Container

GROUP 3 11 FUNGICIDE

#### **Navicon®**

#### **FUNGICIDE**

Broad-spectrum fungicide for disease control on golf course turf

Suspension

**COMMERCIAL (AGRICULTURAL)** 

ACTIVE INGREDIENTS: Mefentrifluconazole ........ 200 g/L

Pyraclostrobin ..... 200 g/L

Contains 5-chloro-2-methyl-4-isothiazolin-3-one at 0.00111%, 2-methyl-4-isothiazolin-3-one at 0.00037%, 1,2-benzisothiazolin-3-one at 0.0400% and 2-bromo-2-nitropropane-1,3-diol at 0.0240%, as preservatives

Warning: contains the allergen soy

**REGISTRATION NO. 34593** 

PEST CONTROL PRODUCTS ACT



#### **SKIN IRRITANT**

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

READ THE LABEL AND ATTACHED BROCHURE BEFORE USING

**KEEP OUT OF REACH OF CHILDREN** 

**NET CONTENTS:** 0.1 L - Bulk

BASF Canada Inc. 5025 Creekbank Road Building A, 2nd floor Mississauga, Ontario L4W 0B6 1-877-371-2273

NAVICON is a registered trade-mark of BASF SE, used with permission by BASF Canada Inc.

## **PRECAUTIONS**

- 1. KEEP OUT OF REACH OF CHILDREN.
- 2. **DO NOT** take internally. Harmful if swallowed.
- 3. May irritate the skin. Avoid contact with skin and clothing.
- 4. Wash exposed areas of skin thoroughly after handling and before eating, drinking or smoking.
- 5. **DO NOT** enter or allow entry into treated areas until sprays have dried.
- 6. Wear coveralls over a long-sleeved shirt, long pants, chemical-resistant gloves, socks and shoes during mixing, loading, application, clean-up and repair. In addition, wear protective eyewear (goggles or face shield) during mixing, loading, clean-up and repair. Gloves are not required during application within a closed cab.
- 7. If clothing becomes contaminated, remove and wash separately from household laundry before reuse.
- 8. Clean spray equipment thoroughly after use.
- 9. **DO NOT** contaminate domestic or irrigation water, lakes, streams or ponds by the cleaning of equipment or the disposal of wastes.
- 10. 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
- 11. **DO NOT** apply to turf in residential areas, including lawns, gardens, parks, playing fields, cemeteries and schools. Navicon can be applied to golf course greens, tees, fairways and roughs only.

## **ENVIRONMENTAL PRECAUTIONS**

Toxic to aquatic organisms, non-target terrestrial plants, and small wild mammals. Observe spray 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 filter strip between the treated area and the edge of the water body.

Mefentrifluconazole is persistent and may carry over. It is recommended that this product not be used in areas treated with any products containing mefentrifluconazole during the previous season.

## **FIRST AID**

**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. 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 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.

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

#### **TOXICOLOGICAL INFORMATION**

Treat symptomatically.

## **STORAGE**

- 1. Store in original tightly closed container.
- 2. Store this product away from food or feed.
- 3. Store in cool, dry, locked, well-ventilated area without floor drain.

#### **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/territorial requirements.

# Disposal of unused, unwanted product

For information on disposal of unused, unwanted product, contact the manufacturer or the provincial/territorial regulatory agency. Contact the manufacturer and the provincial/territorial 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.

**Booklet** 

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NET CONTENTS: 0.1 L - Bulk

BASF Canada Inc. 5025 Creekbank Road Building A, 2nd floor Mississauga, Ontario L4W 0B6 1-877-371-2273

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#### **GENERAL INFORMATION**

**Navicon** is a broad-spectrum fungicide containing the active ingredients mefentrifluconazole and pyraclostrobin. For optimum disease management, apply **Navicon** in a regularly scheduled preventative spray program in rotation with non-Group 3 and 11 fungicides.

#### Mode of Action

The active ingredients in **Navicon** belong to the triazole and strobilurin class of fungicides. The mode of action of mefentrifluconazole inhibits demethylation step of sterol biosynthesis (DMI), which disrupts cell membrane synthesis and is classified by the Fungicide Resistance Action Committee (FRAC) as a Group 3 fungicide. Pyraclostrobin belongs to the group of respiration inhibitors known as quinone outside inhibitors (QoI) and classified by FRAC as a Group 11 fungicide.

## **PRECAUTIONS**

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- 3. May irrirate the skin. Avoid contact with skin and clothing.
- 4. Wash exposed areas of skin thoroughly after handling and before eating, drinking or smoking.
- 5. **DO NOT** enter or allow entry into treated areas until sprays have dried.
- 6. Wear coveralls over a long-sleeved shirt, long pants, chemical-resistant gloves, socks and shoes during mixing, loading, application, clean-up and repair. In addition, wear protective eyewear (goggles or face shield) during mixing, loading, clean-up and repair. Gloves are not required during application within a closed cab.
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## **ENVIRONMENTAL PRECAUTIONS**

TOXIC to aquatic organisms, non-target terrestrial plants, and small wild mammals. Observe spray 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 filter strip between the treated area and the edge of the water body.

Mefentrifluconazole is persistent and may carry over. It is recommended that any products containing mefentrifluconazole not be used in areas treated with this product during the previous season.

#### **FIRST AID**

**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.

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**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.

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

## **TOXICOLOGICAL INFORMATION**

Treat symptomatically.

#### **DIRECTIONS FOR USE**

## **ALL USES**

**Navicon** is a broad-spectrum fungicide for the control of many important diseases of turf grass. For maximum efficacy, **Navicon** should be applied preventively. Under high disease pressure, use the higher specified rate and/or shorter application interval.

All applications should be made according to the use directions indicated in the Application Rates and Intervals Table. Failure to follow directions and precautions on this label may result in turf grass injury and/or inferior disease control.

Apply **Navicon** in 4.0 - 16.0 litres of water per 100 square meters (400 - 1600 litres per hectare). Apply at higher water volume under heavy disease pressure or on higher cuts of turf.

**DO NOT** apply more than two (2) sequential applications of **Navicon** before alternating to a non-Group 3 and non-Group 11 fungicide registered for the same use.

#### **Turf Grass Tolerance**

Due to variability within turf grass species and application techniques, neither the manufacturer nor the seller has determined whether or not **Navicon** can safely be used on all turf grasses under all conditions. Therefore, it is recommended that the user determine if **Navicon** can be used safely before broad use. Apply the recommended use rate of **Navicon** on a small test area under conditions expected to be encountered. Monitor for any adverse effects during a 14-day period after application.

## **Application Rates and Intervals Table**

When applied as directed, **Navicon** will control the listed diseases.

Disease Controlled	Use Rate (mL/ 100 sq. m.)	Application Interval (days)	Additional Instructions
Anthracnose foliar blight and basal rot	12.5	14 – 21	Use the higher rate for areas with a history of severe
(Colletotrichum cereale)	25	21 – 28	disease pressure. Use the higher rate for basal rot symptoms.
Brown patch ( <i>Rhizoctonia solani</i> )	25	14 – 21	Use the shorter interval when prolonged favourable disease conditions exist.

Disease Controlled	Use Rate (mL/ 100 sq. m.)	Application Interval (days)	Additional Instructions
Brown ring patch (Rhizoctonia circinata var. circinata)	25	14	Apply preventively or as symptoms become evident. Use 800 – 1600 L spray volume per hectare. Provide short irrigation cycle directly following treatment to move fungicide through thatch. Disease symptoms may take 2–3 weeks to disappear following application. A sequential application is recommended.
Dollar spot (Sclerotinia homoeocarpa)	12.5	14 – 21 21 – 28	Use the higher rate for areas with a history of severe disease pressure.
Fairy ring (Basidiomycete fungi)	25	28	Apply preventively or as symptoms become evident. Use 800 – 1600 L spray volume per hectare. Provide short irrigation cycle directly following treatment to move fungicide through thatch. Disease symptoms may take 2-3 weeks to disappear following application. A sequential application is recommended.
Gray leaf spot ( <i>Pyricularia grisea</i> )	14 – 25	14 – 28	Apply preventative applications and continue applications while conditions are favourable for disease development.
Leaf spot ( <i>Drechslera</i> spp. <i>Bipolaris</i> spp.)	15.4 – 25	14	Apply when conditions are favourable for disease development.
Gray snow mould / Typhula blight ( <i>Typhula</i> incarnata, <i>T. ishikariensis</i> )	17 – 25	Make a single application in late fall just prior to snow cover.	
Microdochium patch (Fusarium patch) and Pink snow mould ( <i>Microdochium nivale</i> )	25	Make a single application in the late fall just prior to snow cover.	
Pythium blight ( <i>Pythium aphanidermatum</i> )	25	14	Begin preventative application when conditions are favourable for disease development.

Disease Controlled	Use Rate (mL/ 100 sq. m.)	Application Interval (days)	Additional Instructions
Pythium root dysfunction ( <i>Pythium</i> spp.)	25	14 – 28	Apply preventively or as symptoms become evident. Use 800 – 1600 L spray volume per hectare. Provide short irrigation cycle directly following treatment to move fungicide through thatch. Disease symptoms may take 2-3 weeks to disappear following application. A sequential application is recommended.
Rust ( <i>Puccinia</i> spp.)	12.5	14	Apply when conditions are favourable for disease development.
Summer patch (Magnaporthe poae)	25	21 – 28	Initiate applications in the spring when soil temperatures reach 15-18°C at a 5 cm soil depth, or as dictated by local recommendations.
Take-all patch (Gaeumannomyces graminis)	25	28	Apply preventively or as symptoms become evident. Use 800 – 1600 L spray volume per hectare. Provide a short irrigation cycle directly following application to move fungicide through thatch. Disease symptoms may take 2-3 weeks to disappear following application. Sequential application is recommended.

**DO NOT** apply more than 7.5 L/ha (75 mL/100m²) per year for control of all labelled diseases.

**DO NOT** apply more than 3 applications per year.

Disease Controlled	Use Rate	Application	Additional Instructions
	(mL/	Interval	
	100 sq. m.)	(days)	

#### TANK MIXING

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 BASF Canada Inc. at 1-877-371-2273 for information before mixing any pesticide that is not specifically recommended on this label.

Physical incompatibility, reduced disease control or turf injury may result from mixing **Navicon** with other products. Therefore, before using any tank mix (fungicides, insecticides, liquid fertilizers, biological control products, adjuvant and additives) test a small portion of the turf to be treated to ensure that a phytotoxic response will not occur.

## **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 **Navicon** to the tank.
- 4. Add the required amount of the tank mix partner, if required.
- 5. Continue agitation while filling the remainder of the spray tank.
- 6. After use, clean the spray tank according to PRECAUTIONS.

## **APPLICATION INSTRUCTIONS**

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 S572.1) medium classification. Boom height must be 60 cm or less above the crop or ground.

## **DO NOT** apply by air.

## **Spray Buffer Zones**

A spray buffer zone is NOT required for uses with hand-held application equipment permitted on this label.

The spray 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.

		Spray Buffer Zones (metres) Required for the Protection of:					
Method of application	Pest	Freshwater Habitat of Depths:		Estuarine/Marine Habitat of Depths:		Terrestrial	
		Less than 1 m	Greater than 1 m	Less than 1 m	Greater than 1 m	Habitat	
Field sprayer	Anthracnose foliar blight and basal rot (low rate), Dollar spot (low rate), Rust	10	3	1	1	1	
	Anthracnose foliar blight and basal rot (high rate), Dollar spot (high rate), Summer patch, Brown patch, Brown ring patch, Gray leaf spot, Leaf spot, Pythium blight, Pythium root dysfunction	20	5	2	1	1	
	Gray snow mould / Typhula blight, Microdochium patch, Pink snow mould	15	2	2	1	0	
	Fairy ring, Take-all patch	15	5	2	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 buffer zones for this product can be modified based on weather conditions and spray equipment configuration by accessing the Spray Buffer Zone Calculator on the Pesticides portion of the Canada.ca website.

#### RESISTANCE MANAGEMENT RECOMMENDATIONS

For resistance management, **Navicon** contains Group 3 and 11 fungicides. Any fungal population may contain individuals naturally resistant to **Navicon** and other Group 3 and 11 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 **Navicon** or other Group 3 and 11 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 BASF Canada if reduced sensitivity of the pathogen to **Navicon** 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 Inc. at 1-877-371-2273 or at www.betterturf.ca.

## **STORAGE**

- 1. Store in original tightly closed container.
- 2. Store this product away from food or feed.
- **3.** Store in cool, dry, locked, well-ventilated area without floor drain.

### **DISPOSAL**

### For Recyclable Containers

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## **NOTICE TO USER**

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