

2011-11-22

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GROUP	<b>M</b>	FUNGICIDE
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## **MICROSCOPIC SULPHUR**

### **WETTABLE POWDER FUNGICIDE**

#### **COMMERCIAL**



CAUTION POISON

**READ THE LABEL BEFORE USING**

**GUARANTEE:** Sulphur 92%

REGISTRATION NO. 14653 PEST CONTROL PRODUCTS ACT

LOVELAND PRODUCTS CANADA INC.  
789 Donnybrook Drive  
Dorchester, Ontario  
N0L 1G5  
1-800-328-4678

IN CASE OF EMERGENCY DUE  
TO A MAJOR SPILL, FIRE OR  
POISONING INVOLVING THIS  
PRODUCT CALL DAY OR NIGHT,  
1-800-561-8273

NET CONTENTS: 22.7 kg

12/11

## **PRECAUTIONS**

**KEEP OUT OF REACH OF CHILDREN.** Do not inhale dust or spray mist. Avoid contact with skin, clothing and eyes. After handling, wash thoroughly with soap and water before eating, drinking or smoking. Do not contaminate ponds, streams or other bodies of water. Avoid contamination of feed or food.

Wear goggles or a face shield, chemical resistant gloves, a hat, a long-sleeved shirt, long pants and rubber boots during mixing/loading, application, cleanup and repair activities.

When used in a greenhouse, wear the personal protective equipment specified above in addition to a NIOSH-approved respirator.

Do not enter or allow workers to enter into treated areas until 24 hours after application.

Store in cool, dry, ventilated place, away from feeds and foods. Keep away from heat, fire and sparks. Wash contaminated clothing with soap and hot water before re-use. Sulphur is phytotoxic to some plants, including apricots, Anjou and Comice pears, cranberries, cucurbits and spinach. Do not use within 30 days of an oil spray.

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

## **RESISTANCE MANAGEMENT RECOMMENDATIONS**

For resistance management, please note that MICROSCOPIC SULPHUR Fungicide contains a Group M fungicide. Any fungal population may contain individuals naturally resistant to MICROSCOPIC SULPHUR Fungicide and other Group M 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 MICROSCOPIC SULPHUR Fungicide or other Group M fungicides with different groups that control the same pathogens.
- Use tank mixtures with fungicide 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, 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 Technical Service, Loveland Products Canada Inc., at 1-800-328-4678 or at [www.uap.ca](http://www.uap.ca).

## **ENVIRONMENTAL HAZARDS**

Do not apply directly to aquatic habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs, and wetlands) and estuarine/marine habitats. Do not contaminate water by cleaning of equipment or disposal of wastes.

## **DIRECTIONS FOR USE**

Do not apply more than 8 applications per season. Do not apply during periods of dead calm or when winds are gusty. Do not use handheld equipment. **DO NOT APPLY BY AIR.**

For airblast application: 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/hr at the application site as measured outside of the treatment area on the upwind side.

Note that the species of *Monilinia* causing brown rot disease in seabuckthorn has not yet been identified. Microscopic Sulphur has not been tested for control of all *Monilinia* species on sea buckthorn.

### **BUFFER ZONES**

This table specifies the buffer zones which 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 for the protection of aquatic habitats

Application Method	Crop	Buffer zone (metres) required for the protection of aquatic habitat
Airblast	Gooseberry Currant Sweet Cherry Sour Cherry Plum Peach Apple Pear Grape Sea Buckthorn	5
	Rutabaga	0

The rates recommended below are based on 1000 litres of dilute spray. MICROSCOPIC SULPHUR Fungicide may be used in low volume or concentrate sprays by increasing the dosage to apply the same quantity of product per hectare as would normally be applied when spraying dilute mixtures. Apply in sufficient water for thorough coverage of all plant parts; this volume depends on the spray equipment and the size of trees and vines. Follow provincial recommendations for proper timing of the sprays. DO NOT APPLY MICROSCOPIC SULPHUR FUNGICIDE IF HIGH TEMPERATURE (ABOVE 25°C) AND HIGH HUMIDITY PREVAIL OR ARE EXPECTED DURING THE THREE DAYS FOLLOWING APPLICATION.

<b>Crop/Disease</b>	<b>Method/Rate</b>
APPLE, PEAR Powdery Mildew, Scab	Apply 6.5 kg/1000 L in the Pre-Bloom, Calyx and First Cover sprays. In the later Cover sprays use 3.5 - 4.5 kg depending on mildew conditions and temperatures. Do not apply within one day of harvest.
PEACH Brown Rot, Scab	Apply 6.5 kg/1000 L in a regular spray program starting at the late Pink stage. Repeat just before and during harvest if wet weather occurs.
PLUM Brown Rot, Black Knot	Apply 6.5 kg/1000 L in a regular spray program starting at the Shuck stage. Repeat just before and during harvest if wet weather occurs.
SWEET CHERRY Brown Rot	Apply 6.5 kg/1000 L in a regular spray program from the Bloom stage until just before harvest. Repeat during harvest if wet weather occurs. Do not apply within one day of harvest.
SOUR CHERRY Brown Rot Blossom Blight, Powdery Mildew	Apply 6.5 kg/1000 L at the Bloom stage. If Powdery Mildew is a problem, apply 3.5 kg in the First, Second and Third Cover sprays. Do not apply within one day of harvest.

GRAPE Powdery Mildew	Apply 4.5 kg/1000 L in the Post-Bloom spray on Agawam, Seneca and Seibel varieties. Do not use on Concord, Foch and Van Buren varieties. Apply at first sign of mildew and repeat after 10 days. Do not apply later than 21 days before harvest on grapes for wine otherwise, do not apply within one day of harvest.
Grape erineum mite	Apply MICROSCOPIC SULPHUR FUNGICIDE for grapes in water volumes of up to 3000 L/ha. Water volume will vary according to size of crop and foliage cover required. Use sufficient water volume to thoroughly cover all foliage. Follow provincial recommendations for proper timing and water volumes. Apply 3 kg/ha at pre-bloom immediately after the first evidence of erineum development on the leaves and again at mid-season. Do not use on Concord, Foch, de Chaunac and Van Buren varieties. Table grapes: Do not apply later than 1 day before harvest. Wine grapes: Do not apply later than 21 days before harvest.
CURRENTS GOOSEBERRY Powdery Mildew	Apply 5 kg/ha in sufficient water volume to thoroughly cover all foliage. Apply at 10 to 14 day intervals from the onset of the disease until fruit colours. Use no more than 8 applications per season. Leave at least 1 day between last treatment and harvest of the fruit.
CUCUMBERS (Greenhouse) Powdery Mildew	Apply 105 g/100 L of water to runoff using a backpack or other suitable sprayer, at weekly intervals as needed to combat powdery mildew. Leave at least 1 day between last treatment and harvest of fruit.
RUTABAGAS Powdery Mildew	Apply 6.8 kg/ha in 675 - 1125 L of water depending on the size of the rutabagas. Thorough coverage of both upper and lower leaf surfaces is essential for powdery mildew control. Apply weekly, starting when disease symptoms first appear in the field. Use no more than (5) applications per season.

**NOTE TO USER:**

**READ THE FOLLOWING BEFORE USING THIS PRODUCT FOR THE INDICATED SPECIAL USE APPLICATIONS:**

The DIRECTIONS FOR USE for this product for the use(s) described below were developed by persons other than Loveland Products Canada Inc. and accepted for registration by Health Canada under the User Requested Minor Use Label Expansion program. Loveland Products Canada Inc. itself makes no representation or warranty with respect to performance (efficacy) or crop tolerance (phytotoxicity) claims for this product when used on the crop(s) listed below.

Accordingly, the Buyer and User assume all risks related to performance and crop tolerance arising, and agree to hold Loveland Products Canada Inc. harmless from any claims based on efficacy or phytotoxicity in connection with the use(s) described below.

**DIRECTIONS FOR USE**

**SEA BUCKTHORN**

Foliar application from the beginning of bloom stage

Crop	Pest	Rate	Maximum No. of Applications	Days Before Harvest
Sea Buckthorn	Brown Rot ( <i>Monilinia</i> sp.)	6.5 kg of product per 1000 L of water per hectare	8 applications /year, 7-10 days apart	7 days

**COMPATIBILITY**

THIS PRODUCT IS COMPATIBLE WITH MOST COMMONLY USED INSECTICIDES AND FUNGICIDES, EXCEPT OIL.

**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, preferable by mouth-to-mouth, if possible. Call a poison control centre or doctor for treatment advice.

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

**TOXICOLOGICAL INFORMATION:** Treat symptomatically.

**DISPOSAL**

1. Thoroughly empty the contents of the bag.
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.
5. 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 this 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.