**Container Label** 

GROUP	11	<b>FUNGICIDE</b>

# **MANA AZOXYSTROBIN 250**

**Fungicide** 

**SUSPENSION** 

COMMERCIAL

For Use in Controlling Diseases in barley, rye, and wheat (including spring and winter wheat)

# ACTIVE INGREDIENT: Azoxystrobin ......250 g/L

Contains 1,2-benzisothiazolin-3-one at 0.031% as a preservative.

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

REGISTRATION NO: 30489 PEST CONTROL PRODUCTS ACT

NET CONTENTS: 1-10 L

Adama Agricultural Solutions Canada Ltd.
300 - 191 Lombard Ave.
Winnipeg MB R3B 0X1
1-855-264-6262

For emergency medical help call PROPHARMA at 1 877 250 9291 (24 hours a day)

For spill, leak or fire call INFOTRAC at 1 800 535 5053 (24 hours a day)

#### Booklet label

#### FIRST AID

**IN CASE OF POISONING,** contact a physician or a poison control centre **IMMEDIATELY**. 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 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 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 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**

No specific symptoms of poisoning are known for this product. If ingested, nausea, vomiting, diarrhea and abdominal pain may occur. Treat symptomatically.

### **PRECAUTIONS**

KEEP OUT OF REACH OF CHILDREN.

May irritate eyes. Avoid contact with eyes, skin and clothing. Avoid breathing dust or spray mist. Wash with soap and water after handling, and before eating, drinking or smoking. Wash contaminated clothing, separately from household laundry, before re-use. Do not wear contaminated shoes.

Wear long-sleeved shirt and long pants when mixing, loading and applying and during clean-up and repair activities. Wear chemical resistant gloves during mixing and loading.

Do not re-enter treated fields until residues have dried.

# **ENVIRONMENTAL PRECAUTIONS**

TOXIC to aquatic organisms.

Observe buffer zones specified in Table 1 under Directions for Use.

Azoxystrobin is persistent and will carryover. It is recommended that this product not be used in areas treated with Azoxystrobin during the previous season.

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.

The properties of this product indicate it may leach to ground water. The use of this product may result in contamination of ground water, particularly in areas where soils are permeable (e.g. sandy soil) and/or the depth to the water table is shallow.

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 ADAMA Agricultural Solutions Canada Ltd.at 1-855-264-6262 or www.adama.com.

#### **STORAGE**

Keep in original container, tightly closed, during storage. Store in a cool, dry, well ventilated area away from feed and foodstuffs, and out of the reach of children and animals. Do not store below 0°C.

#### **SPILL CLEANUP**

Wear appropriate protective equipment (gloves, glasses, apron) when attempting to clean up the spill. If the container is leaking, secure leak and place the container into a drum or heavy gauge plastic bag.

<u>For spills and leaks</u> - contain the liquid with dikes of inert material (soil, clay, kitty litter, etc.). Absorb the spill onto inert material and shovel into a sealable waste container.

On hard surfaces - sprinkle spill area with detergent and scrub in a small quantity of water with a coarse broom. Let stand 10 minutes then absorb onto an inert material and shovel into the waste container.

On soil - remove the top 15 cm of soil in the spill area and replace with fresh soil. Dispose of all waste including scrub brush 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 clean-up of spills.

### **CONTAINER 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 further use.

If there is no container collection site in your area, dispose of the container in accordance with provincial requirements.

#### PRODUCT INFORMATION

MANA AZOXYSTROBIN 250 is a broad spectrum, preventative fungicide with systemic properties recommended for the control of plant diseases of wheat, barley and rye.

MANA AZOXYSTROBIN 250 is to be applied as a foliar spray. Optimum disease control will be obtained by protective treatments prior to disease establishment. Refer to the specific use directions for each crop for detailed instructions on rates, application timing and technique.

Do not apply MANA AZOXYSTROBIN 250 through irrigation equipment.

#### **DIRECTIONS FOR USE**

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 waste.

# **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 freshwater habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs and wetlands) and estuarine/marine habitats.

**Table 1. Buffer Zones** 

Method of application	Crops	Buffer Zones (metres) Required for the Protection of:				
		Freshwater Habitats of Depths:		Estuarine/Marine Habitats of Depths:		
		Less than 1 m	Greater than 1 m	Less than 1 m	Greater than 1 m	
Field sprayer	Wheat, barley, and rye	1	1	1	1	
Aerial		5	1	1	1	

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.

MANA AZOXYSTROBIN 250 Tank Mixed with Bumper 418 EC FUNGICIDE CEREALS – CROP GROUP 15							
CROPS	DISEASE	Product Rate (L/ha)	Application timing				
Barley	Barley net blotch (Pyrenophora teres)	0.225 L/ha of MANA AZOXYSTR	Apply once between stem elongation and half-head emergence				
Barley, rye	Barley scald (Rhynchosporium secalis)	OBIN 250 with 0.3 L/ha of	(BBCH Growth Stage 29-55).				
Barley	Barley leaf rust (Puccinia hordei)	Bumper 418 EC Fungicide	Good spray coverage and canopy penetration are important for best results.				
Wheat, barley, rye Wheat, barley, rye	Septoria leaf spot (Septoria sp.)						
, , , , , , , , , , , , , , , , , , ,	Tan spot ( <i>Pyrenophora</i> <i>triticirepentis</i> )						
Winter wheat, spring wheat, and barley	Stripe rust ( <i>Puccinia</i> striiformis)	0.2-0.3 L/ha of MANA AZOXYSTRO					
Winter wheat and spring wheat	Wheat leaf rust ( <i>Puccinia triticina</i> )	BIN 250 with 0.24 – 0.3 of Bumper 418 EC Fungicide					

**Specific Use Restrictions**: Do not make more than one application per season of this tank mixture. An additional application of Bumper 418 EC Fungicide can be made, if required. Refer to the Bumper 418 EC Fungicide label for details of the rate and timing. A total of two applications of Bumper 418 EC Fungicide should be applied per season either in a tank mix with MANA AZOXYSTROBIN 250 or alone. Do not apply within 45 days of harvest for grain and straw. Do not harvest wheat for forage. Do not graze or feed livestock treated forage or cut green crop for hay or silage. The tank mix of MANA AZOXYSTROBIN 250 and

Bumper 418 EC Fungicide may be applied with ground or air equipment. GROUND APPLICATION: Apply specified rates in a minimum of 100 L of water per hectare. AERIAL APPLICATION: Apply specified rates in a minimum of 45 L of water per hectare.

# **GROUND APPLICATION**

Do not apply MANA AZOXYSTROBIN 250 through irrigation equipment.

<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) medium classification. Boom height must be 60 cm or less above the crop or ground. Apply using nozzle tips and in sufficient water volume for thorough coverage (i.e. at least 100 litres per hectare). Higher water volumes may be necessary to provide adequate coverage in thick crop canopies.

<u>Airblast application</u>: DO NOT apply during periods of dead calm. Avoid application of this product when winds are gusty. DO NOT direct spray above plants to be treated. Turn off outward pointing nozzles at row ends and outer rows. DO NOT apply when wind speed is greater than 16 km/h at the application site as measured outside of the treatment area on the upwind side.

## **AERIAL APPLICATION**

<u>Aerial application</u>: **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) 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. Apply at least 45 litres of water per hectare.

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. To avoid streaked, uneven or overlapped application, use appropriate marking devices.

Apply only when meteorological conditions at the treatment site allow for complete and even crop coverage. 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.

#### **Operator Precautions**

Do not allow the pilot to mix chemicals to be loaded onto the aircraft. Loading of premixed chemicals with a closed system is permitted.

It is desirable that the pilot have communication capabilities at each treatment site at the time of application.

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.

All personnel on the job site must wash hands and face thoroughly before eating and drinking. Protective clothing, aircraft cockpit and vehicle cabs must be decontaminated regularly.

# **Product Specific Precautions**

Read and understand the entire label before opening this product. If you have questions, call the manufacturer or obtain technical advice from the distributor or your provincial agricultural representative. Application of this specific product must meet and/or conform to the following:

Volume: Apply the recommended rate in a minimum of 45 litres of water per hectare.

Do not spray when the wind is blowing towards a nearby sensitive crop, garden, terrestrial habitat (such as shelter-belt) or aquatic habitat.

The buffer zones specified in Table 1 above 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.

Follow recommendations provided by local disease monitoring services or provincial spray calendars regarding the appropriate application timing for protectant fungicides in your area. Cultural practices such as canopy management and removal of overwintered plant debris should be integrated with the use of fungicides to reduce disease incidence. Use the higher rate, and the shorter application interval under conditions of heavy infection pressure, on highly susceptible varieties, or when environmental conditions are favourable for disease development.

MANA AZOXYSTROBIN 250 treatments should be integrated into an overall disease management strategy that includes selection of varieties with disease tolerance, plant residue management, crop rotation, and proper timing and placement of fertilizer and irrigation. Fungicide applications should begin prior to disease infection and continue throughout the season following a resistance management strategy (see **Resistance-Management Recommendations**).

**General Mixing Instructions:** Partially fill the spray tank with clean water and begin agitation. Add the specified amount of MANA AZOXYSTROBIN 250 to the tank. Finish filling the tank to the desired volume to obtain the required spray concentration, maintain agitation. Maintain agitation throughout the spraying operation. If the spray mixture is left to stand for a prolonged period (ie. overnight), vigourous agitation will be required to resuspend the fungicide.

### **Resistance-Management Recommendations**

For Resistance management, please note that MANA AZOXYSTROBIN 250 contains a Group 11 fungicide. Any fungal population may contain individuals naturally resistant to MANA AZOXYSTROBIN 250 and other Group 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 MANA AZOXYSTROBIN 250 or other Group 11 fungicides with different groups that control the same pathogens.

Do not exceed the total number of applications of MANA AZOXYSTROBIN 250 per season per crop as stated in Table 2.

Do not apply sequential treatments of MANA AZOXYSTROBIN 250, or other fungicides in the same Fungicide Group, in a season. Do not apply at rates lower than recommended on the label. Use tank mixtures with fungicides 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, to which pathogen resistance has not developed.

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 and to report suspected resistance, contact company representatives.

#### 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.