GROUP P07 FUNGICIDE

# SIGNATURE XTRA STRESSGARD

# **Fungicide**

Wettable Granules

SYSTEMIC FUNGICIDE FOR USE ON TURF

#### Commercial

**ACTIVE INGREDIENT:** Fosetyl Al.... 60%

**REGISTRATION NUMBER: 32800 PEST CONTROL PRODUCTS ACT** 

**CAUTION: EYE IRRITANT** 

#### READ THE LABEL AND ATTACHED BROCHURE BEFORE USING

NET CONTENTS: 1 Kg - 25 Kg

**Bayer CropScience Inc.** 

Suite 200, 160 Quarry Park Blvd. S.E. CALGARY, ALBERTA T2C 3G3

Product Information: 1-888-283-6847 www.bayeres.ca

In case of spills, poisoning or fire, telephone emergency response number collect 1-800-334-7577 (24 hours a day).

SIGNATURE XTRA and STRESSGARD are registered trademarks of Bayer.

#### PRECAUTIONS:

KEEP OUT OF REACH OF CHILDREN. During mixing, loading, application, cleanup and repair activities wear chemical-resistant gloves, long coveralls (with hood) over normal clothes, shoes plus socks and a hat. Avoid breathing dust. Avoid contact with skin, eyes and clothing. Wash concentrate from skin or eyes immediately. After use, wash hands and other exposed skin. Wash hands and face before eating, drinking, smoking or using the toilet. Store the container tightly closed away from seeds, fertilizer, plants and foodstuffs. Keep away from ponds, streams and other water sources. Apply only when the potential for drift to areas of human habitation and human activity (other than golf courses) such as parks, school grounds and playing fields, is minimal. Take into consideration wind speed, wind direction, temperature inversions, application equipment and sprayer settings.

Golf courses: For transplanting and planting activities, do not re-enter treated areas for 48 hours. For all other activities, do not enter or allow entry into treated areas until sprays have dried.

Sod farms: DO NOT enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

Turf: DO NOT enter, or allow worker entry until spray has dried.

#### FIRST AID:

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

**Eye contact:** 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.

**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.

**Inhalation:** 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 of doctor for further treatment advice.

**Ingestion:** Call a poison control centre or doctor immediately for treatment advice. Have person sip a glass of water is 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.

# **TOXICOLOGICAL INFORMATION:**

No specific antidote. Treat symptomatically.

#### **ENVIRONMENTAL HAZARDS:**

TOXIC to aquatic organisms. Observe buffer zones specified under DIRECTIONS FOR USE. Toxic to small wild mammals. Toxic to certain beneficial insects. Minimize spray drift to reduce harmful effects on beneficial insects in habitats next to the application site such as hedgerows and woodland.

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:

Store SIGNATURE XTRA STRESSGARD in a dry, ventilated place away from feed, seed or foodstuffs. Unused product should be stored in original container. SIGNATURE XTRA STRESSGARD left exposed to the air will absorb moisture over time and become unusable. If the product becomes caked or lumpy, do not use.

### **DISPOSAL:**

**Recyclable 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.

**Disposal of Unused, Unwanted Product:** Any unused material must be returned to the manufacturer. Contact the manufacturer and the provincial regulatory agency in case of a spill, and for cleanup 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 a control product in a way that is inconsistent with the directions on the label.

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#### **GENERAL INFORMATION:**

SIGNATURE XTRA STRESSGARD can be used for the control of Pythium blight and for the suppression or control of Pythium root rot and as a preventative control of foliar and basal rot anthracnose in turf. SIGNATURE XTRA STRESSGARD is completely systemic. Product applied to leaves will move downwards to the roots. SIGNATURE XTRA STRESSGARD is most effective when used as a preventative treatment. Plants displaying early disease symptoms, or when conditions for disease are favorable, are most likely to benefit from this treatment.

#### PRECAUTIONS:

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# **DIRECTIONS FOR USE**

### **TURF**

Do not apply this product using handheld or automated fogging or mist blower equipment. Do not apply this product using ultra-low volume (ULV) equipment.

Not for use on other residential turf sites including residential lawns, gardens, playing fields, cemeteries, and schools.

When applied as directed, SIGNATURE XTRA STRESSGARD will control the listed diseases, unless otherwise indicated as suppression.

# **GOLF COURSES, SOD FARMS, TURF AREAS**

Target Diseases	Product Rate (g/100 m²)	Application Interval	Instructions
For control of Pythium blight ( <i>Pythium spp.</i> )	60 120-180	7 day 14 day	Apply SIGNATURE XTRA STRESSGARD when conditions are favourable for disease development.  Apply this product uniformly in 6.0-16.0 L of water/100 m² to the targeted area using the appropriate broadcast application methods.  Use the 60 g/100 m² rate and 7-day interval preventively in areas with little history of the disease.  Use the 120-180 g/100 m² rate and 14 day interval under conditions which promote disease development (>30 C, high humidity, wet soils) for extended residual control.  Do not exceed 640 g/100 m² per season.
For suppression of Pythium root rot ( <i>Pythium spp.</i> )	60 120	7 day 14 day	Apply SIGNATURE XTRA STRESSGARD when conditions are favourable for disease development.  Apply this product uniformly in 6.0 - 16.0 L of water/100 m² to the targeted area using the appropriate broadcast application methods.  Use the 60 g/100 m² rate and 7-day interval preventatively in areas with little history of disease.  Do not exceed 640 g/100 m² per season.

180	14 day	Apply SIGNATURE XTRA STRESSGARD when conditions are favourable for disease development.  Apply this product uniformly in 6.0 - 16.0 L of water/100 m² to the targeted area using the appropriate broadcast application methods.  Use the 180 g/100 m² rate and 14 day interval under conditions which promote disease development (> 30° C, high humidity, wet soils) for extended residual control.			
		Do not exceed 640 g/100 m <sup>2</sup> per season.			
60	7 day	Apply SIGNATURE XTRA STRESSGARD when conditions are favourable for disease development.			
		Apply this product uniformly in 6.0 – 16.0 L/100 m <sup>2</sup> to the targeted area using the appropriate broadcast application methods.			
		Use the 60 g/100 m <sup>2</sup> rate and 7-day interval preventatively in areas with little history of the disease.			
		Do not exceed 640 g/100 m² per season.			
100–180	7-14 day	Use the 100-180 g/100 m <sup>2</sup> rate and 7-14 day interval under conditions of high disease pressure (>30 C, high humidity, wet soils) for extended residual control. Under severe disease pressure, use the highest rate and shortest interval.  Do not exceed 640 g/100 m <sup>2</sup> per season.			
	60	60 7 day			

Re-apply when conditions are favourable for disease development.

DO NOT apply using aerial application equipment. For resistance management it is recommended to rotate with other fungicide products with a different mode of action. See Resistance Management Recommendations below.

<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 using aerial application equipment.

#### **Buffer zones:**

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

The buffer zones specified in the table below are required between the point of direct application and the closest downwind edge of sensitive freshwater habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs and wetlands) and estuarine/marine habitats.

Method of	Crop	Buffer Zones (meters) Required for the Protection of:
	0.00	

application		Aquatic Habitat of Depths:		Marine Habitat of Depths:		Terrestrial
		Less than 1 m	Greater than 1 m	Less than 1 m	Greater than 1 m	Habitat
Field Sprayer	Turf	2	1	1	1	0

For tank mixes, consult the labels of the tank-mix partners and observe the largest (most restrictive) 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 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.

#### RESISTANCE MANAGEMENT RECOMMENDATIONS:

For resistance management, SIGNATURE XTRA STRESSGARD contains a Group P07 fungicide. Any fungal population may contain individuals naturally resistant to SIGNATURE XTRA STRESSGARD and other Group P07 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 resistance:

- Where possible, rotate the use of SIGNATURE XTRA STRESSGARD or other P07 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 Bayer CropScience if reduced sensitivity of the pathogen to Signature Xtra StressGard 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 Bayer CropScience representatives at 1-888-283-6847 or at www.cropscience.bayer.ca.