GROUP FUNGICIDE

# Phyton®-27 BACTERICIDE AND FUNGICIDE

Solution

**COMMERCIAL** 

GUARANTEE: Copper, as elemental\*......5.5%

\*From picro cupric ammonium formate and tannate complex

REGISTRATION NO. 21699 PEST CONTROL PRODUCTS ACT

READ THE LABEL AND BROCHURE BEFORE USING KEEP OUT OF REACH OF CHILDREN DANGER – CORROSIVE TO EYES AND SKIN

# **DANGER**



**CORROSIVE** 



**POISON** 

**Net Contents**: 1 L, 3.785 L (1 US Gal)

Manufacturer:
Phyton Corporation
5608 International Parkway
New Hope, MN
55428
1-800-356-8733

# 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.

**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

Note to physician: Probable mucosal damage may contraindicate the inducement of vomiting. Remedial measures and antidotes: Follow dilution and neutralizing advice under FIRST AID. Additional measures may be prescribed by a physician.

Corrosive. Causes irreversible eye damage and skin burns. Harmful if absorbed through the skin or swallowed. May cause sensitization in certain individuals. Symptoms range from sharp burning pain to skin irritation, depending on severity. Contains about 40% surfactants (soaps). Acidic, pH 4.7. Avoid alcohol.

#### **PRECAUTIONS:**

# KEEP OUT OF REACH OF CHILDREN DO NOT APPLY BY AIR

Corrosive--causes irreversible eye damage and severe skin burns. Harmful if swallowed. May be harmful if inhaled or absorbed through the skin. Do not get in eyes or on skin or clothing. Avoid breathing spray mist. May cause sensitization in certain individuals. 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 missing/loading, clean-up and repair. When spraying in an enclosed area, wear a NIOSH approved respirator. When using do not eat, drink, or smoke. Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove personal protective equipment immediately after handling this product. As soon as

possible, wash thoroughly and change into clean clothing. Wash the outside of gloves before removing.

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 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.

#### STORAGE AND DISPOSAL

**STORAGE**--STORE IN ORIGINAL CONTAINERS AT NOT LESS THAN 8°C. DO NOT CONTAMINATE WATER, FOOD OR FEED BY STORAGE OR DISPOSAL. OPEN DUMPING IS PROHIBITED.

#### **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 PROVINCIAL REGULATORY AGENCY. CONTACT THE MANUFACTURER AND THE PROVINCIAL REGULATORY AGENCY IN CASE OF A SPILL, AND FOR CLEAN-UP OF SPILLS.

# **Greenhouse Ornamentals**

**DO NOT** enter or allow worker entry into treated areas of a greenhouse during the restrictedentry interval of 24 hours.

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 7 days following application.

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

- -The name of the product applied
- -The date and 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

Signs must remain posted at least 7 days after treatment. Only the applicator(s) (or someone under their supervision) may remove warning signs. Post warning signs at entrances to treated areas notifying workers of product application.

**DO NOT** enter or allow worker entry into treated areas during the restricted-entry interval of 48 hours for all other uses.

#### 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. The user assumes the risk to persons or property that arises from any such use of this product.

# **ENVIRONMENTAL HAZARDS**

This product is toxic to fish. Do not apply directly to water and wetlands. Do not contaminate any body of water by cleaning of equipment or by disposal of wastes or containers.

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

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

For resistance management, please note that Phyton-27 contains a Group M Fungicide, which is generally considered to have low risk of resistance development. However, as a general principle, it is recommended not to rely exclusively on similar products for pest control and to alternate with products having a different mode of action whenever possible.

To prolong the effectiveness of this product, the following resistance management strategies should be followed:

- Fungicide product 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 chemical control practices.
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#### ORNAMENTALS USE

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#### **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.

- 1. Mix Phyton-27 by shaking it gently back and forth approximately 2 minutes.
- 2. Carefully pour Phyton-27 into the required amount of potable water; gently mix for 2 minutes and each 1 hour if solution is not used up.
- 3. Metal piping or equipment used for application should be brass or stainless steel.
- 4. Solution should be used within 24 hours.
- 5. Phytotoxicity: Phyton-27 has been tested on a wide variety of herbaceous and woody ornamental plants without phytotoxicity symptoms. However, because it is not possible to test all ornamental plant species, varieties and cultivars and because environmental factors and varietal stage of growth may affect phytotoxic expression, it is recommended that a small group of test plants be treated at the anticipated dosage rate and observed for 5 to 7 days to determine phytotoxicity before treating large numbers of those plants.
- 6. Do not tank mix Phyton-27 with B-Nine<sup>®</sup> and do not apply Phyton-27 within 7 days either before or after applications of B-Nine<sup>®</sup>, as burning of leaves may result.
- 7. Do not tank mix Phyton-27 with strongly acidic compounds and do not apply Phyton-27 within 14 days either before or after applications of such products.

# SPECIFIC DIRECTIONS: SPRAY APPLICATIONS

Apply as a foliar spray to run off. Begin applications when conditions favour disease or disease first appears and then weekly. In the event of heavy disease pressure, intervals can be shortened to 3 to 5 days unless otherwise stated (see special remarks). Use 1000-2000L water/hectare. Rates above 125 mL per 100 liters may damage tender, open blooms. Use of low volume equipment is effective against *Botrytis* but not effective against established powdery mildew and bacterial infections. Lower dosage rates may be as effective as higher rates and should be tried first. Routine preventive programs may be maintained at the lower rates. Higher dosage rates may be needed under significant disease pressure. To keep disease pressure low and maximize benefits with minimum dosages, use in combination with good sanitation and other management practices.

Greenhouse Ornamentals			
Crop	Disease	Rate/100L water	Special Remarks
Azalea	Cylindrocladium	125-275 mL	Remove any wilted plants and apply at
			3 to 5 day intervals.
Begonia	Erysiphe	125-250 mL	When powdery mildew is present,
	cichoracearum		remove diseased tissue from plants and
	(Powdery Mildew)		spray higher rates at 10 day intervals
			until sale.
Cyclamen	Botrytis cinerea	125-250 mL	Apply weekly up until flowering.

	Erwinia soft rot	125 mL	Begin applications when disease first appears and then every two (2) weeks. Chilled product may result in discolouration of blooms. Store at or above 7°C. Keep pH under 7 and above 5.5.
Dianthus	Heterosporium echinulatum	125-200 mL	Use the higher rate when conditions favour disease development. Apply at 7 day intervals.
Dusty Miller	Alternaria leaf spot	200 mL	Apply at 7 day intervals.
Fuchsia	Botrytis cinerea	100-150 mL	
Geranium	Botrytis cinerea	250 mL	
	Xanthomonas campestris	250 mL	This will prevent spread of disease in finished plants but will not eradicate disease in propagation material.
Gerbera	Botrytis cinerea	125-200 mL	
Hibiscus	Botrytis cinerea	100-200 mL	
Hydrangea	Powdery Mildew	125-200 mL	Product most effective when applied preventively. Use the higher rate when conditions favour disease development. Apply at 7 day intervals.  May damage blue flowers.
Kalanchoe	Botrytis cinerea	125-200 mL	
Monarda	Powdery Mildew	125-200 mL	Apply at 7 day intervals.
New Guinea	Botrytis cinerea	100-125 mL	
Impatiens	Sphaerotheca sp. (Powdery Mildew)	100-150 mL	
Phlox	Powdery Mildew	125-250 mL	Apply at 7 day intervals.
Primula	Botrytis cinerea	100-150 mL	
Roses	Botrytis cinerea	125-250 mL	
	Sphaerotheca pannosa (Powdery Mildew)	125-250 mL	
Miniature Roses	Cylindrocladium	125-400 mL	For best results, apply preventively, when conditions favour disease development.
Poinsettia	Erysiphe communis (Powdery Mildew	125 mL	Apply anytime from cuttings through color bracts. Powdery Mildew control is best when treatment begins prior to color.
	Botrytis cinerea	150 mL	
	Scab	200-250 mL	Apply anytime from cuttings through color bracts. Scab control is best when treatment begins prior to color. Apply at 7 day intervals.

Spathiphyllum	Botrytis cinerea	100-200 mL		
	Cylindrocladium	125-200 mL	For best results, apply preventively,	
			when conditions favour disease	
			development.	
Verbena	Powdery Mildew	175 mL	Minimum application interval is 14	
			days.	
Outdoor Orna	Outdoor Ornamentals			
Crop	Disease	Rate/100L water	Special Remarks	
Outdoor	Black Spot	390 mL	Apply every 7-10 days, depending on	
Roses			disease incidence and pressure - use the	
			shorter interval under conditions that	
			favour high disease pressure; apply a	
			maximum of 10 sprays per year. Apply	
			at a minimum 7 day intervals.	
Dogwood	Powdery Mildew	200 mL	Apply at a minimum 7 day intervals.	
			Apply a maximum of 10 sprays per	
			year.	

SOIL DRENCH APPLICATIONS, GREENHOUSE ORNAMENTALS			
Rates in mL Phyton-27 per 100L Water			
Poinsettia	Rhizoctonia Root Rot	150-250 mL	Apply as a drench to the growing media in sufficient volume to saturate the media Repeat drench at 7 day intervals when disease pressure is present.

CUT FLOWER DIP APPLICATIONS, GREENHOUSE ORNAMENTALS			
Rates in mL Phyton-27 per L Water			
Alstromeria	Botrytis cinerea	0.2-0.3 mL	Apply as a 4-second bud/flower dip
Freesia	Botrytis cinerea	0.2-0.3 mL	shortly after cutting. Adjust dip mixture
Rose	Botrytis cinerea	0.8-1.0 mL	pH to 5.5 to 6.5.
Sweet Pea	Botrytis cinerea	0.3-0.5 mL	

CUTTINGS DIP APPLICATION, GREENHOUSE ORNAMENTALS			
Rates in mL Phyton-27 per 100L Water			
Poinsettia	Erwinia softRot	125-250 mL	Apply as a pre-plant dip for cuttings. Submerge cutting in solution for a few seconds.