

****Booklet Label****



Bayer CropScience

PROSARO XTR

FUNGICIDE
EMULSIFIABLE CONCENTRATE

GROUP	3	FUNGICIDE
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FOR CONTROL OR SUPPRESSION OF LISTED DISEASES IN WHEAT, BARLEY AND OATS,

COMMERCIAL

DANGER – CORROSIVE TO EYES AND SKIN
CAUTION - SKIN IRRITANT
POTENTIAL SKIN SENSITIZER

REGISTRATION NUMBER 32824 PEST CONTROL PRODUCTS ACT

GUARANTEE:

Prothioconazole	125 g/L
Tebuconazole	125 g/L

**READ THE LABEL AND BOOKLET BEFORE USING
KEEP OUT OF REACH OF CHILDREN**

NET CONTENTS: 6.5 to 324 L (BULK)

Product Information: 1-888-283-6847

Bayer CropScience Inc.
Suite 200, 160 Quarry Park Blvd. S.E.
Calgary, Alberta T2C 3G3

In case of spills, poisoning or fire, telephone emergency response number
1-800-334-7577 (24 hours a day)



PROSARO XTR Fungicide

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For more information, contact:

Bayer CropScience Inc.
Suite 200, 160 Quarry Park Blvd. S.E.
Calgary, Alberta T2C 3G3

GENERAL INFORMATION

Section 1: 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.

Section 2: The Product

PROSARO XTR Fungicide is a broad-spectrum systemic fungicide for the control or suppression of listed diseases on wheat, barley and oats.

SAFETY AND HANDLING

Section 3: Precautions, Protective Clothing & Equipment, and Re-entry Restriction

PRECAUTIONS:

KEEP OUT OF REACH OF CHILDREN. Harmful if swallowed, inhaled or absorbed through the skin. Causes irreversible eye damage. Severely irritating to the eye. Do NOT get in eyes. Avoid contact with skin, eyes, and clothing. May irritate the skin. Avoid contact with skin. Avoid breathing vapor or 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. DO NOT re-enter treated fields until 12 hours post-application. Apply only when the potential for drift to areas of human habitation or areas of human activity such as houses, cottages, schools and recreational areas is minimal. Take into consideration wind speed, wind direction, temperature inversions, application equipment and sprayer settings.

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 www.bayercropscience.ca

PROTECTIVE CLOTHING AND EQUIPMENT:

Wear coveralls over long pants, long-sleeved shirt, chemical-resistant gloves, socks, chemical-resistant footwear, goggles or faceshield during mixing, loading, application, clean-up and repair activities. Coveralls, chemical-resistant gloves and protective eyewear are not required during application within closed cabs or cockpits.

Section 4: First Aid and Toxicological Information
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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:

- Treat symptomatically.
- Medical Personnel should contact Bayer's Medical Information Services, Toll-Free: 1-800-334-7577.

Section 5: Environmental Hazards

Toxic to birds, small wild animals, aquatic organisms and non-target plants. Observe buffer zones specified under DIRECTIONS FOR USE and APPLICATION IN FIELDS ADJACENT TO AQUATIC AREAS. As this product is not registered for the control of pests in aquatic systems, DO NOT use to control aquatic pests. Do not apply to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Runoff is hazardous to aquatic organisms in neighboring areas. 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. Tebuconazole is persistent and will carryover. It is recommended that any products containing tebuconazole not be used in areas treated with this product during the previous season. To reduce run off refer to the recommendations under "APPLICATION IN FIELDS ADJACENT TO AQUATIC AREAS".

Section 6: Storage

Storage:

- Do not contaminate water, food, or feed by storage or disposal.
- Keep away from fire or open flame or other sources of heat.
- Do not store at temperatures below freezing.

- 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 1-800-334-7577.

Section 7: 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: Do not reuse this container for any purpose. For disposal, this empty container may be returned to the point of purchase (distributor/dealer).

Refillable Container: For disposal, this empty 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.

Non-Returnable Container:

1. Triple or pressure-rinse the empty container. Add the rinsings to the spray 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.

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.

Disposal of Unused Spray Solution:

If any spray solution remains in the tank after spraying is finished, it should be sprayed on the perimeter of the area just sprayed, NOT ON THE CROP, away from water supplies, ditches, and irrigation canals. Buffer zones indicated in the DIRECTIONS FOR USE must also be respected.

DIRECTIONS FOR USE**Introduction**

PROSARO XTR Fungicide is a broad-spectrum systemic fungicide for control of a wide range of diseases on wheat (spring, winter and durum), barley and oats, PROSARO XTR Fungicide will protect the crop from yield and quality losses due to disease.

Section 8: Crop, Disease, Rate and Timing			
USE DIRECTIONS			
CROP	DISEASE	RATE (mL/ha)	REMARKS
<u>Wheat,</u> (spring, winter and durum)	Suppression of: Fusarium Head Blight (<i>Gibberella zeae</i> / <i>Fusarium graminearum</i>) Control of: Rust (Leaf, Stem and Stripe)(<i>Puccinia recondita</i> , <i>P. graminis</i> , <i>P. striiformis</i>) Leaf & Glume Blotch (<i>Septoria tritici</i> , <i>Stagonospora nodorum</i>) Tan Spot (<i>Pyrenophora tritici-repentis</i>) Powdery mildew (<i>Erysiphe graminis</i>)	800	For suppression of Fusarium Head Blight, apply PROSARO XTR Fungicide as a preventative spray within the time period from when at least 75% of the wheat heads on the main stem are fully emerged to when 50% of the heads on the main stem are in flower. Application at this timing will also control the listed leaf diseases. Apply by ground or aerial application equipment. For ground application, apply specified dosage in a minimum of 100 L of water per hectare. For aerial application, apply specified dosage in a minimum of 50 L of water per hectare.
<u>Barley</u>	Suppression of: Fusarium Head Blight (<i>Fusarium spp.</i>) Control of: Net Blotch (<i>Pyrenophora teres</i>) Spot Blotch (<i>Cochliobolus sativus</i>) Scald	800	For suppression of Fusarium head blight, apply PROSARO XTR Fungicide as a preventative spray within the time period when 70 to 100% of the barley main stem heads are fully emerged, to 3 days after full head emergence. Application at this timing will also control the listed leaf diseases. Apply by ground or aerial application equipment. For ground application, apply specified dosage in a minimum of 100 L of water per hectare. For aerial

	<i>(Rhynchosporium secalis)</i> Leaf Blotch <i>(Septoria passerinii)</i> Leaf, Stem and Stripe Rusts <i>(Puccinnia hordei, Puccinia graminis, Puccinia striiformis)</i> Powdery Mildew <i>(Erysiphe graminis)</i>		application, apply specified dosage in a minimum of 50 L of water per hectare.
<u>Oats</u>	Control of: Crown Rust <i>(Puccinia coronata)</i> Stem Rust <i>(Puccinia graminis)</i> Stagonospora (Septoria) leaf blotch and black stem <i>(Stagonospora avenae syn. Septoria avenae)</i>	800	Apply PROSARO XTR Fungicide as a preventive foliar spray when the earliest disease symptoms appear on the leaves and stems. Fields should be observed closely for early disease symptoms, particularly when susceptible varieties are planted and/or under prolonged conditions favorable for disease development. Apply by ground or aerial application equipment. For ground application, apply specified dosage in a minimum of 100 L of water per hectare. For aerial application, apply specified dosage in a minimum of 50 L of water per hectare.

SEQUENTIAL APPLICATIONS IN WHEAT AND, BARLEY,:

Prosaro XTR Fungicide may be applied sequentially after an application of Folicur 432F Foliar Fungicide or Folicur 250 EW Fungicide. Please refer to respective product labels for specific use directions, pertinent recommendations, restrictions and precautions.

Recommended Applications:

Application Timing/Crop	Minimum Interval between Applications
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Stage/Product/Product Rates for single application		and Maximum Seasonal Application Rates	
Vegetative stage	Heading/Anthesis	Minimum Interval between applications	Maximum seasonal tebuconazole rate (g a.i./ha)
Folicur 432F 220-292 mL/ha (95-126 g tebuconazole/ha)	PROSARO XTR 800 mL/ha (100 g prothioconazole + 100 g tebuconazole)	7 days	226
Folicur 250 EW 375-500 mL/ha (93.8-125 g tebuconazole/ha)	PROSARO XTR 800 mL/ha (100 g prothioconazole + 100 g tebuconazole)	7 days	226

Resistance Management Advisory for Cereal Crops:

Repeated applications of standalone DMI fungicides should not be used on the same crop in one season against high risk pathogens, such as cereal powdery mildew, in areas of high disease pressure for that particular pathogen. Mixture products, tank-mixtures or alternation with fungicides having a different mode of action applied at effective rates have been shown to protect against the development of resistant forms of disease.

Section 9: Use Limitations

- A maximum of one application of PROSARO XTR Fungicide may be applied per crop season.
- Applications may not be made within 36 days of harvest.
- Do not allow livestock to graze or feed green forage to livestock prior to 6 days after treatment with PROSARO XTR Fungicide.
- Straw cut after harvest may be fed or used for bedding.
- Do not enter treated fields for 12 hours after application.
- **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.
- 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 S572.1) medium classification. Boom height must be 60 cm or less above the crop or ground.

- Aerial application: **DO NOT** apply during periods of dead calm. Avoid application of this product when winds are gusty. **DO NOT** apply when wind speed is greater than 16 km/h at flying height at the site of application. **DO NOT** apply with spray droplets smaller than the American Society of Agricultural Engineers (ASAE S572.1) medium classification. To reduce drift caused by turbulent wingtip vortices, the nozzle distribution along the spray boom length **MUST NOT** exceed 65% of the wing- or rotorspan.

Buffer zones:

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). In addition to the buffer zones specified in the table below, users must also observe buffer zones specified under APPLICATION IN FIELDS ADJACENT TO AQUATIC AREAS.

Method of application	Crop		Buffer Zones (metres) Required for the Protection of:
			Terrestrial Habitats
Field sprayer	Wheat (spring, winter and durum), Barley and Oats,		1
Aerial	Wheat (spring, winter and durum), Barley and Oats,	Fixed and rotary wing	15

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.

The spray drift buffer zones required for the protection of terrestrial habitats for this product can be modified based on weather conditions and spray equipment configuration by accessing the Buffer Zone Calculator on the Pest Management Regulatory Agency web site.

APPLICATION IN FIELDS ADJACENT TO AQUATIC AREAS:

OBSERVE THE FOLLOWING PRECAUTIONS WHEN SPRAYING IN THE VICINITY OF AQUATIC AREAS SUCH AS LAKES, RESERVOIRS, RIVERS, PERMANENT STREAMS, MARSHES OR NATURAL PONDS, AND ESTUARIES.

DO NOT contaminate irrigation or drinking water supplies or aquatic habitats by cleaning of equipment or disposal of wastes. 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.

Do not cultivate within 3 metres of an aquatic area to allow growth of a vegetative filter strip.

Do not apply by ground or air within 30 metres of aquatic areas listed above.

The aquatic buffer zone of 30 meters **may not** be modified by the Buffer Zone Calculator on the Pest Management Regulatory Agency web site.

Rotational Crops:

Treated areas may be replanted with any crop specified on this label and soybean as soon as practical after the last application. For all other crops, do not plant back within 120 days of last application.

Section 10: Pre-harvest Intervals

<u>Crop</u>	<u>PHI</u>
Wheat (spring, winter and durum)	36 days
Barley	36 days
Oats	36 days

Section 11: Mixing Instructions

Mixing Instructions:

PROSARO XTR Fungicide must be applied with properly calibrated, clean equipment. Prior to adding PROSARO XTR Fungicide to the spray tank, ensure that the spray tank is thoroughly clean.

PROSARO XTR Fungicide applied alone:

- Add one-half of the required amount of water to the spray or mixing tank and start agitation.
- Add the required quantity of PROSARO XTR Fungicide to the water and complete filling with water to the required total volume.
- Maintain agitation throughout mixing and spraying.

Section 12: Application Precautions

GROUND APPLICATION:

1. Use well-maintained and calibrated conventional spray equipment, which provides adequate and uniform coverage.
2. Apply PROSARO XTR Fungicide in a minimum of 100 L water/ha.

3. Spray screens should be no finer than 50 mesh.
4. Ensure that the by-pass line discharges at the bottom of the tank to minimize foaming.
5. Maintain pressure at no less than 275 kPa to ensure good foliage penetration and coverage.
6. Provincial buffer zones that are greater than the buffer zones indicated in the DIRECTIONS FOR USE, Section 9, should be respected.
7. If spray mixture remains in the tank overnight, or for long periods during the day, agitate thoroughly prior to application.

AERIAL APPLICATION-GENERAL INFORMATION:

1. Apply only by fixed-wing or rotary aircraft equipment which has been functionally and operationally calibrated for the atmospheric conditions of the area and the application rates and conditions of this label.
2. Label rates, conditions and precautions are product specific. Read and understand the entire label before opening this product. Apply only at the rate recommended for aerial application on this label. Where no rate for aerial application appears for the specific use, this product cannot be applied by any type of aerial equipment. If you have questions, call 1-888-283-6847 or obtain technical advice from the distributor or your provincial agricultural representative.
3. Ensure uniform application. To avoid streaked, uneven or overlapped application, use appropriate marking devices.
4. Apply PROSARO XTR Fungicide in a minimum of 50 L of water/ha.
5. To ensure proper coverage and distribution and to minimize drift, check to see that swath width and droplet size are adequate, and that wind velocities are low.
6. Use mechanical flaggers only.

AERIAL APPLICATION-USE PRECAUTIONS:

1. Apply only when meteorological conditions at the treatment site allow for complete and even crop coverage.
2. Apply only under conditions of good practice specific to aerial application as outlined in the *National Aerial Pesticide Application Manual*, developed by the Federal/Provincial/Territorial committee on Pest management and Pesticides.

AERIAL APPLICATION- OPERATOR PRECAUTIONS:

1. **DO NOT** allow the pilot to mix chemicals to be loaded onto the aircraft. Loading of premixed chemicals with a closed system is permitted.
2. It is desirable that the pilot has communication capabilities at each treatment site at the time of application.
3. The field crew and the mixer/loaders must wear chemical resistant gloves, coveralls and goggles or face shield during mixing/loading, cleanup and repair. Follow the more stringent label precautions in cases where the operator precautions exceed the generic label recommendations on the existing ground boom label.

4. All personnel on the job site must wash hands and face thoroughly before eating and drinking.
5. Protective clothing, aircraft cockpit and vehicle cabs must be decontaminated regularly.
6. Read and understand the entire label before opening this product. If you have questions, call the manufacturer at 1-888-283-6847 or obtain technical advice from the distributor or your provincial agricultural representative.

Section 13: Resistance Management Recommendations
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For resistance management, please note that PROSARO XTR Fungicide contains two Group 3 fungicides. Any fungal population may contain individuals naturally resistant to PROSARO XTR Fungicide 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 PROSARO XTR Fungicide or other Group 3 fungicides with products from different fungicide groups that control the same pathogens.
- Do not apply more than one application of PROSARO XTR Fungicide per season.
- Fungicide use should be based on an integrated pest management (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 a Bayer CropScience representative at 1-888-283-6847 or at bayercropscience.ca.

For more information contact:

Bayer CropScience Inc.
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Calgary, Alberta T2C 3G3

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