



**\*\*BOOKLET\*\***

GROUPS	3	4	FUNGICIDES
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# **RAXIL<sup>®</sup> MD FUNGICIDE**

**SUSPENSION**

**SYSTEMIC FUNGICIDE SEED PROTECTANT FOR WHEAT, BARLEY AND OATS**

Raxil MD Fungicide is a combination of the systemic fungicides, tebuconazole and metalaxyl which control certain seed, seedling, and soil borne diseases of wheat, barley and oats.

## **AGRICULTURAL**

**GUARANTEE:** tebuconazole..... 5.0 g/L  
metalaxyl..... 6.6 g/L

**REGISTRATION NO. 27692 PEST CONTROL PRODUCTS ACT**

**READ THE LABEL AND BOOKLET BEFORE USING**

**PROTECT FROM FREEZING**

**NET CONTENTS: 10 L, 55 L, 100 L, 200 L, 1,000 L**

**Bayer CropScience Inc.  
#100-3131 – 114 Avenue S.E.  
Calgary, AB T2Z 3X2**

**For product information, call: 1-888-283-6847**

**In case of spills, poisoning, fire or other emergencies,  
call: 1-800-334-7577 (24 hours a day)**

Raxil<sup>®</sup> is a registered trademark of Bayer AG.

**GENERAL INFORMATION:** Raxil MD Fungicide is a combination of the systemic fungicides, tebuconazole and metalaxyl, which control the following seed, seedling, and soil borne diseases of wheat, barley and oats.

<b>Crop</b>	<b>Diseases</b>
Wheat	<p><b>Diseases Controlled:</b>            Loose smut            Common bunt or stinking smut            Seed rot and pre-emergent damping-off caused by seed- and soil-borne <i>Fusarium spp.</i>            Seedling blight caused by seed-borne <i>Fusarium spp.</i>            Damping-off caused by <i>Pythium spp.</i>            Seed-borne <i>Septoria nodorum</i></p> <p><b>Diseases Suppressed:</b>            Root and Crown rot caused by seed- and soil-borne <i>Fusarium spp.</i>            Common root rot caused by seed- and soil-borne <i>Cochliobolus sativus</i>            Seed rot and pre-emergent damping-off caused by seed- and soil-borne <i>Cochliobolus sativus</i>            Seedling blight caused by seed-borne <i>Cochliobolus sativus</i></p>
Barley	<p><b>Diseases Controlled:</b>            True loose smut            Covered smut            False loose smut            Seed rot and pre-emergent damping-off caused by seed- and soil-borne <i>Fusarium spp.</i>            Seedling blight caused by seed-borne <i>Fusarium spp.</i>            Damping-off caused by <i>Pythium spp.</i>            Barley leaf stripe</p> <p><b>Diseases Suppressed:</b>            Root and Crown rot caused by seed- and soil-borne <i>Fusarium</i> species            Common root rot caused by seed- and soil-borne <i>Cochliobolus sativus</i>            Seed rot and pre-emergent damping-off caused by seed- and soil-borne <i>Cochliobolus sativus</i>            Seedling blight caused by seed-borne <i>Cochliobolus sativus</i></p>

Oats	<b>Diseases Controlled:</b> Covered smut Loose smut Seed rot and pre-emergent damping-off caused by seed- and soil-borne <i>Fusarium spp.</i> Seedling blight caused by seed-borne <i>Fusarium spp.</i> Damping-off caused by <i>Pythium spp.</i>
	<b>Diseases Suppressed:</b> Root and Crown rot caused by seed- and soil-borne <i>Fusarium</i> species Common root rot caused by seed- and soil-borne <i>Cochliobolus sativus</i> Seed rot and pre-emergent damping-off caused by seed- and soil-borne <i>Cochliobolus sativus</i> Seedling blight caused by seed-borne <i>Cochliobolus sativus</i>

**DIRECTIONS FOR USE:**

**WHEAT, BARLEY AND OATS:**

Raxil MD Fungicide is a ready to use formulation designed for commercial or on-farm treating with conventional seed treating equipment which can accurately control application rates and provide good distribution of the chemical onto the seed in the mixing chamber. Uniform application to seed is necessary to ensure seed safety and best disease control.

Use 300 ml of Raxil MD Fungicide per 100 kg of seed.

1. Seed is protected by Raxil MD Fungicide as soon as it is treated. Seed may be planted immediately.
2. Calibrate seeding equipment using treated seed to insure proper seeding rate.
3. Germination will not be affected by treatment as long as over application does not occur and seed is properly stored. All seed carried from one year to the next, whether treated or untreated should be checked for germination before planting.
4. Uniform coverage at the correct rate is important for satisfactory results. Under treatment will lead to loss of efficacy and over treatment could reduce germination. Refer to instructions supplied with your seed treater or to information supplied by Bayer CropScience for assistance with proper treating.

**RESISTANCE MANAGEMENT RECOMMENDATIONS:**

For resistance management, please note that Raxil MD Fungicide contains both Group 3 and Group 4 fungicides. Any fungal population may contain individuals naturally resistant to Raxil MD Fungicide and other Group 3 or Group 4 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 Raxil MD Fungicide or other Group 3, 4 fungicides with different groups that control the same pathogens.
- 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 disease problems in your area.
- For further information or to report suspected resistance contact Bayer CropScience at 1-888-283-6847.

#### **USE LIMITATIONS:**

All bags containing treated seed for sale or use in Canada must be labeled or tagged as follows:

- This seed has been treated with Raxil MD Fungicide containing tebuconazole and metalaxyl. Use chemical-resistant gloves when handling treated seed.
- Do not use for food, feed or oil processing.
- Do not graze or feed livestock on treated areas for 4 weeks after planting.
- Do not contaminate feed or foodstuffs with treated seed.
- Do not apply this product directly to freshwater habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs, ditches and wetlands), estuaries or marine habitats.
- Do not contaminate irrigation or drinking water supplies or aquatic habitats by cleaning of equipment or disposal of wastes.
- Do not expose treated seeds on soil surface. Any spilled or exposed seed must be incorporated into the soil or otherwise cleaned-up from the soil surface.
- **APPLICATORS AND OTHER HANDLERS MUST WEAR:** coveralls or a long-sleeved shirt and long pants, shoes plus socks and chemical resistant gloves. In addition, wear a suitable dust mask when bagging or sewing bags of treated seed or when transferring seed to a storage bin.
- Dispose of all excess treated seed. Left over treated seed may be doublesown around the headland or buried away from water sources in accordance with local requirements.
- Dispose of seed packaging in accordance with local requirements. **DO NOT** re-use bags from treated seed to handle food or feed products.

**ENVIRONMENTAL HAZARDS:**

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

**PRECAUTIONS:**

**KEEP OUT OF REACH OF CHILDREN.** Wash hands thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

Do not apply in a way that this product will contact workers or other persons either directly or through drift. Only handlers (mixers, loaders and applicators) wearing personal protective equipment may be in the area being treated during application.

**APPLICATORS AND OTHER HANDLERS MUST WEAR:** coveralls or a long-sleeved shirt and long pants, shoes plus socks and chemical resistant gloves. In addition, wear a suitable dust mask when bagging or sewing bags of treated seed or when transferring seed to a storage bin.

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

User should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing 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.

Work in a well-ventilated area when treating seed or while augering or handling treated seed. Augers used for handling treated seed should not be used to move seed for feed, food or oil processing.

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 the acceptable residue levels in the U.S., visit CropLife Canada's web site at: [www.croplife.ca](http://www.croplife.ca).

**FIRST AID:**

**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 to 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.

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

### **TOXICOLOGICAL INFORMATION:**

This compound does not cause any definite symptoms that would be diagnostic. Treat symptomatically.

### **STORAGE AND DISPOSAL:**

**STORAGE:** Store product in original container only, away from other pesticides, fertilizer, food or feed. Store in a cool, dry place and avoid excessive heat. Keep container closed. Do not contaminate water, food, or feed by storage, disposal, or by cleaning of equipment.

### **DISPOSAL:**

#### **DISPOSAL OF TREATED SEED:**

- **Dispose of all excess treated seed. Left over treated seed may be doublesown around the headland or buried away from water sources in accordance with local requirements.**
- **Dispose of seed packaging in accordance with local requirements. DO NOT re-use bags from treated seed to handle food or feed products.**

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 clean-up of spills.

### **NON-RETURNABLE CONTAINERS:**

Do not reuse this container for any purpose. Before disposing of the container it should be triple rinsed. See section "TRIPLE RINSING INSTRUCTIONS FOR CONTAINER DISPOSAL"

1. Triple- or pressure-rinse the empty container. Add the rinsings to the mixture in the tank.
2. Follow provincial instruction for any required additional cleaning of the container prior to its disposal.
3. Make the empty container unsuitable for further use.
4. Dispose of the container in accordance with provincial requirements.

#### RECYCLABLE CONTAINERS:

Do not reuse this container for any purpose. Before disposing of the container it should be triple rinsed. See section "TRIPLE RINSING INSTRUCTIONS FOR 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 mixture in the tank.
- 2) Make the empty 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 CONTAINERS:

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

#### REFILLABLE CONTAINERS:

For disposal, this container may be returned to the point of purchase (distributor/dealer). It must be refilled by the distributor/dealer with the same product. Do not reuse this container for any other purpose.

**TRIPLE RINSING INSTRUCTIONS (FOR RECYCLABLE AND DISPOSABLE CONTAINERS ONLY):** This container should be triple-rinsed prior to its disposal. The rinsate can be added to the seed treatment. Follow these steps for rinsing of containers:

1. Transfer Raxil MD Fungicide from the container to the seed treating equipment applicator tank.
2. Add 1/3 of the rinse water to the container and agitate the contents.
3. Transfer the rinsate to the applicator tank.
4. Rinse as above 2 more times.
5. Thoroughly mix the Raxil MD Fungicide and rinse water in the applicator tank prior to use.

**CAUTION:** Be sure to adjust the undiluted application rate by the same volume of water added to compensate for the dilution of the product caused by the addition of rinsate.

#### **NOTICE: READ CAREFULLY**

Treatment of highly mechanically damaged seed or seed of known low vigor may result in reduced germination and/or reduction of seedling vigor.

When seed quality is questionable or unknown, conducting a germination test on a small portion of treated seed is recommended before treating the whole seed lot.

Due to seed quality and storage conditions which are beyond the control of Bayer CropScience,

Inc., no claims are made to guarantee germination of seed which has been treated and kept longer than the period, if any that is stated in the DIRECTIONS FOR USE section of this 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.