GROUP 3 FUNGICIDE

## **BANNER® 130 EC**

**FUNGICIDE** 

**EMULSIFIABLE CONCENTRATE** 

COMMERCIAL

For broad spectrum and systemic disease control on golf course turf and nursery crops and for control of black spot on roses.

**GUARANTEE:** 

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



**POTENTIAL SKIN SENSITIZER** 

REGISTRATION NO: 23693
PEST CONTROL PRODUCTS ACT

NET CONTENTS: 5 L

NOT FOR RELABELLING OR REPACKAGING PROTECT FROM FREEZING

Syngenta Canada Inc.

140 Research Lane, Research Park Guelph, ON N1G 4Z3

Telephone: 1-877-964-3682

Label

## **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.

#### **FIRST AID**

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

**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.

**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 SWALLOWED,** call a poison control centre or doctor **IMMEDIATELY** for treatment advice. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give **any** liquid to the person. Do not give anything by mouth to an unconscious person.

**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.

#### TOXICOLOGICAL INFORMATION

There is no specific antidote for this product. Apply symptomatic therapy. This product contains petroleum distillates.

## **PRECAUTIONS**

KEEP OUT OF THE REACH OF CHILDREN. **For turf uses, DO NOT** allow entry into treated area until the area is dry.

- 1. **DO NOT** get in eyes, on skin or on clothing.
- 2. Avoid breathing mist or vapours. Harmful if swallowed, inhaled or absorbed through the skin. Causes eye and skin irritation. This product may cause skin sensitization reactions in certain individuals.
- 3. Wear long pants, a long sleeve shirt, shoes and socks and chemical-resistant gloves during mixing/loading, application, clean-up and repair activities.
- 4. **DO NOT** use leather or cloth gloves.
- 5. Rinse gloves with soap and water before removal and wash hands.
- 6. Wear protective goggles or face shield as well as a protective apron when handling the concentrated product during mixing and loading.

- 7. **DO NOT** eat, drink or smoke during application; wash hands and face thoroughly immediately following each application of this product. Immediately wash off accidental splashes of the concentrate or spray mixture from skin, clothing and eyes.
- 8. After work, change clothing and wash entire body thoroughly.
- 9. Wash contaminated clothes separately from other laundry before reuse.
- For ornamental and nursery crop uses, DO NOT allow entry into treated areas for 12 hours following application. See the DIRECTION FOR USE section for crop specific restricted entry intervals.
- 11. **DO NOT** contaminate food or feed.
- 12. **DO NOT** graze livestock on treated areas.
- 13. **DO NOT** feed clippings from treated areas to livestock or poultry.
- 14. This pesticide is toxic to fish.
- 15. **DO NOT** spray any body of water by direct application, drift or by cleaning and rinsing spray equipment.
- 16. This product contains a petroleum distillate (at 82.9%) which is moderately toxic to aquatic organisms.
- 17. Avoid contamination of aquatic systems during application. **DO NOT** contaminate these systems through direct application, disposal of waste or cleaning equipment.

#### **ENVIRONMENTAL HAZARDS**

Toxic to aquatic organisms and non-target terrestrial plants. Observe buffer zones specified under DIRECTIONS FOR USE.

The use of this chemical may result in contamination of groundwater particularly in areas where soils are permeable (e.g. sandy soils) and/or the depth to the water table is shallow.

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.

Toxic to certain beneficial insects. Minimize spray drift to reduce harmful effects on beneficial insects in habitats next to the application sites such as hedgerows and woodland.

#### **STORAGE**

To prevent contamination store this product away from food or feed.

#### **DECONTAMINATION AND DISPOSAL**

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

## **CONTAINER DISPOSAL:**

## For recyclable containers for commercial use:

**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 (FASTMED)

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CAUTION



**POISON** 

WARNING EYE AND SKIN IRRITANT POTENTIAL SKIN SENSITIZER

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## **GENERAL INFORMATION**

BANNER® 130 EC is a broad spectrum systemic fungicide for use on turf grass grown on golf courses, nursery crops and roses. BANNER 130 EC is a demethylation inhibitor (DMI) fungicide, also known as a sterol inhibitor (SI). For optimum turf quality and disease control, use BANNER 130 EC in conjunction with management practices that promote good plant health and optimum disease control. Before the use of any fungicide, proper diagnosis of the organism causing or expecting to cause the disease is important. Proper identification of the disease organism is essential to determine the best control measures. BANNER 130 EC PROVIDES THE BEST RESULTS IN A PREVENTATIVE DISEASE CONTROL PROGRAM IN ROTATION WITH OTHER FUNGICIDES.

The repeated and exclusive use of certain classes of fungicides in solo applications may select fungal strains with reduced sensitivity. The North American Fungicide Resistance Action Committee advises that a spray program which alternates and/or tank mixes BANNER 130 EC with fungicides having a different mode of action may prevent or delay this process.

#### MIXING INSTRUCTIONS

- Fill spray tank 1/2 to 3/4 full with clean water.
- With the agitation system on, add the required amount of BANNER 130 EC and then continue filling the tank with water.

- Maintain agitation during mixing and spraying operation.
- Use nozzle screen no finer than 50 mesh. Keep by-pass line on or near the bottom of the tank to minimize foaming.

## **Tank Mixtures - Pesticides:**

BANNER 130 EC can be tank mixed with DACONIL 2787<sup>®</sup> Flowable Fungicide. Read the DACONIL 2787 Flowable Fungicide label and follow the precautionary statements, directions for use (rates, diseases controlled and application intervals) and other restrictions.

If BANNER 130 EC is tank mixed, use the following sequence:

- Always check the compatibility of the tank mix using a jar test with proportionate amounts of BANNER 130 EC and DACONIL 2787 Flowable Fungicide to be used with water, before mixing in the spray tank.
- 2. Provide sufficient jet or mechanical agitation during filling and application to keep the tank mix uniformly suspended.
- 3. Fill spray tank at least 1/2 full of clean water.
- 4. Add DACONIL 2787 Flowable Fungicide and ensure it is well mixed.
- 5. Add BANNER 130 EC last.
- 6. Do not leave the tank mix combination in the spray tank for prolonged periods without agitation. Mix and apply them the same day.

## **Tank Mixtures - Fertilizers:**

BANNER 130 EC is also compatible with liquid and water soluble turf fertilizers. Check compatibility using a jar test before tank mixing.

#### **DIRECTIONS FOR USE**

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.

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

#### **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.

	Сгор	Buffer Zones (metres) Required for the Protection of:				
Method of Application		Freshwater Habitat of Depths:		Estuarine/Marine Habitats of Depths:		Terrestrial
		Less than 1 m	Greater than 1 m	Less than 1 m	Greater than 1 m	Habitat
	Turf, golf courses	3	1	4	2	4
Field Sprayer <sup>1</sup>	Dogwood, maple, crabapple, non-bearing apple, pyracanthas, Roses, azalea, rhododendron	1	0	1	1	1

<sup>&</sup>lt;sup>1</sup> 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 zones 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%.

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.

#### **GOLF COURSE TURF**

- Under conditions optimum for high disease pressure, use the highest suggested rate of BANNER 130 EC and the shortest interval.
- **DO NOT** apply BANNER 130 EC through any type of irrigation system.
- Apply in sufficient water to ensure thorough coverage (3 15 L per 100 m<sup>2</sup>)
- Apply after mowing OR allow sprayed area to completely dry before mowing.
- For control of foliar diseases, allow sprayed area to completely dry before irrigation. If significant rainfall occurs within one hour after application, reapplication is necessary.
- For control of soil-borne diseases, apply BANNER 130 EC in higher spray volumes (13 21 L of water per 100 m<sup>2</sup>). If this is not possible, then BANNER 130 EC can be watered in after application (0.60 cm of water prior to drying of the spray application).
- DO NOT add surfactants or wetting agents as this may result in phytotoxicity.
- When treating greens, always treat aprons and fairway approaches.
- This product is not to be used around homes or other residential areas such as parks, school grounds, playing fields. It is not for use by homeowners or other unlicensed users.
- DO NOT allow entry into treated area until the area is dry.

DISEASE	RATE OF BANNER 130 EC (mL per 100m²)	APPLICATION INTERVAL/ DURATION OF CONTROL*	INSTRUCTIONS
Dollar Spot	31-62	21-28 days	Apply BANNER 130EC during periods of humid, warm days and cool nights that result in heavy dew formation. Nitrogen deficiency and drought stress also promote the disease.  To prevent disease resistance, BANNER 130EC can be either:  1) Tank-mixed (see mixing instructions) or alternated with DACONIL 2787 Flowable Fungicide, OR  2) Rotated with fungicides that have different modes of action.
Anthracnose	31-62	21 days	Apply when warm, humid weather conditions occur. Areas of compaction, poor soil drainage, excess thatch, or with large amounts of Poa annua favour the development of anthracnose.
Red Thread	62	14 days	Apply when cool, wet conditions occur. Prolonged periods of moisture saturated air favours the development of the disease.
Brown Patch	62-124	14 days	Apply BANNER 130EC preventively when conditions favour disease development (high surface moisture or humidity and warm night temperatures). Use the higher rate under severe disease pressure. Do not apply BANNER 130EC if disease symptoms are present.
Leaf Spot & Melting Out	62-124	14 days	Under light to moderate disease pressure, apply BANNER 130EC to reduce the severity of leaf spot and melting out caused by <u>Drechslera</u> spp. (Helminthosporium) pathogens.
Summer Patch	124	30 days	Apply BANNER 130EC on a preventative basis. The first application should be when the soil temperature is greater than 16°C at a 5 cm depth for 4 consecutive days with a second application 30 days later. A third application may be required if hot, humid weather occurs. Apply BANNER 130EC with 13-21 L of water per 100 sq. metres.
Gray and Pink Snow Mold	248	Late Fall	Apply one application in the late fall before snow cover. Do not apply on top of snow or when the temperature is below 0°C.
Fusarium Patch	62-124	30 days	Apply BANNER 130EC in the fall or early spring during cool, wet weather. Use the high rate only under high disease pressure.

<sup>\*</sup>Expected length of control when used in a preventative disease control program.

# NOTE TO USER: READ THE FOLLOWING BEFORE USING THIS PRODUCT FOR THE INDICATED SPECIAL USE APPLICATIONS

The DIRECTIONS FOR USE for this product for the uses described below were developed by persons other than Syngenta Canada Inc. and accepted for registration by Health Canada under the User Requested Minor Use Label Expansion program. Syngenta Canada Inc. itself makes no representation or warranty with respect to performance (efficacy) and/or crop tolerance (phytotoxicity) claims for this product when used on the crops listed below.

Accordingly, the Buyer and User assume all liability arising, and agrees to hold Syngenta Canada Inc. harmless from any claims based on efficacy and/or phytotoxicity in connection with the uses described below.

#### **DIRECTIONS FOR USE**

#### **NURSERY CROPS AND ROSES**

- **DO NOT** apply BANNER 130 EC through any type of irrigation system.
- DO NOT add surfactants or wetting agents as this may result in phytotoxicity.
- **DO NOT** use in greenhouses.

CROP	DISEASE	RATE OF BANNER 130EC (mL/100 L water)	INSTRUCTIONS
Dogwood, maple	Anthracnose	34	Apply every 14 days. Do not exceed more than 4 applications per year
Crabapple, nonbearing apple, pyracanthas	Scab	17	Apply every 14 days beginning at green tip. Do not exceed more than 4 applications per year.
Roses, azalea, rhododendron	Powdery mildew	42	Apply every 14 days. Do not exceed more than 4 applications per year.

CROP	DISEASE	RATE OF BANNER 130EC (mL/100 L water)	INSTRUCTIONS	
Roses	Black spot	40	Apply every 14 days. Do not exceed more than 4 applications per year.	

#### RESISTANCE MANAGEMENT RECOMMENDATIONS

For resistance management, BANNER 130EC contains a Group 3 fungicide. Any fungal population may contain individuals naturally resistant to BANNER 130EC and other Group 3 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 BANNER 130EC or other Group 3 fungicides with different groups that control the same pathogens.

Avoid application of more than the maximum number listed in the label and consecutive sprays of BANNER 130EC or other fungicides in the same group in a season.

Use tank mixtures with fungicides from a different group when such use is permitted.

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 <a href="https://www.syngenta.ca">www.syngenta.ca</a>.

BANNER® and DACONIL 2787® are trademarks of a Syngenta Group Company.