Fungicide in conjunction with turfgrass management practices that promote plant health. Before use of any fungicide, proper diagnosis of the organism causing the disease is important. Use of diagnostic kits or other means of identification of the disease is essential to determine the best control measures.

#### **10.0 DIRECTIONS FOR USE**

#### **10.1 General Information**

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.

**DO NOT** apply more than 180 mL product/100 m<sup>2</sup>/year (18.0 L product/ha/year) on turfgrass.

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 Syngenta Canada Inc. at 1-87-SYNGENTA (1-877-964-3682) for information before applying any tank mix that is not specifically recommended on this label.

Syngenta Canada Inc. has not fully assessed performance (efficacy) and/or crop tolerance (phytotoxicity) of all potential tank-mixes under all environmental conditions or for all crop varieties. Tank mixes that are not specifically listed on this label should be tested on a small area first, under local conditions and using standard practices, to confirm the tank mix is suitable for widespread application.

To determine the physical compatibility of this product with other products, use a jar test.

Always read and follow label directions including WALES mixing order.

## **10.2** Application Instructions

<u>Field sprayer application</u>: **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.

## **10.3 Mixing Instructions**

To prepare spray solution, fill half of the required water volume in the spray tank with clean water and begin agitation. Add the required amount of INSTRATA II A Fungicide to the tank, allowing time for good dispersion. Finish filling the tank to the desired volume to obtain the proper spray concentration. Maintain agitation throughout the spraying operation. Do not allow spray mixture to stand overnight or for prolonged periods. Make up only the amount of spray required for immediate use. Sprayers should be calibrated before application and thoroughly cleaned immediately after application. Do not use silicone based products with INSTRATA II A Fungicide due to possible phytotoxicity.

## 10.4 Buffer Zones

Use of the following spray methods or equipment **DOES 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.

		Buffer Zones (metres) Required for the Protection of:				
Method of	Crop	Freshwater Habitat of Depths:		Estuarine/Marine Habitats of Depths:		Terrestrial habitat
application		Less than 1 m	Greater than 1 m	Less than 1 m	Greater than 1 m	
Field sprayer	Turf	4	1	1	1	1

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.

The spray drift buffer zones for this product can be modified based on weather conditions and spray equipment configuration by accessing the Buffer Zone Calculator on the Pest Management Regulatory Agency web site.

## 11.0 CROP USE DIRECTIONS

#### 11.1 Turf: Golf Courses

#### The following use instructions will provide control of the listed diseases.

TURF: GOLF COURSES	
DISEASE	Fusarium patch (Microdochium nivale)
PRODUCT RATE	3-6 L/ha or 30-60 mL/100 m <sup>2</sup>
APPLICATION INTERVAL	14 days
MAXIMUM APPLICATIONS OF PRODUCT PER YEAR	3
APPLICATION DIRECTIONS	For use on fairways, use low rate under conditions of low to moderate disease pressure. For control of <i>Microdochium nivale</i> over winter (pink snow mould) high rate of 60 mL/100 m <sup>2</sup> rate is required. Refer to Pink snow mould ( <i>Microdochium nivale</i> ) section below for more information.
DISEASE	Pink snow mould (Microdochium nivale)
PRODUCT RATE	6 L/ha or 60 mL/100 m <sup>2</sup>
MAXIMUM APPLICATIONS OF PRODUCT PER YEAR	1

TURF: GOLF COURSES	
APPLICATION INSTRUCTIONS	For optimum disease control tank mix INSTRATA II A Fungicide with INSTRATA II B Fungicide. Under conditions of high disease pressure consider including an additional product containing a different mode of action which is also labelled for snow mould.
	Make one application in the late fall before snow cover.
	<b>DO NOT</b> apply on top of snow or when the temperature is below 0°C.
	For best control, use as a component of an integrated disease management program.
	Apply in sufficient water to ensure thorough coverage. 2-8 litres of water per 100 m <sup>2</sup> is recommended.
	Use AI, XR or Syngenta XC nozzles.
	Apply after mowing and do not mow after application.

## 12.0 RESISTANCE MANAGEMENT RECOMMENDATIONS

For resistance management, INSTRATA II A Fungicide contains a Group 12 Fungicide. Any fungal population may contain individuals naturally resistant to INSTRATA II A Fungicide and other Group 12 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.

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

Where possible, make use of predictive disease models to effectively time fungicide applications.

#### To delay fungicide resistance:

Where possible, rotate the use of INSTRATA II A Fungicide or other Group 12 fungicide with different groups that control the same pathogens.

Do not apply more than the maximum number of applications listed in the label.

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 certified crop advisors for any additional pesticide

resistance-management and/or IPM recommendations for specific crops and disease problems in your area.

For further information or to report suspected resistance, contact company representatives at 1-87-SYNGENTA (1-877-964-3682) or at <u>www.syngenta.ca.</u>

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