



GROUP	<b>U</b>	FUNGICIDE
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**NET CONTENTS:  
3.78 LITRE**

**BANOL**

**Aqueous Solution Fungicide**

**For Control of Pythium blight and Damping off caused by Pythium spp.  
on Turfgrass in Golf Courses and Sod Farms**

**COMMERCIAL**



**DANGER – CORROSIVE TO EYES**

**REGISTRATION NUMBER :29156  
PEST CONTROL PRODUCTS ACT**

**GUARANTEE :**  
Propamocarb hydrochloride 722 g/L

Bayer CropScience Inc.\*  
Suite 100, 3131 114<sup>th</sup> Avenue SE  
Calgary, AB T2Z 3X2  
Telephone: 1-888-283-6847

\*Bayer Environmental Science  
A Division of Bayer CropScience

**READ LABEL BEFORE USING AND ATTACHED BROCHURE  
KEEP OUT OF REACH OF CHILDREN**

**PRECAUTIONS: KEEP OUT OF REACH OF CHILDREN. HAZARDOUS TO HUMANS AND DOMESTIC ANIMALS.** Corrosive. Causes eye damage. Harmful if swallowed or absorbed through skin. Do not get in eyes or on clothing. Avoid contact with skin. Avoid breathing spray mist. Wash thoroughly with soap and water after handling and before eating, drinking, or smoking. If product comes in contact with clothing, remove all contaminated clothing, wash skin with soap and water and dress in clean clothing. Launder applicator clothing separate from other laundry. If this pest control product is to be used on a commodity that may be exported to the U.S. and you require information on acceptable residue levels in the U.S., visit CropLife Canada's web site at [www.croplife.ca](http://www.croplife.ca).

**Protective Clothing and Equipment:** During ALL activities, workers must wear long pants, long-sleeved shirts and boots. During mixing, loading, and cleanup of spray solution and when handling freshly treated soil medium workers must ALSO wear chemical resistant gloves and safety goggles or a face shield.

**FIRST AID:** 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 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 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:** Medical Personnel should contact Bayer's medical information services, toll-free: 1-800-334-7577. **Note To Physician:** Probable mucosal damage may contraindicate the use of gastric lavage.

**ENVIRONMENTAL PRECAUTIONS AND INFORMATION:** This product is toxic to fish, aquatic invertebrates, and marine/estuarine organisms. DO NOT allow effluent or runoff from greenhouses containing this product to enter lakes, streams, ponds or other waters. DO NOT contaminate water when disposing of equipment washwaters.

**STORAGE:** Do not contaminate water, food, or feed by storage or disposal. STORE IN A COOL PLACE, NOT BELOW 0°C OR ABOVE 30°C. If stored for 1 year or longer,

shake well before using. Store the tightly closed container away from feeds, seeds, fertilizer, plants and foodstuffs. Do not use or store in or around the home. Keep in original container during storage. In case of fire, leaking or damaged containers, call toll free 1-800-667-5959.

**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.

**Returnable Container Disposal:** Do not reuse this container for any purpose. For disposal, this empty container may be returned to the point of purchase (distributor/dealer).

**Disposal of Unused, Unwanted Product:** 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 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 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.



Bayer CropScience

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FUNGICIDE

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3.78 LITRE**

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**COMMERCIAL**

**TRIPLE**



**RINSE**

**DANGER – CORROSIVE TO EYES**

**REGISTRATION NUMBER : 29156  
PEST CONTROL PRODUCTS ACT**

**GUARANTEE :**

Propamocarb hydrochloride  
722 g/L

Bayer CropScience Canada Inc.\*  
#100-3131-114<sup>th</sup> Avenue S.E.  
Calgary, AB, T2Z 3X2  
Telephone: 1-888-283-6847

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KEEP OUT OF REACH OF CHILDREN**

## GENERAL INFORMATION

### Section 1: The Product

- BANOL is a fungicide with curative and systemic protectant for the control of Pythium spp soil borne diseases in turfgrass, In moist soil, the product is absorbed by the roots and translocated to the aerial parts of the plants, thereby protecting roots and foliage from disease infection.

## SAFETY AND HANDLING

### Section 2: Precautions, Protective Clothing and Equipment

#### PRECAUTIONS:

- KEEP OUT OF REACH OF CHILDREN
- HAZARDOUS TO HUMANS AND DOMESTIC ANIMALS
- Corrosive
- Causes eye damage.
- Harmful if swallowed or absorbed through skin.
- Do not get in eyes or on clothing.
- Avoid contact with skin.
- Avoid breathing spray mist.
- Wash thoroughly with soap and water after handling and before eating, drinking, or smoking.
- If product comes in contact with clothing, remove all contaminated clothing, wash skin with soap and water and dress in clean clothing. Launder applicator clothing separate from other laundry.
- If this pest control product is to be used on a commodity that may be exported to the US and you require information on acceptable residue levels in the US, visit CropLife Canada's web site at: [www.croplife.ca](http://www.croplife.ca).

#### Protective Clothing and Equipment:

- During ALL activities, workers must wear long pants, long-sleeved shirts and boots.
- During mixing, loading, and cleanup of spray solution and when handling freshly treated soil medium workers must ALSO wear chemical resistant gloves and safety goggles or a face shield.

### **Section 3: First Aid and Toxicological Information**

**FIRST AID:** 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 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 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:**

Medical personnel should contact Bayer's medical information services, toll-free: 1-800-334-7577.

**Note To Physician:** Probable mucosal damage may contraindicate the use of gastric lavage.

### **Section 4: ENVIRONMENTAL HAZARDS**

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 birds and small wild mammals.
- Toxic to aquatic organisms and non-target vascular plants. Observe buffer zones specified under DIRECTIONS FOR USE.
- This product is toxic to fish, aquatic invertebrates, and marine/estuarine organisms. DO NOT allow effluent or runoff from greenhouses containing this product to enter lakes, streams, ponds or other waters.
- DO NOT contaminate water when disposing of equipment washwaters.

### **Section 5: Storage**

- Do not contaminate water, food, or feed by storage or disposal.
- STORE IN A COOL PLACE, NOT BELOW 0° OR ABOVE 30°
- If stored for 1 year or longer, shake well before using.
- Store the tightly closed container away from feeds, seeds, fertiliser, plants and foodstuffs.
- Do not use or store in or around the home.

- Keep in original container during storage.
- In case of fire, leaking or damaged containers, call toll free 1-800-667-5959.

## **Section 6: 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.

### **Returnable Container Disposal:**

Do not reuse this container for any purpose. For disposal, this empty container may be returned to the point of purchase (distributor/dealer).

### **Disposal of Unused, Unwanted Product:**

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 cleanup of spills.

## **Section 7: Directions For Use**

### **GOLF COURSES and SOD FARMS WITH MECHANICAL HARVESTING EQUIPMENT**

#### **FOR PREVENTIVE CONTROL OF PYTHIUM BLIGHT AND PYTHIUM DAMPENING OFF (*Pythium aphanidermatum*)**

**APPLICATION RATE:** Apply 1 application of 64 ml of BANOL per 100 m<sup>2</sup> .

#### **APPLICATION TIMING:**

**Established Turf:** Apply as a preventive treatment to established turf during high temperature or humidity favourable to the development of Pythium blight.

Overseeded Turf: For overseeded areas apply immediately after germination to control Pythium damping-off.

#### **FOR CURATIVE CONTROL\* OF PYTHIUM BLIGHT (*Pythium aphanidermatum*)**

**APPLICATION RATE:** Apply 64 ml of BANOL per 100 m<sup>2</sup> .

**APPLICATION TIMING:** For a curative treatment on established turf, apply immediately as soon as a Pythium blight outbreak has occurred. \*Curative control will only be achieved if a preventative application has previously been made.

**RECOMMENDED WATER VOLUME:** Use water volumes of 7.5 - 19L per 100m<sup>2</sup>.

**RETREATMENT:** Retreat at 7-21 day intervals if conditions remain favourable for disease development. Use shorter interval under prolonged high temperatures and humidity.

Do not apply more than 2 applications of BANOL before alternating with a fungicide of a different group with a different mode of action.

Do not apply more than 3 applications per growing season.

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) and sensitive freshwater habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs and wetlands).

Method of application	Crop	Buffer Zones (metres) required for the Protection of:	
		Freshwater Habitat	Terrestrial Habitat
Field sprayer	Turf	1	1



## Section 8: Resistance Management

For resistance management, please note that BANOL contains a Group U fungicide. Any fungal population may contain individuals naturally resistant to BANOL and other Group U 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/bactericide resistance:

- Where possible, rotate the use of BANOL or other Group U fungicides with different groups that control the same pathogens. Use a maximum of three applications of BANOL per season.
- Use tank mixtures with fungicide 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 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 pathogens.

For further information and to report suspected resistance, contact Bayer CropScience representatives at 1-888-283-6847 or at [www.bayercropscience.ca](http://www.bayercropscience.ca).

## Section 9: Application Precautions and Re-entry Restrictions

### APPLICATION PRECAUTIONS:

- It is a violation of the Pest Control Products Act to use this product in a manner inconsistent with its labelling. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application.
- DO NOT allow spray mixture to remain in the tank overnight.

### Re-Entry Restrictions

#### **Golf Course Turf:**

The requirements in this box apply to uses of this product that are NOT within the scope of the worker protection restriction for agricultural pesticides. The worker protection restriction applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

**DO NOT** enter treated areas without protective clothing until sprays have dried.

**For Foliar Applications on Commercial Sod Farms:**

**DO NOT** enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours. This worker protection restriction provides for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides.

**Section 10: Mixing Instructions**

- Add one-half of the required amount of water to the spray or mixing tank and start agitation.
- Add the required quantity of BANOL to the water and complete filling with water to the required total volume.
- Agitate thoroughly and spray out immediately.

**Note:** Undiluted BANOL is corrosive to all metals except stainless steel. Rinse all metal application equipment thoroughly after use.

**Section 11: Notices**

**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.

FOR MORE INFORMATION CONTACT:

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