

2017-1584  
2018-08-09

BAG

GROUP	<b>M 01</b>	FUNGICIDE
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## COPPERCIDE XLR FUNGICIDE

COPPER HYDROXIDE

WETTABLE GRANULES

COMMERCIAL

FUNGICIDE



CAUTION

POISON WARNING - EYE IRRITANT

READ THE LABEL BEFORE USING.

REGISTRATION NO. 33124 PEST CONTROL PRODUCTS ACT

ACTIVE INGREDIENT: Copper, present as copper hydroxide...50%

**Loveland Products Canada Inc.**

PO Box 5234 | 64137 Hwy 543 E

High River, AB T1V 1M4

1-800-328-4678

NET CONTENTS: kg

## **PRECAUTIONS**

**DO NOT APPLY BY AIR.**

**KEEP OUT OF REACH OF CHILDREN.**

Corrosive to eyes. DO NOT get in eyes. Harmful if swallowed or inhaled. Avoid contact with skin and clothing. Wash thoroughly after handling and before eating, drinking or smoking. Wash contaminated clothing with soap and hot water before reuse.

Avoid breathing dust or spray mist. Do not contaminate food or feed. Do not contaminate any body of water.

**DO NOT** apply this product in a way that will contact workers or bystanders, either directly or through drift. Only protected handlers may be in the area during application.

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

**DO NOT** apply within 2 days of harvest. Pre-harvest interval (PHI) = 2 Days

Wear goggles, long pants, a long-sleeved shirt and shoes plus socks during mixing/loading, application, clean-up and repair. In addition, wear chemical-resistant gloves during mixing/loading, clean-up and repair. Wash the outside of the gloves before removing.

Remove personal protective equipment immediately after handling this product. As soon as possible, wash thoroughly and change into clean clothing.

Remove clothing and personal protective equipment immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

Discard clothing and other absorbent material that have been drenched or heavily contaminated with the product's concentrate. Do not reuse them.

For cleaning/ maintaining personal protective equipment, use detergent and hot water. Keep and wash personal protective equipment separately from other laundry.

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

Post a warning sign, containing product sprayed and the date, at the entrances to treated areas notifying workers of the application of the product.

**DO NOT** enter or allow worker entry into treated areas during the restricted-entry interval of 48 hrs.

For greenhouses, **DO NOT** enter or allow worker entry into treated areas during the restricted-entry interval of 24 hours if the following conditions are satisfied:

1. At least one container or station designed specifically for flushing eyes must be available, and in operating condition with decontamination supplies, for workers entering the treated area. This container/station must remain available for at least seven days following application.

2. Applicators must post warning signs bearing the following information on all entrances to the greenhouse:

- The name of the product applied.

- The date, time of the application.

- Product residues in the treated area may be highly irritating to the eyes.

- Avoid contact of product residues with eyes.

- If in eyes: Hold eye open and rinse slowly and gently with water for 15–20 minutes using the eye flush container [or eye flush station] located in the greenhouse. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control centre or doctor for treatment advice.

- The location of the eye flush container/station.
  - Instructions on how to operate the eye flush container/station.
3. Signs must remain posted at least 7 days after treatment. Only the applicator(s) (or someone under their supervision) may remove warning signs.

Restricted entry interval (REI) = 48 hrs

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.

**GENERAL INSTRUCTIONS**

Apply COPPERCIDE XLR FUNGICIDE at 0.77- 3.15 kg/ha as noted. COPPERCIDE XLR FUNGICIDE is adaptable to spraying from all types of spray equipment. It can be used in high or low capacity sprays. No additional surfactants are needed. Add COPPERCIDE XLR FUNGICIDE slowly to a spray tank partially filled with water. Spreader-stickers, insecticides, nutrients, etc., should be added last. The following specific instructions are based on general applications. However, the recommendations of the Agricultural Extension Specialists should be closely followed as to timing, frequency and number of sprays per season.

**Buffer zones**

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.

Spot treatments using hand-held equipment **DO NOT** require a buffer zone.

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

Method of application	Use site	Buffer Zones (meters) Required for the Protection of :				
		Freshwater Habitat of Depths:		Estuarine/Marine Habitats of Depths:		Terrestrial Habitat
		Less than 1 m	Greater than 1 m	Less than 1 m	Greater than 1 m	
Field Sprayer	Potatoes, tomatoes	20	10	10	5	1
	Beans, cucumbers, peppers	25	10	15	5	1
	Sugar beets	30	15	15	10	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.

The buffer zones 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.

#### DIRECTIONS FOR USE

**BEANS - Suppression of Bacterial Halo Blight (*Pseudomonas syringae* pv. *phaseolicola*) and Bacterial Common Blight (*Xanthomonas axonopodis* pv. *phaseoli*):** For protective sprays, apply first application when plants are 15 cm high. Apply at recommended 7 to 14 day intervals (minimum 3-day interval under severe disease pressure) depending on local conditions. Use COPPERCIDE XLR FUNGICIDE at 1.575- 2.275 kg/ha depending on disease severity. Do not apply within 2 days of harvest. Maximum 10 applications per year.

**CUCUMBERS (field) - Suppression of Angular Leaf Spot (*Pseudomonas syringae* pv. *lachrymans*):** Apply at recommended 7 day intervals (minimum 3-day interval under severe disease pressure) once the plants begin to vine. Use at 1.575- 2.275 kg/ha. Do not apply within 2 days of harvest. Maximum 10 applications per year,

**PEPPERS (field) - Suppression of Bacterial Spot (*Xanthomonas campestris* pv. *vesicatoria*):** When disease threatens, apply 1.575- 2.275 kg/ha at recommended 7 to 14 day intervals depending on disease severity (minimum 3-day interval under severe disease pressure). Do not apply within 2 days of harvest. Maximum 10 applications per year.

**POTATOES - Suppression of Early Blight (*Alternaria solani*) and Late Blight (*Phytophthora infestans*):** Apply at recommended 7 to 10 day intervals (minimum 3-day interval under severe disease pressure) starting when plants are 15 cm high until harvest. Use COPPERCIDE XLR FUNGICIDE at 0.77-1.575 kg/ha, depending on density of foliage, combined with 1.75 to 2.25 kg of Mancozeb product per ha. COPPERCIDE XLR FUNGICIDE at 2.38 kg/ha, may be applied at vine kill with a desiccant or alone after vine kill, prior to harvest. This late treatment may reduce infection of tubers by the late blight fungus during harvesting. Do not apply with 2 days of harvest. Maximum 10 applications per year.

**SUGAR BEETS - Suppression of Cercospora Leaf Spot (*Cercospora beticola*):** Start spray when disease threatens and continue for 4 to 5 applications. Spray at recommended 10 to 14 day intervals (minimum 3-day interval under severe disease pressure) depending on weather conditions using COPPERCIDE XLR FUNGICIDE at 1.575- 2.94 kg/ha depending on disease severity. Addition of suitable non-herbicidal agricultural spray oil is recommended at 4.5 litres/ha. For specific instruction, consult local agricultural authorities. Do not apply within 2 days of harvest. Maximum 10 applications per year.

**TOMATOES (field) - Suppression of Bacterial Spot (*Xanthomonas campestris* pv. *vesicatoria*):** When disease threatens, apply 1.575 kg/ha at recommended 7 to 10 day intervals; more frequently when disease is severe (minimum 3-day interval under severe disease pressure). Do not apply within 2 days of harvest. Maximum 10 applications per year.

#### Greenhouse Seedling Tomatoes and Peppers for Transplant

**DO NOT** re-enter treated area for 24 hours.

**DO NOT** apply within 1 day of transplanting.

RECOMMENDED APPLICATIONS			
CROP	DISEASE SUPPRESSED	RATE/ DOSAGE	REMARKS
Tomatoes (Greenhouse seedlings for transplant)	Bacterial Spot ( <i>Xanthomonas campestris</i> pv. <i>vesicatoria</i> )	1.575 kg product per hectare	* Apply COPPERCIDE XLR FUNGICIDE at 1.575 kg/ha every 5 days when warranted (minimum 3-day interval under severe disease pressure) to a maximum of 5 applications prior to transplant over a 4 week period. * Following transplantation to the field, when disease threatens, apply COPPERCIDE XLR FUNGICIDE at 1.575 kg/ha at recommended 7 to 10 day intervals depending upon disease severity (minimum 3-day interval). Wear long pants, a long-sleeved shirt, shoes and socks, goggles, and chemical resistant gloves when handling or spraying the product.*Maximum of 10 applications per year..
Peppers (Greenhouse seedlings for)	Bacterial Spot ( <i>Xanthomonas campestris</i> pv.	1.575 kg product per hectare	* Apply COPPERCIDE XLR FUNGICIDE at 1.575 kg/ha every 5 days when warranted (minimum 3-day interval under severe disease pressure) to a maximum of 5 applications prior to

transplant)	<i>vesicatoria</i> )		transplant over a 4 week period .* Following transplantation to the field, when disease threatens, apply COPPERCIDE XLR FUNGICIDE at 1.575 kg/ha at a recommended 7 to 10 day intervals depending upon disease severity (minimum 3-day interval).. Wear long pants, a long-sleeved shirt, shoes and socks, goggles, and chemical resistant gloves when handling or spraying the product. * Maximum of 10 applications per year.
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### ENVIRONMENTAL HAZARDS

TOXIC to birds, small wild mammals, aquatic organisms and non-target terrestrial plants.

Observe buffer zones specified under DIRECTIONS FOR USE.

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.

### RESISTANCE MANAGEMENT RECOMMENDATIONS

For resistance management, COPPERCIDE XLR FUNGICIDE contains a Group M 01 fungicide. Any fungal population may contain individuals naturally resistant to COPPERCIDE XLR FUNGICIDE and other Group M 01 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 COPPERCIDE XLR FUNGICIDE or other Group M 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 treated fungal/bacterial populations for resistance development. Notify **Loveland Products Canada Inc.** if reduced sensitivity of the pathogen to COPPERCIDE XLR FUNGICIDE 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 Loveland Products Canada Inc. at 1-800-328-4678 or at [www.uap.ca](http://www.uap.ca).

### FIRST AID

**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 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 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.

#### **STORAGE**

Store in a cool, dry ventilated place, away from feeds and foods. Keep away from heat, fire and sparks.

#### **DISPOSAL**

1. Follow provincial instructions for any required additional cleaning of the container prior to its disposal.
2. Make the empty container unsuitable for further use.
3. Dispose of the container in accordance with provincial requirements.
4. For information on the 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.

**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.