# Doktor Doom Premium Fungicide Concentrate

Copper Fungicide

**DOMESTIC** 

**SOLUTION** 

## READ THE LABEL BEFORE USING

## KEEP OUT OF REACH OF CHILDREN

ACTIVE INGREDIENT: Copper, present as copper octanoate ... 1.8%

REG. NO. 34303 PCPA

NET CONTENTS 100 ml - 10 L

753146 Alberta Ltd o/a Ultrasol Industries 10755 69 Avenue NW Edmonton, Alberta T6H 2C9 1-800-452-0023

> [Peel back for instructions Press to reseal]

#### DIRECTIONS FOR USE

Do not apply this product in a way that will contact adults, children or pets, either directly or through drift.

Do not contaminate irrigation or drinking water supplies or aquatic habitats by cleaning of equipment or disposal of wastes.

Do not apply to any body of water.

Avoid application of this product when winds are gusty.

Do not apply within one day of harvest.

## PESTS/SITES AND APPLICATION INSTRUCTIONS

GENERAL USE: For outdoor and greenhouse use only. Unless otherwise stated below, the standard rate for the listed species is 1 part Doktor Doom Premium Fungicide Concentrate in 50 (2%) to 200 (0.5%) parts water.

Spray all plant surfaces thoroughly, not exceeding 100 mL of diluted spray per 1 m<sup>2</sup>; if necessary, repeat sprays every 7- to 10-days unless otherwise noted below. For best control, begin treatment 2 weeks before disease normally appears or when weather forecasts predict a long period of wet weather.

Alternatively, begin treatment when disease first appears and repeat at 7- to 10-day intervals unless otherwise noted below. Apply at the higher rate every 7 days or fewer following heavy rain or when the amount of disease is increasing rapidly.

For outdoor flowers and ornamentals, do not exceed 10 applications per year. If possible, time applications so that 12 hours of dry weather follow application.

Doktor Doom Premium Fungicide Concentrate may cause some copper toxicity on some plant species. During excessive moisture and cold, leaf spots can appear on copper-sensitive crop species. If concerned about sensitivity of plants, apply to individual plants or small areas of plants and wait to determine if plant damage occurs prior to treatment of larger areas.

	Turf						
Plant	Diseases Controlled	Application Rate	Notes				
Turf	Powdery mildew	Use a 0.5% to 2%	Apply product when disease first appears,				
(lawns)	(Erysiphe graminis)	solution applied at	and repeat at 7- to 10-day intervals for a				
		4.7 - 9.4 L per	maximum of 15 applications.				
		$100 \text{m}^2$	In frequently diseased areas, prune adjacent				
			trees and shrubs to reduce turf shading and to				
			improve air movement.				

Ornamentals (Outdoor and Greenhouse)						
Plant	Plant Diseases Controlled or Application Notes					
	Suppressed	Rate				
Greenhouse and	Corynespora leaf spot	Use a 0.5% to 2%	Re-apply using 5- to 10-day			
outdoor	(Corynespora casiicola) –	solution applied at	intervals.			
ornamental	Suppression,	4.7-9.4 L per				
shrubs and	Powdery mildew (Erysiphe	$100 \text{m}^2$	This product may cause			

flowering plants (such as rose, hollyhock, hydrangea, crape myrtle)	spp.), Rust ( <i>Puccinia malvacearum</i> ), Bacterial blight ( <i>Pseudomonas syringae</i> ), Fire blight ( <i>Erwinia amylovora</i> ), Coryneum blight	copper toxicity on some rose varieties. Copper toxicity appears as purple spots.  For black spot, use a 1% solution.
	(Thyrostroma carpophilum)	In damp cool conditions (below 18°C), phytotoxicity
Rose	Black spot ( <i>Diplocarpon</i> rosae), Powdery mildew ( <i>Podosphaera pannosa</i> var. rosae, Rust ( <i>Phragmidium</i> mucronatum	is likely to occur with use of this product.
Crape myrtle	Cercospora leaf spot (Cercospora lythracearum) - Suppression	

Vegetables, Fruits, Nuts and Berries					
Plant	Diseases Controlled or Suppressed	Application Rate	Notes		
Root and Tuber Vegetables (Garden beet, Celeriac, Potatoes, Sugar beet)	Early blight (Alternaria solani) on potato, Late blight (Phytophthora infestans) on potato, Septoria leaf spot (Septoria lycopersici) on potato, Septoria (late) blight (Septoria apiicola) on celeriac, Cersospora leaf spot (Cercospora beticola) on beet and sugar beet	Use a 0.5% to 2% solution, applied at 4.7-9.4 L per 100m <sup>2</sup>	Re-apply using 5- to 10-day intervals.		
Bulb Vegetables (Chives, Garlic, Leek, Onion, Shallot)	Downy mildew (Peronospora destructor), Botrytis leaf blight (Botrytis squamosa), Soft rot (Erwinia carotovora subsp. carotovora)	Use a 0.5% to 2% solution, applied at 4.7-9.4 L per 100m <sup>2</sup>	Re-apply using 5- to 10-day intervals.		
Celery	Cercospora (early) blight ( <i>Cercospora</i>	Use a 0.5% to 2%, applied at 4.7-9.4 L	Re-apply using 5-to 10-day intervals.		

	apiicola), Septoria (late) blight (Septoria apiicola)	per 100m <sup>2</sup>	Use higher rate when disease pressure is high.
Brassica Leafy Vegetables (Bok choy, Broccoli, Brussels sprouts, Cabbage, Cauliflower, Kale, Kohlrabi, Mustard, Pak-choi)	Black rot (Xanthomonas campestris pv. campestris) - Suppression	Use a 0.5% to 2%, applied at 4.7-9.4 L per 100m <sup>2</sup>	Re-apply using 5- to 10-day intervals.  For Brussels sprouts, do not exceed 10 applications per year.
Legumes (Bean, Pea, Soybean)	Ascochyta blight (Ascochyta pisi), Halo blight (Pseudomonas syringae pv. phaseolicola), Common blight (Xanthomonas campestris pv phaseoli), Brown spot (Pseudomonas syringae pv. syringae), Powdery mildew (Erysiphe spp.), Rust (Uromyces appendiculatus)	Use a 0.5% to 2% solution, applied at 4.7-9.4 L per 100m <sup>2</sup>	Re-apply using 5- to 10-day intervals.
Fruiting Vegetables (Eggplant, Peppers, Tomatoes)	Early blight (Alternaria solani), Late blight (Phytophthora infestans), Septoria leaf spot (Septoria lycopersici), Bacterial speck (Pseudomonas syringae), Bacterial leaf spot (Xanthomonas campestris pv vesicatoria), Bacterial canker (Clavibacter michiganensis pv. michiganensis)	Use a 0.5% to 2% solution, applied at 4.7-9.4 L per 100m <sup>2</sup>	Re-apply using 5- to 10-day intervals.
Cucurbits (Cucumbers, Cantaloupe, Melon, Squash, Pumpkin, Zucchini)	Powdery mildew (Podosphaera xanthii; Erysiphe cichoracearum), Downy mildew	Use a 0.5% to 2% solution, applied at 4.7-9.4 L per 100m <sup>2</sup>	Re-apply using 5- to 10-day intervals.

	(Pseudoperonospora cubensis), Alternaria leaf blight (Alternaria cucumerina), Anthracnose (Colletotrichum orbiculare), Angular leaf spot (Pseudomonas syringae pv. orbiculare), Bacterial wilt (Erwinia tracheiphila), Septoria leaf spot (Septoria cucurbitacearum)		
Pome Fruit Trees (Apple, Pear, Quince)	Fire blight (Erwinia amylovora), Scab (Venturia Inaequalis, V. pirina)	Use a 0.5% to 2% solution, applied at 4.7-9.4 L per 100m <sup>2</sup>	Re-apply using 5-to 10-day intervals. Do not exceed 10 applications per year. Do not exceed the 1% rate for apple varieties susceptible to russeting. For fireblight control, apply in the dormant period, during bloom, or in-season cover spray applications. NOTE: This product as used in this recommendation may cause russeting of light coloured apple varieties. Use a 0.8% solution when fruit is present.
Stone Fruit Trees (Apricot, Cherry, Nectarine, Peach, Plum)	Peach leaf curl (Taphrina deformans), Bacterial spot (Xanthomonas campestris pv. pruni), Coryneum blight (Thyrostroma carpophilum), Bacterial canker (Pseudomonas syringae pv. syringae, morsprunorum,) Brown rot (Monilinia fructicola),	Use a 0.5% to 2% solution applied at 4.7-9.4 L per 100m <sup>2</sup>	Re-apply using 5- to 10-day intervals. For peaches, do not exceed 5 applications per year. For nectarines, do not exceed 10 applications per year. For bacterial canker, apply as a dormant spray as buds begin to swell, repeating at the bud burst stage, and weekly thereafter as needed, up to

	Leaf and fruit spot (Blumeriella jaapii)		six sprays. In the fall spray again at 10% and 80% leaf fall. For brown rot blossom blight apply full cover spray at delayed dormant (bud swell), popcorn, full bloom and petal fall stages. During wet weather additional bloom sprays may be necessary. Apply to leaf and fruit spot, Coryneum blight, and peach leaf curl as a
Small Fruits	Powdery mildew	Use a 0.5% to 2%	dormant spray in late fall during a period of dry weather.  Apply at the start of
(Blackberry, Blueberry, Currant, Gooseberry, Grape, Raspberry, Strawberry)	(Erysiphe necator) on grape, Powdery mildew (Podosphaera aphanis) on strawberry, Downy mildew (Plasmopara viticola) on grape, Rust (Cronartium ribicola) on currant and gooseberry, Bacterial blight (Pseudomonas syringae pv. Syringae) on raspberry, blackberry, and blueberry	solution, applied at 4.7-9.4 L per 100m <sup>2</sup>	flowering and continue every 7- to-10 days. Do not apply within 1 day of harvest. For strawberries, spray 1 month after planting (or before flowering on established plants) and twice more at 7-day intervals. For grapes, do not mix with lime. Certain Vinifera and French Hybrid varieties may be sensitive to copper sprays resulting in marginal leaf burn. Make test sprays before spraying these varieties
Filbert, Hazelnut	Bacterial blight (Xanthomonas campestris pv. corylina), Eastern filbert blight (Anisogramma anomala)	Use a 0.5% to 2% solution, applied at 4.7-9.4 L per 100m <sup>2</sup>	Re-apply using 5- to 10-day intervals.
Walnut	Bacterial blight (Xanthomonas campestris pv. juglandis)	Use a 0.5% to 2% solution, applied at 4.7-9.4 L per 100m <sup>2</sup>	Re-apply using 5- to 10-day intervals.
Parsley	Leaf spot (Septoria petroselini)	Use a 0.5% to 2% solution, applied at	Re-apply using 5- to 10-day intervals.

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47-94	L per 100m <sup>2</sup>	
T·/-/-T·	L per room	

	Greenhouse Foo	d Crops	
Crop or Plant	Diseases Controlled or Suppressed	Application Rate	Notes
Celery	Cercospora (early) blight (Cercospora apiicola), Septoria (late) blight (Septoria apiicola)	Use a 0.5% to 2% solution applied at 4.7-9.4 L per 100m <sup>2</sup>	Re-apply using 5- to 10-day intervals. Use higher rate when disease pressure is high.
Crop Group 6: Legumes (Bean, Pea, Soybean)	Ascochyta blight (Ascochyta pisi), Halo blight (Pseudomonas syringae pv. phaseolicola), Common blight (Xanthomonas campestris pv. phaseoli), Brown spot (Pseudomonas syringae pv. syringae), Powdery mildew (Erysiphe spp.), Rust (Uromyces appendiculatus)	Use a 0.5% to 2% solution applied at 4.7-9.4 L per 100m <sup>2</sup>	Re-apply using 5- to 10-day intervals.
Crop Group 8: Fruiting Vegetables (Eggplant, Pepper, Tomatoes)	Early blight (Alternaria solani), Late blight (Phytophthora infestans), Septoria leaf spot (Septoria lycopersici), Bacterial speck (Pseudomonas syringae), Bacterial leaf spot (Xanthomonas campestris pv vesicatoria), Bacterial canker (Clavibacter michiganensis pv. michiganensis)	Use a 0.5% to 2% solution applied at 4.7-9.4 L per 100m <sup>2</sup>	Re-apply using 5- to 10-day intervals.
Crop Group 9: Cucurbits (Cucumbers, Cantaloupe, Melon, Squash, Pumpkin, Zucchini)	Powdery mildew (Podosphaera xanthii; Erysiphe cichoracearum), Downy mildew (Pseudoperonospora cubensis,) Alternaria leaf blight (Alternaria cucumerina,) Anthracnose (Colletotrichum orbiculare), Angular leaf spot (Pseudomonas syringae pv. orbiculare), Bacterial wilt (Erwinia tracheiphila),	Use a 0.5% to 2% solution applied at 4.7-9.4 L per 100m <sup>2</sup>	Re-apply using 5- to 10-day intervals.

Septoria leaf spot (Septoria cucurbitacearum)	

#### **PRECAUTIONS**

KEEP OUT OF REACH OF CHILDREN. Prevent access by unauthorized personnel. Use only in well ventilated areas. For good hygiene practice, wear gloves when handling this product. Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Do not allow adults, children or pets to enter the treated area until sprays have dried.

#### TOXICOLOGICAL INFORMATION

Treat symptomatically.

#### **ENVIRONMENTAL PRECAUTIONS**

Toxic to birds, small wild mammals and aquatic organisms. 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.

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

#### **STORAGE**

Store in original container in a cool, dry, well-ventilated area. To prevent contamination, store this product away from food or feed. Protect from freezing.

## DISPOSAL/DECONTAMINATION

DO NOT reuse the empty containers. Dispose in household garbage. Unused or partially used products should be disposed at provincially or municipally designated hazardous waste disposal sites.

#### 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.

## OPTIONAL MARKETING STATEMENTS

Controls powdery mildew & other listed diseases Biodegradable

Controls many plant diseases using low concentrations of copper Shake Well Before Using 2021-5678 2021-11-04

Dormant and growing season liquid copper fungicide Controls many plant diseases using low concentrations of copper Decomposes to a form useful to plants & microbes