

PMRA Approved
2014-5809
2014-12-17

GROUP	M	FUNGICIDE
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USE BAG

COPPER 53W

WETTABLE POWDER FUNGICIDE

COMMERCIAL

WARNING POISON

READ THE LABEL BEFORE USING

REGISTRATION NO. 9934
PEST CONTROL PRODUCTS ACT

GUARANTEE: Copper, present as basic copper sulphate 53.4%

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

LOVELAND PRODUCTS CANADA INC.
789 Donnybrook Drive
Dorchester, Ontario
N0L 1G5
1-800-265-4624

NET CONTENTS: 10 kg

02/11

DIRECTIONS FOR USE

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 apply this product directly to freshwater habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs and wetlands), estuarine/marine habitats.

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

DO NOT apply by air.

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

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) medium classification. Boom height must be 60 cm or less above the crop or ground.

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

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 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 *	Brussels sprout		10	5	5	3	0
	Rose		15	5	10	4	0
	Potatoes, peppers, eggplant		40	20	20	10	1
	Strawberries, squash, pumpkin, melon, celery, watermelon, cucumbers		20	10	10	5	1
	Beet		25	10	15	5	1
	Carrot, cabbage, broccoli, cauliflower		25	10	10	5	1
	Spinach		15	5	10	4	0
	Tomatoes		45	20	25	10	1
	Hops		25	10	10	5	1
	Beans		35	15	20	10	1
Airblast	Apricots, peaches (except leaf curl)	Early growth stage	45	35	40	30	0
		Late growth stage	35	30	30	20	0
	Peach, nectarine (leaf curl)	Early growth stage	40	30	30	20	0
	Raspberry	Early growth stage	55	45	50	40	1
		Late growth stage	45	35	40	30	1
	Grapes	Early growth stage	60	55	55	45	2
		Late growth stage	50	45	45	35	2
	Apple, pear	Early growth stage	60	50	50	40	1
		Late growth stage	50	40	40	35	1
	Currants, gooseberries	Early growth stage	55	45	50	40	1
		Late growth stage	45	35	40	30	1
	Sour Cherry (brown rot, leaf rot)	Early growth stage	55	45	45	40	1
	Nectarines	Early growth stage	45	35	40	30	0
		Late growth stage	35	25	30	20	0

* For field sprayer application, buffer zones can be reduced with the use of drift reducing spray shields. When using a spray boom fitted with a full shield (shroud, curtain) that extends to the crop canopy, the labeled buffer zone can be reduced by 70%. When using a spray boom where individual nozzles are fitted with cone-shaped shields that are no more than 30 cm above the crop canopy, the labeled buffer zone can be reduced by 30%.

Crops	Disease	Maximum number of application per year	Minimum number of days between applications	Rate*
APPLE PEAR	Fire Blight	10	5	Use 1 kg Copper 53W Wettable powder plus 6 kg of Hydrated Lime (Bordeaux Mixture) per 1000L of water

***REMARKS**

IF FIRE BLIGHT IS A LIGHT PROBLEM: Apply when the temperature is at 21°C during the bloom period. Apply in a dilute spray of 3000 L/ha. Do not use STREPTOMYCIN 17 after using the COPPER plus Hydrated Lime spray.

IF FIRE BLIGHT IS A MODERATE PROBLEM: Use STREPTOMYCIN 17 after first blossoms are open. Then use the Bordeaux mixture when half the blossoms have opened and the following weather conditions occur or are expected: temperature 18°C and rainfall, or 18°C plus relative humidity 60% or higher. Apply 3000 L/ha of dilute spray.

MIXING: Pre-mix the Hydrated Lime in a pail with enough water to make a slurry. Pour this lime slurry through a 0.3 mm screen into the spray tank. Add the mixture to the spray tank when partly filled with water and the mechanical agitator is running. Allow 15 minutes of mixing before starting to spray. Keep the agitator going during the spraying operation until the whole tank full is sprayed out.

COMPATIBILITY: This mixture is incompatible with all other insecticides and fungicides.

FIRE BLIGHT: May be spread to healthy plants by insects such as aphids and leafhoppers. Diseased twigs which appear to be "scorched" must be cut off 15 cm below the infected part and burned; disinfect pruning shears after each cut in solution of 1 part "Javex" (chlorine bleach) to 4 parts water.

Crops	Disease	Maximum Rate	Maximum number of application per year	Minimum number of days between applications	Remarks*
APPLE- cv. Mutsu (Crispin) And other Sensitive Cultivars such as Jonagold	Apple Blister Spot (Pseudomonas syringae pv papulans)	3 kg/ha	3	10	Rate is given in terms of Copper 53W Wettable powder per 3000L of water. Use hydrated lime as a safener at a rate of 6 kg per 1 kg of Copper 53W per 1000L of water. Maximum of three applications per year. Apply first spray 10 days after calyx and again if required at 10 day intervals. Spray to runoff in 3000L water/ha. The preharvest interval is 30 days. Ground application only.

APRICOT PEACHES (British Columbia only)	Coryneum Blight	4 kg/1000 L	1		Apply in September after harvest complete.
NECTARINE (British Columbia only)	Coryneum Blight	4 kg/1000 L	2	7	Apply in September after harvest complete.
PEACHES	Leaf Curl Anthracnose	1.9kg/ 1000 L	2	7	Apply in fall after leaves have fallen or in the spring before buds break. May be used with spray oil where applied in the spring. Follow use directions on the oil label.
NECTARINE	Leaf Curl Anthracnose	4 kg/1000 L	2	7	Apply in fall after leaves have fallen or in the spring before buds break. May be used with spray oil where applied in the spring. Follow use directions on the oil label.
SOUR CHERRIES	Brown Rot Leaf Spot	2 kg/1000 L	10	7	Apply in all regular sprays except blossom spray. Add 4 Kg of hydrated lime per 1000 L.
GRAPES	Dead Arm Black Rot Downy Mildew	3 Kg /1000 L	7	3	Apply according to local spray calendar recommendations. Add 6 Kg of hydrated lime per 1000 L. Copper 53W Wtable powder cannot be used on French hybrid or vinifera varieties
CURRENTS GOOSEBERRY	Anthracnose, Phyllosticta leaf spot, Powdery Mildew, Septoria Leaf Spot	3 to 5 kg /1000 L	4	10	Apply according to local spray calendar recommendations. Add 4 Kg of hydrated lime per 1000 L.
RASPBERRIES	Bacterial blight	5 kg/ha, in 1000L water	4	14	Apply once before fall rains begin and apply 4 kg in 1000 L/ha with bud burst and repeat twice at 14 day intervals.
STRAWBERRY	Leaf spot	2.5-3.8 kg/ha in 1000 L water	5	7	Apply according to local spray calendar recommendations.
BEANS	Anthracnose, Downy Mildew, Bacterial Leaf Spot	5.5 Kg/ha	6	7	Apply as needed to keep plants covered.
BEET CARROT	Cercospora Leaf Spot	4 kg/ha	Beets – 6 Carrots – 5	7	Apply according to local spray calendar recommendations.

CABBAGES BROCCOLI CAULIFLOWER	Downy Mildew, Black Leaf Spot Grey Leaf Spot	4 Kg/ha	5	7	Apply according to local spray calendar recommendations.
CELERY	Early and Late Blights Anthracnose Leaf mold Septoria leaf spot	3.8 Kg/ha	5	5	Apply when the plants are 10 to 12cm high and repeat at intervals of 7 to 10 days throughout the season. Vary the rate according to the degree of leaf development.
CUCUMBER (field) SQUASH PUMPKIN MELON WATERMELON	Angular Leaf Spot Anthracnose Downy Mildew Scab	2.5 - 3 kg/ha	Cucumber 5 Other crops 5	Cucumber 7 Other crops 5	Apply in 1000 L of water. Apply according to local spray calendar recommendations.
EGGPLANT	Early blight, Late blight	4 kg/ha mixed in 1000 L water	10	3	Apply according to local spray calendar recommendations.
POTATOES	Early and Late Blights	3.8 Kg/ha	10	5	Apply when plants are 12 to 18 cm high. Repeat at 7 to 10 day intervals.
SPINACH	Downy Mildew White Rust	2.5 kg/ha	5	7	Apply according to local spray calendar recommendations.
TOMATOES (Field) PEPPER	Anthracnose, Early and Late Blights, Leaf mould, Septoria Leaf Spot	4.5 Kg/ha on Tomatoes 4 kg/ha on Pepper	10	3	Apply when plants are 15 cm tall and repeat at 7 to 10 day intervals.
HOPS	Downy Mildew	4-5 Kg /1000 L	4	7	Four applications at weekly intervals.
ROSE	Powdery Mildew Downy Mildew Black Spot, Leaf Spot	5.6 kg/ha	2	7	Apply in 1000 L water/ha. Repeat at 7-10 day intervals.

*Apply in sufficient water for thorough coverage.

DO NOT APPLY TO THESE CROPS WITHIN TWO DAYS OF HARVEST OR AS OTHERWISE NOTED.

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 described below were developed by persons other than United Agri Products Canada Inc. and accepted for registration by Health Canada under the User Requested Minor Use Label Expansion program. United Agri 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 listed below.

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

**DIRECTIONS FOR USE
BRUSSELS SPROUTS**

Follow provincial government recommendations for application timing.
Apply with ground equipment only. DO NOT APPLY BY AIR.

Crop	Pests	Rate per Ha	Maximum No. of Applications per year	Minimum Interval between Applications	Days Before Harvest
Brussels Spouts	Bacterial Leaf Spot Downey Mildew Black Leaf Spot Grey Leaf Spot	4 kg/ha mixed in a maximum of 1000L water	2	14 days	2

PRECAUTIONS

KEEP OUT OF REACH OF CHILDREN. Store in a cool, dry, ventilated place, away from feeds and foods. Keep away from heat, fire and sparks. May irritate eyes, nose, throat and skin. May discolour skin. Avoid contact with skin, eyes, 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. When spraying on copper-sensitive plants, add hydrated lime to prevent injury. DO NOT APPLY BY AIR.

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 web site at: www.croplife.ca

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

Remove clothing/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. If gloves are required on the label, wash the outside of gloves before removing.

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.

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

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, please note that COPPER 53W Wettable Powder contains a Group M fungicide. Any fungal population may contain individuals naturally resistant to COPPER 53W Wettable Powder 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 COPPER 53W Wettable Powder 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 the Technical Service, United Agri Products, 1-800-265-4624 or at 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.

DISPOSAL

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

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