

# Raxil PRO Fungicide

GROUP 3 4 FUNGICIDE

A Seed Treatment Fungicide for seed and seedling protection against certain seed-borne and soil-borne diseases on labeled crops.

# SUSPENSION

# AGRICULTURAL

ACTIVE INGREDIENT:	tebu
	prot

tebuconazole..... 3.0 g/L prothioconazole... 15.4 g/L metalaxyl..... 6.2 g/L

# REGISTRATION NO. 30102 PEST CONTROL PRODUCTS ACT

# DANGER – CORROSIVE TO EYES

# READ THE LABEL AND ATTACHED BOOKLET BEFORE USING

# PROTECT FROM FREEZING

# NET CONTENTS: 0.947 L - 1000 L

## ALL SEED TREATED WITH THIS PRODUCT MUST BE CONSPICUOUSLY COLOURED

Bayer CropScience Inc. Suite 200, 160 Quarry Park Blvd. SE Calgary, AB T2C 3G3

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)

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# GENERAL INFORMATION

#### Section 1: The Product

Raxil PRO is a seed treatment containing the fungicides prothionconazole, tebuconazole and metalaxyl. Raxil PRO provides protection from seed, seedling and soil-borne diseases caused by certain *Ustilago* spp. *Tillecia* spp. *Fusarium* spp., *Pythium* spp., *Cochliobolus* sativus, *Pyrenophora* spp, *Aspergillus* spp., *Penicillium* spp. and *Rhizoctonia* solani on labeled crops

# SAFETY AND HANDLING

Section 2: Precautions, Protective Clothing and Equipment

#### PRECAUTIONS:

- KEEP OUT OF REACH OF CHILDREN.
- DANGER Causes irreversible eye damage. Harmful if swallowed, inhaled, or absorbed through skin. DO NOT get in eyes. Wear protective eyewear. Avoid contact with skin and breathing vapor or spray mist. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Remove and wash contaminated clothing before reuse.
- Wear long pants, a long-sleeved shirt, chemical-resistant gloves, protective eyewear (goggle or face shield), shoes and socks during mixing, loading and treating. Wear long pants, a long-sleeved shirt, chemical-resistant gloves, shoes and socks during clean-up, maintenance of seed treatment equipment, bagging, sewing or stacking of bagged treated seed. In addition, workers must wear NIOSH-approved N95 (minimum) filtering facepiece respirator (dust mask) that is properly fit tested when bagging or sewing bags of treated seed or when transferring seed to a storage bin.
- Do not apply in a way that this product will contact workers or other persons. Only handlers (mixers, loaders and applicators) wearing personal protective equipment may be in the area being treated during application.
- Wear long-sleeved shirt, long pants and chemical-resistant gloves when handling treated seed.
- All bags containing treated seed must be labelled or tagged as follows: "This seed has been treated with Raxil PRO containing prothioconazole, tebuconazole and metalaxyl. Wear a long-sleeved shirt, long pants, shoes with socks and chemical-resistant gloves when handling treated seed. DO NOT use for feed, food or oil processing. Store away from feeds and other foodstuffs. Any spilled or exposed seeds must be incorporated into the soil or otherwise cleaned-up from the soil."
- If this pest control product is to be used on a commodity that may be exported and you require information regarding Maximum Residue Limits for an importing country, please contact Bayer CropScience Canada Inc. at 1-888-283-6847 or <a href="https://www.cropscience.bayer.ca">www.cropscience.bayer.ca</a>.

# Section 3: First Aid and Toxicological Information

#### 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:

There is no specific antidote if this product is ingested. Treat symptomatically.

#### Section 4: Environmental Precautions and Information

#### ENVIRONMENTAL HAZARDS:

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

Section 5: 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. To prevent contamination, store this product away from food or feed.

#### Section 6: Disposal

#### FOR NON-RETURNABLE CONTAINERS:

- 1. Triple- or pressure-rinse the empty container. Add the rinsings to the mixture in the tank.
- 2. Follow provincial instructions 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.

#### 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 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.

#### FOR 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).

#### FOR 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 use this container for any other purpose.

TRIPLE RINSE 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 PRO 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 PRO 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.

#### 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 clean-up of spills.

#### DISPOSAL OF TREATED SEED:

Dispose of all excess treated seed. Left over treated seed may be double-sown 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.

#### Section 7: 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.

## DIRECTIONS FOR USE

Raxil PRO is a ready-to-use seed treatment formulation for use in commercial seed treatment operations and for on-farm treatment with conventional seed treating equipment which can accurately meter, mix and apply flowable seed treatment formulations. Allow seeds to dry before bagging, storing or seeding. Uniform application to seed is necessary to ensure best disease protection and seed safety.

As this product in 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.

#### Section 8: Pests Controlled

Raxil PRO is a seed treatment containing the fungicides prothionconazole, tebuconazole and metalaxyl. Raxil PRO provides protection from seed, seedling and soil-borne diseases caused by certain *Ustilago* spp. *Tillecia* spp. *Fusarium* spp., *Pythium* spp., *Cochliobolus sativus, Pyrenophora* spp, *Aspergillus spp., Penicillium spp.* and *Rhizoctonia solani* on labeled crops.

# Section 9: Recommended Uses

CROP	PEST	APPLICATION RATE	DIRECTIONS
Barley	Control:Seed rot, pre-emergent damping-off caused by seed- and soil-borne Fusarium spp., Cochliobolus sativus and soil-borne Pythium spp.Seedling blight caused by seed-borne 	Apply 325 mL per 100 kg of seed	Use only in 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 best disease protection and seed safety.
l	Suppression:	1	
	Root and Crown rot caused by seed- and soil-borne <i>Fusarium spp</i> . Common root rot caused by seed- and soil-		
	borne Cochliobolus sativus		
	Seedling blight caused by seed-borne <i>Penicillium spp</i> .		
	Seed rot, pre-emergent damping off and root rot caused by <i>Rhizoctonia solani</i>		

CROP	PEST	APPLICATION RATE	DIRECTIONS
Wheat, Oats, Rye, Triticale	Control: Seed rot, pre-emergent damping-off caused by seed- and soil-borne <i>Fusarium spp.</i> , <i>Cochliobolus sativus</i> and soil-borne <i>Pythium spp</i> . Seedling blight caused by seed-borne <i>Fusarium spp.</i> , <i>Cochliobolus sativus</i> and soil-borne, <i>Fusarium spp</i> . and <i>Pythium spp</i> . Post-emergent damping-off caused by seed- and soil-borne <i>Fusarium spp</i> . and <i>Cochliobolus sativus</i> Seed rot, pre-emergent damping-off, post- emergent damping-off and seedling blight caused by seed-borne <i>Aspergillus spp</i> . Loose smut ( <i>Ustilago tritici</i> , <i>U. avenae</i> ) Common bunt ( <i>Tilletia tritici</i> , <i>T. laevis</i> ) on wheat, rye, triticale Covered smut ( <i>Ustilago kolleri</i> ) on oats <b>Suppression:</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> Seedling blight caused by seed- and soil- borne <i>Cochliobolus sativus</i> Seedling blight caused by seed- borne <i>Penicillium spp</i> . Seed rot, pre-emergent damping off and root rot caused by <i>Rhizoctonia solani</i>	Apply 325 mL per 100 kg of seed	Use only in 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 best disease protection and seed safety.

#### TANK-MIXTURES

For control of certain insect pests, Raxil PRO may be combined with certain seed treatment insecticides.

For recommended tank-mixes, read the label directions for each product and follow the most restrictive label precautions and limitations.

CROP	TANK-MIX PARTNER
Wheat, Barley, Oats	Stress Shield

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	Section 10:	Application Cautions	

SEED QUALITY: Lab and field studies have shown that Raxil PRO treated seed can be stored without loss in germination or disease performance. Many seed types are prone to mechanical damage during seed handling, and a reduction in germination within a seed lot can occur should handling cause seed damage irrespective of seed treatment application. Raxil PRO-treated or untreated seed may drop in germination with age and germination drops are accelerated under adverse storage conditions or in seed with a high level of mechanical damage. Use handling equipment designed to minimize mechanical damage when moving seed. Due to seed quality and seed storage conditions beyond the control of Bayer CropScience, no claims are made to guarantee the germination of carry-over seed or propagating materials for all crop seed. Treatment of highly mechanically scarred or damaged seed, or seed known to be of low vigour and poor quality, may result in reduced germination and/or reduction of seed and seedling vigour. Treat a small quantity of seed using equipment similar to that planned for treating the total seed lot. Conduct germination tests on a small portion of seed before committing the total seed lot to a selected seed treatment.

#### Section 11: Use Limitations

#### USE RESTRICTIONS:

• Treated seed must not be used for food, feed or oil processing.

#### LABELLING TREATED SEED:

All bags containing treated seed must be labelled or tagged as follows: "This seed has been treated with Raxil PRO, containing prothioconazole, tebuconazole and metalaxyl. Wear a long-sleeved shirt, long pants, shoes with socks and chemical-resistant gloves when handling treated seed. DO NOT use for feed, food or oil processing. Store away from feeds and other foodstuffs. Any spilled or exposed seeds must be incorporated into the soil or otherwise cleaned-up from the soil."

# Section 12: Resistance Management Recommendations

For resistance management, please note that Raxil PRO contains Group 3 and Group 4 fungicides. Any fungal population may contain individuals naturally resistant to Raxil PRO and other Group 3 and 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 PRO or other Group 3 and 4 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 fungal populations for resistance development. Notify Bayer CropScience if reduced sensitivity of the pathogen to Raxil PRO 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 Inc. at 1-888-283-6847 or at <u>www.cropscience.bayer.ca</u>.