
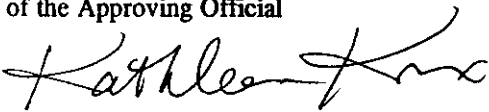


55146-83

9-28-2000

1/12

	U.S. ENVIRONMENTAL PROTECTION AGENCY Office of Pesticide Programs Biopesticides and Pollution Prevention Division (7511C) 1200 Pennsylvania Avenue NW Washington, DC 20460	EPA Reg. Number: <b>55146-83</b>	Date of Issuance: <b>SEP 28 2000</b>
	NOTICE OF PESTICIDE: <input checked="" type="checkbox"/> Registration <input type="checkbox"/> Reregistration  (under FIFRA, as amended)	Term of Issuance: <b>Unconditional</b>	
		Name of Pesticide Product: <b>PHOSTROL™ Agricultural Fungicide</b>	
Address of Registrant (include ZIP Code):  <b>Agtrol International</b> <b>7322 Southwest Freeway, Suite 1400</b> <b>Houston, TX 77074</b>			
<p>Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Biopesticides and Pollution Prevention Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.</p> <p>On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act. Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.</p> <p>This product is unconditionally registered in accordance with FIFRA sec. 3(c)(5) subject to the comments listed below:</p> <ol style="list-style-type: none"><li>1. Make the following label changes:<ol style="list-style-type: none"><li>a. Add the phrase, "EPA Registration No. 55146-83 to your label before you release the product for shipment</li><li>b. Add the appropriate Establishment Number to your label before you release the product for shipment</li></ol></li><li>2. Submit five copies of the final printed labeling before you release this product for shipment.</li></ol> <p>If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec.6(e). Your release for shipment of the product constitutes acceptance of these conditions.</p> <p>Unconditional registration does not eliminate the need for continual reassessment of a pesticide. If EPA determines, at any time, that additional data are required to maintain in effect, an existing registration, the Agency will require submission of such data under Section 3(c)(2)(B) of FIFRA.</p>			
Signature of the Approving Official 		9/28/00	

DRAFT 08/30/00

Agtrol International

# PHOSTROL™

## Agricultural Fungicide

KEEP OUT OF REACH OF CHILDREN

### CAUTION

#### ACTIVE INGREDIENTS:

Mono- and dibasic sodium, potassium, and ammonium phosphites*	53.8 %
OTHER INGREDIENTS:	46.4 %
TOTAL	100.00 %

\*Contains 6.69 pounds/gallon of the active ingredients, mono- and dibasic sodium, potassium, and ammonium salts of phosphorous acid, equivalent to 4.32 pounds phosphorous acid per gallon (35.6 weight %).

#### FIRST AID STATEMENT

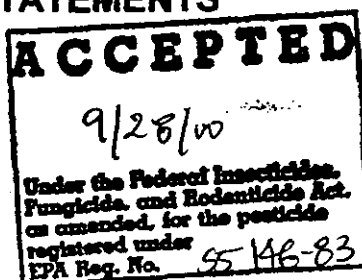
**IF IN EYES:** Flush eyes with plenty of water. Call a physician if irritation persists.

**IF ON SKIN:** Wash with plenty of soap and water. Get medical attention.

**IF INHALED:** Remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth to mouth. Get medical attention.

SEE BACK PANEL FOR ADDITIONAL PRECAUTIONARY STATEMENTS

EPA REG. NO. 55146 - IG



EPA EST. NO.

**PHOSTROL™****PRECAUTIONARY STATEMENTS****HAZARDS TO HUMANS AND DOMESTIC ANIMALS****CAUTION**

Causes moderate eye injury. Avoid breathing vapor or spray mist. Harmful if swallowed or absorbed through the skin. Avoid contact with eyes, skin and clothing.

**PERSONAL PROTECTIVE EQUIPMENT (PPE)**

Applicators and other handlers must wear:

- a) long-sleeved shirt and long pants
- b) waterproof gloves
- c) shoes plus socks
- d) protective eyewear

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

**ENGINEERING CONTROLS STATEMENT**

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d) (4-5)], the handler PPE requirements may be reduced or modified as specified in the WPS.

**USER SAFETY RECOMMENDATIONS**

Users should:

Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.

Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

## ENVIRONMENTAL HAZARDS

For terrestrial uses, do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters. This pesticide is toxic to fish and aquatic organisms. Do not apply to water. Drift and runoff from treated areas may be hazardous to fish and aquatic organisms in adjacent aquatic sites.

## DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Do not apply this product in a way that will contact workers or other persons either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

## AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protections Standard (WPS), 40 CFR part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted-entry interval (REI). The requirements in this box only apply to uses of this product that are covered by the WPS.

Do not enter or allow worker entry into treated areas during the REI of 4 hours.

For early entry to treated areas that is permitted under the WPS and that involves contact with anything that has been treated, such as plants, soil, or water, wear: Coveralls, waterproof gloves and shoes and socks and protective eyewear.

**CHEMIGATION:** Apply this product only through center pivot, motorized lateral move, end tow, traveler, big gun, plastic solid set, or plastic hand move sprinkler irrigation systems that do not contain aluminum components. Do not apply this product through any other type of irrigation system unless specifically set forth above or as may be specified in the future as additional systems not containing aluminum components come into use. Crop injury, lack of effectiveness or illegal pesticide residues in the crop can result from non-uniform distribution of treated water. A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise. If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.

Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place. Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year. Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone (RPZ), backflow preventer or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe. For non-public water sprinkler chemigation systems, the system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection

pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected. For non-public water sprinkler chemigation systems, the irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected. Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock. Do not apply when wind speed favors drift beyond the area intended for treatment.

It is recommended that the pesticide supply tank be equipped with a means for continuous agitation either by recirculation or a mechanical agitator. Charge the supply tank with the appropriate amount of water and add the pesticide slowly followed by any sticker-spreaders, insecticides, nutrients, etc. Observe all cautions and limitations on the label of all products used in the mixtures. For fixed position irrigation systems such as center pivot, big gun, etc., the pesticide should be applied towards the end of the irrigation period. Exact timing will depend on the desired pesticide application rate and calibration of the system. For moving systems, the pesticide should be applied continuously. In all cases, thorough coverage of the crop should be achieved.

Posting of areas to be chemigated is required when 1) any part of a treated area is within 300 feet of sensitive areas such as residential area, labor camps, businesses, day care centers, hospitals, inpatient clinics, nursing homes or any public areas such as schools, parks, playgrounds, or other public facilities not including public roads, or 2) when the chemigated area is open to the public such as golf courses or retail greenhouses.

Posting must conform to the following requirements: Treated areas shall be posted with signs at all usual points of entry and along likely

routes of approach from the listed sensitive areas. When there are no usual points of entry signs must be posted in the corners of the treated areas and in any other location affording maximum visibility to sensitive areas. The printed side of the sign should face away from the treated area toward the sensitive area. The signs shall be printed in English. Signs must be posted prior to application and must remain posted until foliage has dried and soil surface water has disappeared. Signs may remain in place indefinitely as long as they are composed of materials to prevent deterioration and maintain legibility for the duration of the posting period.

All words shall consist of letters at least 2.5 inches tall, and all letters and the symbol shall be a color which sharply contrasts with their immediate background. At the top of the sign shall be the words KEEP OUT, followed by an octagonal stop sign symbol at least 8 inches in diameter containing the word STOP. Below the symbol shall be the words PESTICIDE IN IRRIGATION WATER.

This sign is in addition to any sign posted to comply with the Worker Protection Standard.

### **AVOCADO**

*Phytophthora citricola* (Canker). Mix 2.5 – 5.0 gallons with 5 gallons of water and apply to trunk lesions using enough spray volume to thoroughly wet the lesions. In the absence of lesions, apply to the trunk from the soil line to about two feet up the trunk. Use the higher rate when lesions are present.

*Phytophthora cinnamoni* (Root Rot). Apply 5.0 gallons per acre in 500 gallons of water starting at transplant or at the start of the growing season. Make up to four applications per year at 60 day intervals. Spray to run-off.

*Downy Mildew*. Apply 0.5 ounces per gallon of water (2.0 gallons/500 gallons water) to run-off as needed for disease control.

### **BRASSICA CROPS**

(Broccoli, Broccoli Raab (rapini), Brussels Sprouts, Cabbage, Chinese Broccoli (gai lan), Chinese Cabbage (Bok Choy),

**Chinese Cabbage (Napa), Chinese Mustard Cabbage (Gai Choy), Cauliflower, Cavalo Broccolo, Collards, Kale, Kohlrabi, Mizuna, Mustard Greens, Mustard Spinach, Rape Greens)**

*Peronospora parasitica* (Downy Mildew). Apply 2.0 – 5.0 gallons in 8 – 20 gallons of water per acre on a 7 – 21 day interval when conditions favor disease development. Use higher rates and shorter spray intervals when disease pressure is moderate to high.

## **CANEBERRY**

**(Blackberry, Loganberry, Red and Black Raspberry, cultivars and/or hybrids)**

*Phytophthora spp.* (Root Rot): Apply 5.0 gallons in 20 gallons of water per acre to assure thorough wetting of the foliage. In new plantings, begin application when the plants produce new growth of 1 – 3 inches. In established plantings, begin application when conditions favor disease development.

**East of the Rocky Mountains:** Begin application in the Spring after bud break (1 – 3 inches of new growth) and repeat on 45 – 60 day interval. Do not make more than 4 sprays during the growing season.

**West of the Rocky Mountains:** Fall Application – apply when conditions favor disease development and repeat if necessary in 3 – 4 weeks. Spring Application – make first application after bud break and repeat 3 – 4 weeks later.

## **CITRUS**

*Phytophthora Foot Rot.* Mix 2.5 – 5.0 gallons with 5 gallons of water and apply to trunk lesions using enough spray volume to thoroughly wet the lesions. In the absence of lesions, apply to the trunk from the soil line to about two feet up the trunk. Use the higher rate when lesions are present.

*Phytophthora Foot, Root and Brown Rot.* Apply 5.0 gallons per acre in 500 gallons of water when conditions favor disease development. Apply to run-off making sure the foliage is thoroughly wet.



## CUCURBIT CROPS

[Chinese Waxgourd, Citron Melon, Cucumber, Gherkin, Gourd (edible), Momordica spp. (Balsam Apple, Balsam Pear, Bitter Melon, Chinese Cucumber), Muskmelon, Pumpkin, Summer and Winter Squash, Watermelon]

*Phytophthora* spp. (Root and Fruit Rot) and *Pseudoperonospora cubensis* (Downy Mildew). Apply 2.0 – 5.0 gallons in 8 -20 gallons of water per acre beginning when conditions favor disease development. Repeat as needed on a 7 – 14 day interval. In times of moderate to high disease pressure, use the higher rate and the shorter spray interval.

**NOTE:** 1) Do not exceed seven applications per season.

## GINSENG

*Phytophthora cactorum* (Foliar and Root Rot). Apply 5.0 gallons per 100 gallons of spray starting when conditions first become conducive to disease development and continue on a 7 day interval as long as conditions remain favorable for disease development.

**NOTE:** Do not exceed nine applications per season.

## GRAPE

*Downy Mildew*. Apply 2/3 to 1 1/4 gallons per acre. Begin application at bud break with additional applications made throughout the season. Use higher rates depending upon disease severity and canopy density. (**NOTE:** Due to varietal sensitivity, it is recommended that a test for sensitivity be performed prior to use).

## HOPS

*Downy Mildew*. Apply 2.5 gallons in 10 gallons of water per acre as directed foliar spray using ground equipment only. During favorable disease development conditions make applications as follows: 1) when shoots are 6 – 12 inches high; 2) after training when vines are 5 – 6 feet tall; 3) about 3 weeks after the second application; and 4) during bloom.

## LEAFY VEGETABLES (Except Brassica Vegetables)

[Amaranth, Arugula (Roquette), Cardoon, Celery, Celery (Chinese), Celtuce, Chervil, Chrysanthemum (Edible Leaved,

Garland), Corn Salad, Cress (Garden, Upland), Dandelion, Dock (Sorrel), Endive (Escarole), Fennel (Florence), Lettuce (Head and Leaf), Orach, Parsley, Purslane (Garden, Winter), Radicchio (Red Chicory), Rhubarb, Spinach, Spinach (New Zealand and Vine, Swiss Chard]

*Bremia lactucae*, *Peronospora* spp. (Downy Mildew). Apply 2.0 – 5.0 gallons in 8 -20 gallons of water per acre to obtain good coverage. Begin application when conditions favor disease development and continue on a 7 –21 day spray interval. Use higher rate and shorter spray interval during times of moderate to high disease pressure.

**NOTES:** 1) Do not exceed seven applications per season.

### **ONIONS (DRY BULB)**

*Peronospora destructor* (Downy Mildew). Best results are obtained when PHOSTROL is used in a preventative disease control program. Apply 2.0 – 3.0 gallons in 8 - 12 gallons of water per acre beginning when conditions first favor disease development. Continue applications on a 7 – 14 day interval. If disease is already present, use the high rate and the shortest spray interval.

**NOTES:** 1) Do not exceed seven applications per crop season.

### **PINEAPPLE**

*Phytophthora parasitica* (Heart Rot). Apply as a pre-plant dip immediately prior to planting using 2.5 gallons per 100 gallons solution. One hundred gallons should be used to treat the number of slips required to plant one acre. For established plantings, apply 3.75 gallons per 100 gallons of spray mixture beginning when conditions are favorable for disease development and when such conditions are anticipated. Continue applications at 3 month intervals. Make sure sufficient coverage is obtained.

### **POME FRUIT**

(Apple, Crabapple, Loquat, Mayhaw, Pear, Oriental Pear Quince)

*Phytophthora* spp. (Collar and Root Rot). Apply 2.5 – 5.0 gallons per acre in 500 gallons of water at 30 – 60 day intervals when conditions favor disease development. Under moderate to heavy disease pressure, make 3 – 4 applications at 5.0 gallons per acre on a 60 day

spray interval or make 6 – 8 applications at 2.5 gallons per acre on a 30 day interval. Thorough spray coverage is required.

## STRAWBERRY

*Phytophthora fragariae* (Red Stele). Dip Application – Apply at 2.5 gallons in 100 gallons of water as a pre-plant dip to strawberry roots and crowns for 15 – 30 minutes. Plant within 24 hours of dipping. This application can be used for both annual and perennial varieties.

Foliar Application: Annual planting – Apply 2.5 to 5.0 gallons per acre. Begin application 2 – 3 weeks after planting and repeat on a 30 – 60 day interval while conditions favor disease development. Perennial planting – Start spring applications when the plants start active growth. Repeat application at 30 - 60 day intervals if disease conditions persist or reoccur.

If using Red Stele susceptible varieties or if disease pressure is severe, use higher rates (4.0 to 5.0 gallons per acre), shortest application time (30 days) and maximum number of applications.

*Phytophthora cactorum* (Leather Rot). Apply 2.5 – 5.0 gallons per acre starting at 10% bloom and early fruit set. Continue on a 7 – 14 day interval while conditions favor disease development. Under heavy disease pressure, use higher rates (4.0 to 5.0 gallons per acre), shortest application time (7 days) and maximum number of applications.

## TOMATO

*Phytophthora spp.* (Root Rot). Apply 2.5 – 5.0 gallons in 10 - 20 gallons of water per acre beginning at the 2 – 4 leaf growth stage for direct seeded tomatoes or immediately after transplanting to the field. Continue on a 7 – 14 day spray interval when conditions are favorable for disease development. Use the higher rate (4.0 – 5.0 gallons in 16 - 20 gallons of water per acre) and shorter spray interval when disease pressure is moderate too high.

12/12

## STORAGE AND DISPOSAL

**STORAGE:** Do not contaminate water, food, or feed by storage or disposal. Store in a cool, dry place.

**PESTICIDE DISPOSAL:** Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at the nearest Environmental Protection Agency Regional Office for guidance.

**CONTAINER DISPOSAL:** Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incinerator, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

## WARRANTY STATEMENT

AGTROL INTERNATIONAL warrants that the product conforms to the chemical description on the label and is reasonably fit for the purposes set forth on the label when used according to directions under normal use conditions. THERE ARE NO OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE. This warranty does not extend to the handling or use of this product contrary to label instructions or under abnormal conditions not reasonably foreseeable to seller and buyer assumes all risk of any such use.

PHOSTROL™ is a registered trademark of Agtrol International