

GROUP

M1

FUNGICIDE

# Nufarm

## Parasol

**WETTABLE POWDER FUNGICIDE**

COMMERCIAL - AGRICULTURAL

COPPER HYDROXIDE



CAUTION

POISON

WARNING EYE IRRITANT

KEEP OUT OF REACH OF CHILDREN

READ THE LABEL BEFORE USING

ACTIVE INGREDIENT:

Elemental copper, present as copper hydroxide..... 50.0%

Warning, contains the allergen sulfites

REGISTRATION NUMBER 24671 PEST CONTROL PRODUCTS ACT

Nufarm Agriculture Inc.  
5101, 333 - 96th Ave NE  
Calgary, Alberta T3K 0S3  
1-800-868-5444

Net Contents: (1-20) KG

24 HOUR EMERGENCY RESPONSE NUMBER 1-800-424-9300

## GENERAL INSTRUCTIONS

Use **PARASOL Wettable Powder Fungicide** at 1.1-4.25 kg/ha as noted. **PARASOL Wettable Powder Fungicide** is adaptable to spraying from all types of spray equipment. It can be used in high or low volume spray. No additional surfactants are needed.

Add **PARASOL Wettable Powder Fungicide** slowly to the spray tank partially filled with water. Spreader-stickers, insecticides, nutrients, etc. should be added last. **PARASOL Wettable Powder Fungicide** is compatible with commercially formulated spreader-stickers, non-herbicidal agricultural oils, and such insecticides as Rotenone and Parathion.

The following specific instructions are based on general applications. However, the recommendations of the Provincial Ministry of Agriculture should be closely followed as to timing, frequency and number of sprays per season.

## RESISTANCE-MANAGEMENT RECOMMENDATIONS

For resistance management, please note that **PARASOL Wettable Powder Fungicide** contains a Group M1 fungicide/bactericide. Any fungal population may contain individuals naturally resistant to **PARASOL Wettable Powder Fungicide** and other Group M1 fungicides/bactericides. A gradual or total loss of pest control may occur over time if these fungicides/bactericides 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 **PARASOL Wettable Powder Fungicide** or other Group M1 fungicides/bactericides with different groups that control the same pathogens.
- Use tank mixtures with fungicide/bactericides from a different group when such use is permitted.
- Fungicide/bactericide 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.
- Where possible, make use of predictive disease models to effectively time fungicide/bactericide applications.
- Monitor treated fungal/bacterial populations for resistance development. Notify Nufarm Agriculture Inc. if reduced sensitivity of the pathogen to **PARASOL Wettable Powder 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 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 Nufarm Agriculture Inc. at 1-800-868-5444 or at [www.nufarm.ca](http://www.nufarm.ca).

## DIRECTIONS FOR USE

### DO NOT APPLY BY AIR.

**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.

**BEANS, Bacterial Blight, Halo** (*Pseudomonas syringae* pv. *phaseolicola*), **Bacterial Blight, Common** (*Xanthomonas campestris* pv. *phaseoli*): For protective sprays, apply first application when plants are 15 cm high. Apply on 7-14 day schedule depending on local conditions. Use 2.25-3.25 kg/ha depending on disease severity. Do not apply within 2 days of harvest. Do not apply more than 6 treatments per year, with a minimum retreatment interval of 7 days.

**CUCUMBERS, Angular Leaf Spot** (*Pseudomonas syringae* pv. *lachrymans*): Apply weekly once the plants begin to vine. Use 2.25-3.25 kg/ha. Do not apply within 2 days of harvest. Do not apply more than 5 treatments per year, with a minimum retreatment interval of 7 days.

**PEPPERS, Bacterial Spot** (*Xanthomonas campestris* pv. *vesicatoria* and *X. vesicatoria*): When disease threatens, apply 2.25-3.25 kg/ha at 7 to 14 day intervals depending on disease severity. Do not apply within 2 days of harvest. Do not apply more than 10 treatments per year, with a minimum retreatment interval of 3 days.

**POTATOES, Early Blight** (*Alternaria solani*), **Late Blight** (*Phytophthora infestans*): Apply at 7 to 10 day intervals starting when plants are 15 cm high until harvest. Use PARASOL Wettable Powder at 1.1-2.5 kg/ha, depending on density of foliage, combined with 1.75-2.25 kg of Mancozeb (80% active) product per ha. PARASOL Wettable Powder at 3.4 kg/ha may be applied at vinekill with a desiccant or alone after vinekill, prior to harvest. This late treatment may reduce infection of tubers by the late blight fungus during harvesting. Do not apply within 2 days of harvest. Do not apply more than 10 treatments per year, with a minimum retreatment interval of 5 days.

**SUGAR BEETS, Cercospora Leaf Spot** (*Cercospora beticola*): Start spray when disease threatens and continue for 4 to 5 applications. Spray every 10 to 14 days depending on weather conditions at 2.25-4.25 kg/ha depending on disease severity. Addition of a suitable non-herbicidal agricultural spray oil is recommended at 5.5 liters/ha. For specific instructions, consult local agricultural authorities. Do not apply within 2 days of harvest. Do not apply more than 6 treatments per year, with a minimum retreatment interval of 7 days.

**TOMATOES, Bacterial Spot** (*Xanthomonas campestris* pv. *vesicatoria*): When disease threatens, apply 2.25 kg/ha at 7 to 10 day intervals, more frequently when disease is severe. PARASOL Wettable Powder should be combined with 1.75-2.25 kg/ha maneb or mancozeb (80% active compound). Do not apply within 2 days of harvest. Do not apply more than 10 treatments per year, with a minimum retreatment interval of 3 days.

## SPRAY 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.

Use of the following spray methods or equipments DO NOT require a spray buffer zone: hand-held or backpack sprayer and spot treatment.

The spray 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	Spray 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*	Beans	35	15	20	10	1
	Cucumbers	20	10	10	5	1
	Peppers	40	20	20	10	1
	Potatoes	40	20	20	10	1
	Sugar beets	25	10	15	5	1
	Tomatoes	45	20	25	10	1

\* For field sprayer application, spray 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 spray 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 spray buffer zone can be reduced by 30%.

## TANK MIXES

This product may be tank mixed with registered pest control products, whose labels also allow tank mixing, provided the entirety of both labels, including Directions for Use, Precautions, Restrictions, Environmental Precautions, and Spray Buffer Zones are followed for each product. In cases where these requirements differ between the tank mix partner labels, the most restrictive label must be followed. Do not tank mix products containing the same active ingredient unless specifically listed on this label.

In some cases, tank mixing pest control products can result in reduced pesticide efficacy or increased host crop injury. The user should contact Nufarm Agriculture Inc. at 1-800-868-5444 for information before applying any tank mix that is not specifically recommended on this label.

## PRECAUTIONS

**KEEP OUT OF REACH OF CHILDREN  
HARMFUL IF INHALED - AVOID BREATHING DUSTS OR SPRAY MISTS  
CAUSES EYE IRRITATION - DO NOT GET IN EYES.**

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.

Harmful if swallowed.

Avoid contact with skin and eyes.

Do not contaminate food or feed. Do not contaminate any body of water.

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](http://www.croplife.ca).

## ENVIRONMENTAL PRECAUTIONS

TOXIC to birds, small wild mammals, aquatic organisms and non-target terrestrial plants. Observe spray 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 filter strip between the treated area and the edge of the water body.

## FIRST AID

**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 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**

Probable mucosal damage may contraindicate use of gastric lavage. Treat symptomatically.

### **EMERGENCY TELEPHONE NUMBERS**

For spills or transportation accidents, Chemtrec, 1-800-424-9300.  
For health or environmental emergencies, Prosar, 1-877-325-1840.  
For product and use information, Nufarm Agriculture Inc., 1-800-868-5444.

### **STORAGE**

Store this product away from food or feed. Store unused product in original container only in a cool, dry, well-ventilated area, out of reach of children and animals. If container or bag is damaged, place the container or bag in a plastic bag. Shovel any spills into plastic bags and seal with tape.

### **DISPOSAL**

1. Follow provincial/territorial instruction 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/territorial requirements.
4. For information on disposal of unused, unwanted product, contact the manufacturer or the provincial/territorial regulatory agency. Contact the manufacturer and the provincial/territorial 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.