

55146-83

2/3/2011

10916

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

FEB 03 2011

Danielle A. Larochelle  
Registration Manager  
Nufarm Americas Inc, AGT Division  
150 Harvester Drive, Suite 200  
Burr Ridge, IL 60527

Subject: PHOSTROL® Agricultural Fungicide  
EPA Registration No. 55146-83  
Label Amendment to update the storage and disposal statement per PR Notice 2007-4, expand the crop listings and satisfy the outstanding deficiencies that were outlined in the Agency letter date October 29, 2010  
Decision # 437792  
Application Dated: November 09, 2010

Dear Mrs. Larochelle:

The amendment referred to above, submitted in connection with registration under FIFRA section 3(c)(5), is acceptable provided that you:

1. Submit and/or cite all data required for registration/reregistration of your product under FIFRA section 3(c)(5) when the Agency requires all registrants of similar products to submit such data.
2. Submit three (3) copies of your final printed labeling before you release the product for shipment. Final printed labeling means the label or labeling of the product when distributed or sold. Clearly legible reproductions or photo reductions will be accepted for unusual labels, such as those silk-screened directly onto glass or metal containers or large bags or drum labels.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6(b). Your release for shipment of the product bearing the amended labeling constitutes acceptance of these conditions.

If you have any questions contact Ms. Menyon Adams at 703-347-8496 or by email at: [adams.menyon@epa.gov](mailto:adams.menyon@epa.gov). A stamped copy of the label is enclosed for your records.

Sincerely,

Linda A. Hollis, Chief  
Biochemical Pesticides Branch  
CONCURRENCES  
Biopesticides and Pollution  
Prevention Division (7511P)

SYMBOL	▶ 7511P	7511P					
SURNAME	▶ Adams	COLE					
DATE	▶ 02/03/11	2/3/11					

2 of 16

# PHOSTROL®

## AGRICULTURAL FUNGICIDE

**ACTIVE INGREDIENTS:**

Mono- and dibasic sodium, potassium, and ammonium phosphites* .....	53.6%
<b>OTHER INGREDIENTS:</b> .....	<b>46.4%</b>
<b>TOTAL:</b> .....	<b>100.0%</b>

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

**KEEP OUT OF REACH OF CHILDREN**  
**CAUTION / PRECAUCIÓN**

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.  
 (If you **DO NOT** understand the label, find someone to explain it to you in detail.)

**SEE INSIDE BOOKLET FOR FIRST AID AND ADDITIONAL PRECAUTIONARY STATEMENTS**

**For Chemical Spill, Leak, Fire, or Exposure, Call CHEMTREC (800) 424-9300**  
**For Medical Emergencies Only, Call (877) 325-1840**

EPA REG. NO. 55146-83  
 EPA EST. NO. \_\_\_\_\_

MANUFACTURED FOR  
 NUFARM AMERICAS INC.  
 AGT Division  
 150 HARVESTER DRIVE  
 BURR RIDGE, IL 60527  
 800-455-2000



NET CONTENTS: \_\_\_\_\_ (Gal.) ( \_\_\_\_\_ liters)

**ACCEPTED**

FEB 03 2011

Under the Federal Insecticide, Fungicide,  
 and Rodenticide Act, as amended, for  
 the pesticide registered under  
 EPA Reg. No. 55146-83

30916

**PRECAUTIONARY STATEMENTS  
HAZARDS TO HUMANS AND DOMESTIC ANIMALS  
CAUTION / PRECAUCIÓN**

Causes moderate eye irritation. Harmful if inhaled. Avoid breathing vapor or spray mist. Harmful if swallowed or absorbed through the skin. Avoid contact with eyes, skin and clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.

<b>FIRST AID</b>	
<b>IF IN EYES</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15 to 20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>IF ON SKIN OR CLOTHING</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15 to 20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>IF INHALED</b>	<ul style="list-style-type: none"> <li>• Remove victim to fresh air.</li> <li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.</li> <li>• Call a poison control center or doctor for further treatment advice.</li> </ul>
<b>HOT LINE NUMBER</b>	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-877-325-1840 for emergency medical treatment information.	

**PERSONAL PROTECTIVE EQUIPMENT (PPE):**

**Applicators and other handlers must wear:**

- long-sleeved shirt and long pants
- chemical-resistant gloves
- shoes plus socks
- 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:**

- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

**ENVIRONMENTAL HAZARDS**

For terrestrial use: **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 wash waters or rinsate. 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 State or Tribal agency responsible for pesticide regulation.

### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection 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, chemical-resistant gloves made of any waterproof material, shoes and socks, and protective eyewear.

### NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are not within the scope of the WPS for agricultural pesticides 40 CFR Part 170. The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries or greenhouses.

**DO NOT** enter treated area until sprays have dried.

**CHEMIGATION:** Apply this product only through center pivot, motorized lateral move, end tow, traveler, big gun, solid set, drip, microjet, or hand move sprinkler irrigation systems. **DO NOT** apply this product through any other type of irrigation system unless specifically set forth above. 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. 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. 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.

**SPRINKLER CHEMIGATION:** 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 back flow. 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. 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.

The pesticide supply tank should 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 labels of all products used in the mixtures. For fixed position irrigation systems such as center pivot, big gun, etc, apply the pesticide 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, apply the pesticide continuously. In all cases, provide thorough coverage of the crop.

**APPLICATION PROCEDURES:** Apply by air or ground in sufficient water for complete coverage of the foliage. Unless specified elsewhere in this label, use a minimum of 5 gallons of water / Acre for aerial application and 20 gallons by ground.

### CROP USE PRECAUTIONS

**NOTE:** Mixing this product with certain surfactants, foliar fertilizers, or other pesticides can cause crop injury. If you do not have prior experience using this product as a solo treatment or in a tank mixture, you must determine crop sensitivity to a particular combination by spraying a small area of foliage and fruit. Evaluate for 3 to 7 days for adverse effects.

**NOTE:** To assure compatibility of this product with other products, pour the products into a small container of water in the correct proportions. After thorough mixing, let stand for 5 minutes. If the combination remains mixed, or can be re-mixed readily, the mixture is compatible.

**NOTE:** Mixing of this product with other products has been known to increase the salt content and the potential for fruit burn. Environmental factors that enhance burn potential include applying product during the following conditions:

- 1) At temperatures above 90°F,
- 2) Shortly after a rain event,
- 3) During color break of the fruit.

Apply with extreme caution when these conditions exist. Determine crop sensitivity to these factors by spraying small areas of foliage and fruit. Evaluate for 3 to 7 days for adverse effects.

60916

## CROP SPECIFIC USE INSTRUCTIONS

Crop	Target Disease	Rate (pints product / A)	Remarks
<b>ASPARAGUS</b>	Asparagus Spear Slime Crown Rot ( <i>Phytophthora</i> spp.)	2.5 – 5.0	Apply this product to fully expanded asparagus ferns. <b>DO NOT</b> apply to ferns that are beginning to senesce. Thorough coverage is required.
<b>AVOCADO</b>	Canker ( <i>Phytophthora citricola</i> )	2.5 – 5.0	Mix product 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 2 feet up the trunk. Use the higher rate when lesions are present.
	Root Rot ( <i>Phytophthora cinnamoni</i> )	4.5	Apply product as a dilute spray starting at transplant or at the start of the growing season. Make up to 4 applications per year at 60-day intervals. Spray to point of runoff.
	Downy Mildew	0.12 fluid ounce product per gallon of water  (equivalent to 3.15 pints product per 500 gallons water)	Apply to the point of runoff. Repeat application as needed for disease control.
<b>BLUEBERRY</b>	Phytophthora Root Rot ( <i>Phytophthora</i> spp.)	2.5 – 5.0	Begin foliar sprays in the spring at approximately the pink bud stage and continue on a 14 to 21-day interval. Use sufficient volume of water for good coverage.
<b>BRASSICA (Cole) LEAFY VEGETABLES</b> All members of Crop Group 5 including: Broccoli, Broccoli Raab (Rapini), Brussels sprouts, Cabbage, Chinese broccoli (Gai Lan), Chinese cabbage (Bok Choy, Napa), Chinese mustard, Cabbage (Gai Choy), Cauliflower, Cavalo broccolo, Collards, Kale, Kohlrabi, Mizuna, Mustard greens, Mustard spinach, Rape greens	Downy Mildew ( <i>Peronospora parasitica</i> )	2.5 – 5.0	Apply product on a 7 to 21-day interval when conditions favor disease development. Use higher rates and shorter spray intervals when disease pressure is moderate to high.
<b>CANEBERRY</b> Blackberry, Loganberry, Red and Black Raspberry*, cultivars and/or hybrids	Root Rot ( <i>Phytophthora</i> spp.)	4.5	Apply product in a minimum of 20 gallons of water to assure thorough wetting of the foliage. In new plantings, begin application when the plants produce new growth of 1 to 3 inches. In established plantings, begin application when conditions favor disease development.
			<b>East of the Rocky Mountains:</b> Begin application in the spring after bud break (1 to 3 inches of new growth) and repeat on 45 to 60-day intervals. <b>DO NOT</b> make more than 4 sprays during the growing season.
			<b>West of the Rocky Mountains:</b> Fall Application – apply when conditions favor disease development and repeat if necessary in 3 to 4 weeks. Spring Application – make first application after bud break and repeat 3 to 4 weeks later.

Crop	Target Disease	Rate (pints product / A)	Remarks
STRAWBERRY	<b>DIP APPLICATIONS</b>		
	Red Stele ( <i>Phytophthora fragariae</i> )	2.5 – 5.0 pt/100 gallons	<p>Except in California, apply at 2.5 pints product in 100 gallons of water as a pre-plant dip to strawberry roots and crowns for 15 to 30 minutes.</p> <p>In California, apply 2.5 to 5.0 pints product in 100 gallons of water as a pre-plant dip to strawberry roots and crowns for 15 to 30 minutes.</p> <p>Plant within 24 hours of dipping. Use this application for both annual and perennial varieties.</p> <p><b>NOTE:</b> When using this product for "Dip Treatments" follow PPE requirements specified on this label.</p>
	<b>FOLIAR APPLICATIONS</b>		
Red Stele* ( <i>Phytophthora fragariae</i> )	2.5 – 5.0*	<p><u>Annual Plantings</u> – Begin applications 2 to 3 weeks after planting and repeat on a 30 to 60-day interval while conditions favor disease development.</p> <p><u>Perennial Plantings</u> – Begin applications when the plants start active growth. Repeat application at 30 to 60-day intervals if disease conditions persist or reoccur.</p> <p><b>*NOTE:</b> If using Red Stele susceptible varieties or if disease pressure is severe, use (3.75 – 5.0 pints / Acre) and a 30 day spray interval for foliar applications.</p>	
Leather Rot ( <i>Phytophthora cactorum</i> )	2.5 – 5.0*	<p>Apply at 10% bloom and early fruit set. Repeat applications at 7 to 14-day intervals while conditions favor disease development.</p> <p>*Under heavy disease pressure, use higher rates (3.75 to 5.0 pints product per acre) and 7 day application intervals.</p>	
TOBACCO*	Black Shank ( <i>Phytophthora parasitica</i> var. <i>nicotiana</i> )	2.5 – 5.0*	<p>Apply in a minimum of 10 gallons of water per acre beginning after transplants have been established in the field. Continue on 7 to 14-day spray intervals when conditions are favorable for disease development.</p> <p>*When disease pressure is high or plants are more mature, use 3.75 to 5.0 pints in a minimum of 10 gallons of water per acre and a 7-day interval.</p> <p><b>* Not registered for use in California.</b></p>
TOMATO	Root Rot ( <i>Phytophthora</i> spp.)	2.5 to 5.0*	<p>Apply in a minimum of 10 gallons of water per acre beginning at the 2 to 4-leaf stage for direct seeded tomatoes or immediately after transplanting. Continue on a 7 to 14-day spray interval when conditions are favorable for disease development.</p> <p>*When disease pressure is moderate to high, use a higher rate (3.75 to 5.0 pints product in a minimum of 10 gallons of water / acre) and a 7-day spray interval.</p>

Crop	Target Disease	Rate (pints product / A)	Remarks
<b>TREE NUTS and PISTACHIO</b> All members of Crop Group 14 and Pistachio including: Almonds, Beech nut, Brazil nut, Butternut, Cashew, Chestnut, Chinquapin, Filbert (hazelnut), Hickory nut, Macadamia nut, Pecan, Pistachio, and Walnut	<i>Phytophthora</i> ssp.	2.5 – 5.0	Apply first application with first irrigation in the spring with subsequent applications at 3 to 5 month intervals or as needed.
	<b>MACADAMIA NUT ONLY</b>		
	<i>Phytophthora Raceme</i> Blight	7.5	When used in conjunction with good cultural management practices, this product is effective in controlling <i>Phytophthora raceme</i> Blight. For foliar application, apply this product when disease first appears. Apply 7.5 pints product per acre in sufficient water to thoroughly wet the foliage. Continue applications at 21-day intervals until conditions no longer favor disease development.
	<b>PECAN ONLY</b>		
Pecan Scab ( <i>Fusicladosporium effusum</i> )	2.5 - 5.0	Apply as a preventive foliar spray beginning at budbreak. Applications may be made in combination with or in alternation with a fungicide, such as Agri-Tin, that is also labeled for pecan scab. In combination, use only with a fungicide that is tank-mix compatible and use the lower end of the Phostrol rate range. In alternation, use the upper end of the Phostrol rate range. In general, make applications on a 10-14 day schedule and adjust according to the disease pressure. Use this product in sufficient spray solution to obtain thorough coverage of the target.  * Not registered for use in California.	
<b>TUBEROUS AND CORM VEGETABLES</b> All members of Crop Subgroup 1C and 1D including: Arracacha, Arrowroot; Bitter cassava, Chayote (root), Chinese artichoke, Chufa, Dasheen, Edible canna, Ginger, Jerusalem artichoke, Leren, Potato, Sweet cassava, Sweet potato, Tanier, Turmeric, Yam bean; True yam	<b>IN-FURROW APPLICATIONS</b>		
	Storage Rot Diseases:  Pink Rot ( <i>Phytophthora erythroseptica</i> )  Pythium Leak ( <i>Pythium spp.</i> )	3.75 – 10.0	For the suppression of storage rot diseases such as Pink Rot and Pythium Leak apply 3.75 to 10 pints product in combination with 11.6 to 13.0 fluid ounces of Ultra Flourish® brand mefenoxam fungicide. Apply in a band at planting directly over the seed pieces prior to row closure in a minimum of 3 gallons of water per acre.  Additional in-season foliar applications of this product tank mixed with an appropriate fungicide containing either mefenoxam, chlorothalonil, mancozeb, or copper is necessary when: <ul style="list-style-type: none"> <li>• disease conditions are severe</li> <li>• the variety planted is susceptible or moderately susceptible to the disease</li> <li>• field is located in a long growing season location</li> </ul> See Ultra Flourish® Label for more information.
	<b>FOLIAR APPLICATIONS</b>		
Late Blight ( <i>Phytophthora infestans</i> )  Storage Rot Diseases: Pink Rot ( <i>Phytophthora erythroseptica</i> )  Pythium Leak ( <i>Pythium spp.</i> )	2.5 – 10.0	For air, ground and/or chemigation; apply every 4 to 14 days depending on disease conditions. Integrate this product with other fungicides labeled for Late Blight such as Agri Tin®, Flouronil™, Champ® 2 Flowable or Champ® DP in a spray rotation program appropriate for disease conditions.	

Crop	Target Disease	Rate (pints product / A)	Remarks
<b>POST HARVEST – POTATOES ONLY</b>			
	Late Blight ( <i>Phytophthora infestans</i> )	Apply 0.1 gallon of this product per ton of tubers in 0.5 gallon of water as a spray. Ensure complete and even coverage.	
	Pink Rot ( <i>Phytophthora erythroseptica</i> )		

**ORNAMENTALS AND BEDDING PLANTS USE INSTRUCTIONS**

Apply this product to ornamentals and bedding plants grown in field nursery, greenhouse, and landscaping and conifer nursery plantations to control diseases caused by *Pythium* spp. and *Phytophthora* spp. Apply this product for the control of downy mildew, fire blight and suppression of bacterial blight caused by certain pathovars of *Xanthomonas campestris*. Apply this product prior to disease development in conjunction with good agricultural management practices. Use higher rate when disease pressure is severe. To prevent plant injury, **DO NOT** exceed the rates or application intervals.

**PLANT TOLERANCE**

The genera and species identified on this label have been found to have acceptable plant tolerances to this product. Not every species or variety of ornamental plant has been tested for its tolerance to this product. Prior to using this product on plant genera or species that is not identified on this label, test a sample area for phytotoxicity responses using the given rates.

**TANK MIXTURES**

Determine the compatibility of this product with any other product by mixing approximately 1 pint of this product spray solution with other products in the same proportion and order as the contemplated use. The mixture will typically show signs of incompatibility within 5 to 15 minutes. **DO NOT** use this mixture if any signs of incompatibility appear. If a tank mixture is being considered, read and follow all directions and precautions on this product label and on the labels of any products that will be used in the tank mixture. Follow the most restrictive label precautions and requirements when preparing and applying a tank mixture.

Treatment	Use Rate (pints of product)	Remarks
<b>FOLIAR APPLICATIONS</b>		
<b>ORNAMENTALS including:</b> Aglaonema, Aphelandra, Azalea, Bougainvillea, Orchard sp. <i>Cattelya skinneri</i> , Cissus, Dieffenbachia, Hibiscus, Juniper, Leather-leaf Fern, Pittosporum, Philodendron Spathiphyllum and Taxus media	2.5 – 5.0	Apply in 100 gallons of water. Spray until foliage is wet. <b>DO NOT</b> use more than 400 gallons of spray per acre. Re-apply as needed for disease control. <b>DO NOT</b> apply more than once every 30 days.
<b>ORNAMENTALS:</b> Roses to control Downy mildew ( <i>Peronospora sparsa</i> )	2.5	Apply this product to the foliage of field, container, landscape grown roses and mini roses. Apply in 100 gallons of water. Apply spray mix until foliage is wet. <b>DO NOT</b> apply more than 400 gallons per acre. Always use a thorough disease sanitation program to reduce the spread of diseases to uninfected plants. <b>DO NOT</b> apply more than once every 7 days.
<b>ORNAMENTALS:</b> Ornamental Pear, Pyracantha and Hawthorne to suppress fire blight	2.5	Apply in 100 gallons of water. Apply spray mix until the foliage is wet. <b>DO NOT</b> spray more than 400 gallons of solution per acre. Because this product functions as a preventative application to suppress fire blight, apply the first spray treatment before blooms appear and repeat application once every 7 days until bloom period ends. <b>DO NOT</b> apply more than once every 7 days. Always use a thorough disease sanitation program to reduce the spread of diseases to uninfected plants. <b>NOTE: Not registered for use in California.</b>

Treatment	Use Rate (pints of product)	Remarks
<b>ORNAMENTALS:</b> English Ivy, Schefflera, Anthurium, Dieffenbachia, Spathiphyllum, Syngonium, and Ficus to control <i>Xanthomonas campestris</i> pathogens: hederiae, dieffenbachiae, syngonli, and fici	1.9 – 4.1	Apply in 100 gallons of water. Apply spray mix until the foliage is wet. <b>DO NOT</b> spray more than 400 gallons of solution per acre. <b>DO NOT</b> apply more than once every 7 days. Always use a thorough disease sanitation program to reduce the spread of diseases to uninfected plants.
<b>BEDDING PLANTS including:</b> Begonia, Pansy, Vinca, Marigold, Zinnia, Petunia, Geranium, and Impatiens	1.25 – 4.0	Mix 2.0 to 4.0 pints of this product with 100 gallons of water. Spray the solution until the foliage is wet. <b>DO NOT</b> spray more than 400 gallons of solution per acre. Reapply as necessary, but <b>DO NOT</b> apply more than once every 14 days.
<b>BEDDING PLANTS:</b> Conifers in nurseries (to prevent Phytophthora root rot)	2.5 – 5.0	Apply this product as a foliar spray to conifers such as Douglas fir, spruce and pines. Apply in 100 gallons of water. Spray the solution until foliage is wet. <b>DO NOT</b> spray more than 400 gallons of spray mix per acre. <b>DO NOT</b> apply more than once every 30 days.
<b>DRENCH APPLICATIONS</b>		
<b>ORNAMENTALS including:</b> Aphelandra, Azalea, Boxwood, Cissus, Dieffenbachia, Japanese Holly, Juniper, Monterey Pine, Philodendron, Pieris, Pittosporum, Rhododendron, Schefflera, Spathiphyllum, and Taxus media	0.375 – 0.75	Mix 12 to 24 fluid ounces of product with 100 gallons of water. Apply 2 pints of spray solution per square foot. Repeat as necessary. <b>DO NOT</b> make more than 1 application every 30 days.
<b>SOIL INCORPORATION</b>		
<b>ORNAMENTALS</b> (Well rooted)	0.7 – 0.75	Apply this product directly in the soil to control Phytophthora in well rooted plants only. Use 8 to 12 fluid ounces of this product per cubic yard of soil. Mix this product into soil immediately prior to potting. Apply this product as a foliar spray or drench, according to directions above, when conditions support disease development. <b>DO NOT</b> apply this product as a foliar spray or drench more than once every 30 days.
<b>DIP APPLICATIONS</b>		
<b>BEDDING PLANTS:</b> Conifers in nurseries (to prevent Phytophthora root rot)	2.5	Use this product for dip treatment when transplanting conifers in nurseries to prevent Phytophthora root rot. Mix required amount of product in 100 gallons of water. Immediately prior to transplanting, thoroughly wet the plant and root mass by dipping it in the product solution. <b>NOTE:</b> When using this product for "Dip Treatments" follow PPE requirements specified on this label.

### TURF USE INSTRUCTIONS

Apply this product, as a systemic fungicide to turf grass, such as those found on golf courses and sod farms, for the control of *Pythium* diseases and Yellow tuft. Make applications of this product to *Pythium spp.* diseases and Yellow tuft with an accurately or properly calibrated sprayer. Begin preventive application when conditions first favor disease development and repeat at the specified intervals. **DO NOT** mow or water the areas treated with this product until sprays have dried.

Treatment	Use Rate / 1000 ft <sup>2</sup>	Remarks
<b>TURF</b> To control <i>Pythium</i> diseases including root rot and blight	4.1 fl. oz.	Apply 1 to 5 gallons of spray mix per 1000 ft <sup>2</sup> . Apply at 14-day intervals as a broadcast spray.

Crop	Target Disease	Rate (pints product / A)	Remarks
<b>CITRUS FRUIT</b> <b>All members of Crop Group 10 including:</b> Calamondin, Citrus citron, Citrus hybrids (includes Chironja, Tangelo, Tangor), Grapefruit, Kumquat, Lemon, Lime, Mandarin (tangerine), Orange (sour and sweet), Pummelo, Satsuma mandarin	Foot, Root, and Brown Rot <i>(Phytophthora nicotianae and/or palmivora)</i>	4.5	Apply as a dilute spray when conditions favor disease development and apply to run-off to make sure the foliage is thoroughly wet.
	Foot Rot <i>(Phytophthora nicotianae and/or palmivora)</i>	2.5 – 5.0	Apply product with 5 gallons of water and apply directly to trunk lesions; use enough spray volume to thoroughly wet the lesions. In the absence of lesions, apply to the trunk from the soil line to about 2 feet up the trunk. Use the higher rate when lesions are present.
<b>CRANBERRY*</b>	Phytophthora spp.	5.0 – 6.0	This product is effective when used in conjunction with good management practices. Apply 5 to 6 pints product per acre as a foliar spray, beginning in the spring when conditions become conducive to disease development. Continue applications on a 14 to 30-day interval. <b>DO NOT</b> exceed 4 applications per year. <b>DO NOT</b> apply within 3 days of harvest. Use a sufficient volume of water to ensure good coverage. <b>* Not registered for use in California.</b>
<b>CUCURBIT VEGETABLES</b> <b>All members of Crop Group 9 including:</b> Chayote, Chinese Waxgourd, Citron melon, Cucumber, Gherkin, Edible Gourd, Momordica spp. (Balsam apple, Balsam pear, Bitter melon, Chinese cucumber), Muskmelon, Pumpkin, Summer and Winter squash, Watermelon	Root and Fruit Rot <i>(Phytophthora spp.)</i>	2.5 – 5.0	Apply in a minimum of 8 gallons of water per acre beginning when conditions favor disease development. Repeat as needed on a 7 to 14-day interval. In times of moderate to high disease pressure, use the higher rate and the shorter spray interval. <b>NOTE: DO NOT</b> exceed 7 applications/season.
<b>GINSENG*</b>	Foliar and Root Rot <i>(Phytophthora cactorum)</i>	4.5	Apply in 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. <b>NOTE: DO NOT</b> exceed 9 applications/season. <b>* Not registered for use in California.</b>
<b>GRAPE</b>	Downy Mildew <i>(Plasmopara viticola)</i>	2.5 – 5.0	Apply in a minimum of 10 gallons of water per acre. Begin application at bud break with additional applications made throughout the season. Use higher rates depending upon disease severity and canopy density. <b>NOTE:</b> Due to varietal sensitivity, test for sensitivity prior to use.
<b>HOP</b>	Downy Mildew <i>(Pseudoperonospora humuli)</i>	2.5	Apply in a minimum of 10 gallons per acre as directed foliar spray using ground equipment only. During favorable disease development conditions make applications as follows: 1) When shoots are 6 to 12 inches high; 2) After training when vines are 5 to 6 feet tall; 3) About 3 weeks after the second application; and 4) During bloom.

Crop	Target Disease	Rate (pints product / A)	Remarks
<p><b>LEAFY VEGETABLES</b> (Except Brassica Leafy Vegetables)</p> <p><b>All members of Crop Group 4 including:</b></p> <p>Amaranth, Arugula (Roquette), Cardoon, Celery, Chinese Celery, Celtuce, Chervil, Chrysanthemum (Edible leaved and garland), Corn salad, Cress (Garden and Upland), Dandelion, Dock (Sorrel), Endive (Escarole), Florence Fennel, Lettuce (Head and Leaf), Orach, Parsley, Purslane (Garden and Winter), Radicchio (Red chicory), Rhubarb, Spinach, New Zealand Spinach, Vine Spinach, Swiss chard</p>	<p>Downy Mildew (<i>Bremia lactucae</i>) (<i>Peronospora spp.</i>)</p>	<p>2.5 – 5.0</p>	<p>Apply in a minimum of 10 gallons of water per acre to obtain good coverage. Begin application when conditions favor disease development and continue on a 7 to 21-day spray interval. Use higher rate and shorter spray interval during times of moderate to high disease pressure.</p> <p><b>NOTE: DO NOT</b> exceed 7 applications per season.</p>
<p><b>LEGUME VEGETABLES</b> (Beans and Peas)</p> <p><b>All members of Crop Group 6 including:</b></p> <ul style="list-style-type: none"> <li>• Edible Podded</li> <li>• Succulent Shelled</li> <li>• Dried Shelled</li> </ul> <p><b>Lupines types – including:</b> grain, sweet, white, and white sweet lupin beans</p>	<p>Cottony Leak (<i>Pythium aphanidermatum</i>)</p>	<p>4.0 – 5.0</p>	<p>Apply by air or ground in a minimum of 10 gallons of water per acre. Make the first application at full bloom and another 10-14 days later. Use the high rate and subsequent application for heavy disease pressure and when conditions favor disease development.</p> <p>This product may be used at a reduced rate in combination with another class of chemistry that is labeled for <i>Pythium</i> spp. control.</p>
<b>BEAN (Edible-podded, Succulent, and Dry) ONLY</b>			
<p><b>Phaseolus types</b> - including: field, kidney, lima, navy, pinto, runner, snap, tepary, and wax beans</p> <p><b>Pisum types</b> - including: dwarf, edible - pod, English, field, garden, green, snow and sugar snap peas</p> <p><b>Vigna types</b> - including: adzuki, asparagus, moth, mung, rice, urd and yardlong beans; black-eye pea, catjang, Chinese longbean, cowpea, Crowder pea, and Southern pea</p> <p>Broadbean, Chickpea, Guar, Jackbean, Lablab bean, Lentil, Pigeon pea, Soybean, Sword bean</p>	<p>Downy Mildew (<i>Phytophthora phaseoli</i>)</p>	<p>4.0</p>	<p>Apply at 7-day intervals.</p> <p>The number of applications depends on how long favorable conditions for infection persist and/or if downy mildew is present in the area.</p> <p><b>NOTE:</b> This product must be applied before disease symptoms appear for control of downy mildew in beans.</p>
<b>PEA AND LENTIL ONLY</b>			
<p>Broadbean, Chickpea, Guar, Jackbean, Lablab bean, Lentil, Pigeon pea, Soybean, Sword bean</p>	<p>Downy Mildew (<i>Phytophthora spp.</i>) (<i>Pythium spp.</i>)</p>	<p>2.0 – 4.0</p>	<p>Apply diluted solution to thoroughly wet foliage. Apply with normal irrigation schedule. Apply at 2 to 3 week intervals and repeat as needed</p>

Crop	Target Disease	Rate (pints product / A)	Remarks
ONION (DRY BULB)	Downy Mildew ( <i>Peronospora destructor</i> )	2.5 – 3.75	<p><b>Best results are obtained when this product is used in a preventative disease control program.</b></p> <p>Apply product by air, ground and/or chemigation, beginning when conditions first favor disease development. Continue applications on a 7 to 14-day interval. If disease is already present, use the high rate and the shortest spray interval.</p> <p><b>NOTE: DO NOT</b> exceed 7 applications per crop season.</p>
PEPPER Bell, Chili, Cooking, and Sweet pepper, Pimento	Downy Mildew ( <i>Phytophthora spp.</i> ) ( <i>Pythium spp.</i> )	2.0 – 4.0	Apply diluted solution to thoroughly wet foliage. Apply with normal irrigation schedule. Apply at 2 to 3-week intervals and repeat as needed.
PINEAPPLE	Heart Rot ( <i>Phytophthora parasitica</i> )	2.5 – 3.0	Apply as a pre-plant dip immediately prior to planting using 2.5 pints product per 100 gallons solution. 100 gallons is used to treat the number of slips required to plant 1 acre. For established plantings, apply 3 pints product 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 All members of Crop Group 11 including: Apple, Crabapple, Loquat, Mayhaw, Pear, Oriental pear, Quince	Fire Blight ( <i>Erwinia amylovora</i> )	2.5 – 5.0	Apply as a dilute spray at 30 to 60-day intervals when conditions favor disease development. Under moderate to heavy disease pressure, make 3 to 4 applications at 4.0 pints product per acre on a 60-day spray interval or make 6 to 8 applications at 2.0 pints product per acre on a 30-day interval. Thorough spray coverage is required.
	Collar and Root Rot ( <i>Phytophthora spp.</i> )	2.5 – 5.0	Apply as a dilute spray at 7 to 10-day intervals when conditions favor disease development. Apply 4 to 5 times. Begin applications at bloom and continue as long as conditions favor disease development. Thorough spray coverage is required.
STONE FRUIT All members of Crop Group 12 including: Apricot, Sweet & Tart Cherries, Nectarine, Peach, Plum, Chickasaw Plum, Damson Plum, Japanese Plum, Plumcot, Prune	Collar and Root Rot ( <i>Phytophthora spp.</i> )	4.5	<p>Foliar Application: Apply product as a dilute spray when conditions favor disease development. Check with your Cooperative Extension Service if you are unsure about whether conditions exist and continue on a 60-day interval.</p> <p>Treat nursery tree resets and new plantings after leaf emergence.</p>
	Almond Pruning Wound Canker ( <i>Phytophthora syringae</i> )	2.5 – 5.0	<p>Paint or Spray Application: Apply as a dilute paint or spray to the pruning wound area in a sufficient volume to thoroughly wet the entire surface.</p> <p>Under severe disease conditions (e.g., active canker lesions), use the higher rate.</p> <p>For small volume applications, mix 0.5 to 0.8 fluid ounce product per gallon of water. This is equivalent to 3.0 to 5.0 pints product per 100 gallons.</p>

Treatment	Use Rate / 1000 ft <sup>2</sup>	Remarks
<b>TURF</b> To control Yellow tuft	8.2 fl. oz.	Apply 1 to 5 gallons of spray mix per 1000 ft <sup>2</sup> . Apply at 21-day intervals as a broadcast spray.
<b>TURF</b> <b>TANK MIXTURES</b> <b>SUMMER STRESS COMPLEX</b> To control Summer Decline caused by <i>Pythium</i> spp. and <i>Rhizoctonia</i> spp.		Use this product in tank mixtures with other products in accordance with the most restrictive label limitations and precautions. Apply tank mixtures on golf courses, sod farms, industrial or municipal turf areas and residential lawns. <b>DO NOT</b> exceed the dosage rates provided on this or any other tank mix partner label. <b>DO NOT</b> mix this product with any other products that have a label warning against such mixing. Use this product as a foliar spray using an accurately calibrated sprayer. Apply product at rates given above mixed with 1 to 5 gallons of water per 1000 ft <sup>2</sup> . Use this product preventatively by starting applications when conditions first favor disease. Repeat applications at the directed intervals.

### STORAGE AND DISPOSAL

**DO NOT** contaminate water, food or feed by storage or disposal.

**PESTICIDE STORAGE:** This product should be stored in its original container in a cool, dry locked place out of reach of children and out of direct sunlight. **DO NOT** use or store near open flame.

**PESTICIDE DISPOSAL:** To avoid waste, use all material in this container by application according to label directions. If waste cannot be avoided, offer remaining product to a waste disposal facility or pesticide disposal program (often such programs are run by state or local governments).

#### CONTAINER HANDLING:

##### [Nonrefillable Containers 5 Gallons or Less:]

Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available. Triple rinse container (or equivalent) promptly after emptying. **Triple rinse as follows:** Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities. Plastic containers are also disposable by incineration. Do not burn unless allowed by state and local ordinance. If burned stay out of smoke.

##### [Nonrefillable containers larger than 5 gallons:]

Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available. If recycling or reconditioning not available, puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities. Plastic containers are also disposable by incineration. Do not burn unless allowed by state and local ordinance. If burned stay out of smoke. Triple rinse or pressure rinse container (or equivalent) promptly after emptying. **Triple rinse as follows:** Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. **Pressure rinse as follows:** Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

### WARRANTY DISCLAIMER

The directions for use of this product must be followed carefully. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, (1) THE GOODS DELIVERED TO YOU ARE FURNISHED "AS IS" BY MANUFACTURER OR SELLER AND (2) MANUFACTURER AND SELLER MAKE NO WARRANTIES, GUARANTEES, OR REPRESENTATIONS OF ANY KIND TO BUYER OR USER, EITHER EXPRESS OR IMPLIED, OR BY USAGE OF TRADE, STATUTORY OR OTHERWISE, WITH REGARD TO THE PRODUCT SOLD, INCLUDING, BUT NOT LIMITED

**TO MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, USE, OR ELIGIBILITY OF THE PRODUCT FOR ANY PARTICULAR TRADE USAGE.** UNINTENDED CONSEQUENCES, INCLUDING BUT NOT LIMITED TO INEFFECTIVENESS, MAY RESULT BECAUSE OF SUCH FACTORS AS THE PRESENCE OR ABSENCE OF OTHER MATERIALS USED IN COMBINATION WITH THE GOODS, OR THE MANNER OF USE OR APPLICATION, INCLUDING WEATHER, ALL OF WHICH ARE BEYOND THE CONTROL OF MANUFACTURER OR SELLER AND ASSUMED BY BUYER OR USER. THIS WRITING CONTAINS ALL OF THE REPRESENTATIONS AND AGREEMENTS BETWEEN BUYER, MANUFACTURER AND SELLER, AND NO PERSON OR AGENT OF MANUFACTURER OR SELLER HAS ANY AUTHORITY TO MAKE ANY REPRESENTATION OR WARRANTY OR AGREEMENT RELATING IN ANY WAY TO THESE GOODS.

#### **LIMITATION OF LIABILITY**

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, IN NO EVENT SHALL MANUFACTURER OR SELLER BE LIABLE FOR SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, OR FOR DAMAGES IN THEIR NATURE OF PENALTIES RELATING TO THE GOODS SOLD, INCLUDING USE, APPLICATION, HANDLING, AND DISPOSAL. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, MANUFACTURER OR SELLER SHALL NOT BE LIABLE TO BUYER OR USER BYWAY OF INDEMNIFICATION TO BUYER OR TO CUSTOMERS OF BUYER, IF ANY, OR FOR ANY DAMAGES OR SUMS OF MONEY, CLAIMS OR DEMANDS WHATSOEVER, RESULTING FROM OR BY REASON OF, OR ARISING OUT OF THE MISUSE, OR FAILURE TO FOLLOW LABEL WARNINGS OR INSTRUCTIONS FOR USE, OF THE GOODS SOLD BY MANUFACTURER OR SELLER TO BUYER. ALL SUCH RISKS SHALL BE ASSUMED BY THE BUYER, USER, OR ITS CUSTOMERS. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BUYER'S OR USER'S EXCLUSIVE REMEDY, AND MANUFACTURER'S OR SELLER'S TOTAL LIABILITY SHALL BE FOR DAMAGES NOT EXCEEDING THE COST OF THE PRODUCT.

**If you DO NOT agree with or DO NOT accept any of directions for use, the warranty disclaimers, or limitations on liability, DO NOT use the product, and return it unopened to the Seller, and the purchase price will be refunded.**

Phostrol<sup>®</sup>, Agri Tin<sup>®</sup>, Champ<sup>®</sup>, Flourolil<sup>™</sup>, and Ultra Flourish<sup>®</sup> are registered trademarks of Nufarm Americas Inc. All other trademarks appearing on this label are the property of their respective owners.

BATCH CODE: \_\_\_\_\_

(RV110910)

**LABEL HISTORY**

<b>File Name</b>	<b>Revision Mark</b>	<b>Comment</b>
055146-00083.2010mmdd.amended_label	RV06ddy	Legume vegetable use, reformat specific use directions into tables.
055146-00083.20100617.amended_label	_____	Added Tables, changed direction uses. Rejected by EPA because of change in pounds a.i. per gallon (ingredient statement).
055146-00083.20101109.Amended_Label	RV110910	Changed pounds a.i. per gallon to values on the latest ESL. Added use on pecans for scab control. Added 24(c) use on beans for Downey mildew control. Updated crop listings to include entire crop groups/subgroups. Updated container handling statement per PRN 2007-4.