

55146-83

05/14/2012

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON D C 20460

OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION

MAY 14, 2012

NUFARM AMERICAS, INC  
4020 Aerial Center Parkway, Suite 101  
Morrisville, North Carolina 27560

Subject Notification to show label changes made

- Addition of Silver Scurf control to the use directions for post – harvest potatoes
- Addition of a Note to Reviewer and statement under the Container Handling Section to aid the end user to the correct instructions for the container in their possession Optional information regarding the container type designation was also added in the Net Contents section
- Minor editorial changes on pages 1, 10, and 14

Product Name PHOSTROL® Agricultural Fungicide  
EPA Reg No 55146-83  
Your Submission Dated April 4, 2012

Dear Ms Larochelle

The Biopesticides and Pollution Prevention Division is in receipt of your application for Notification under Pesticide Registration Notice (PRN) 98-10 dated above. A screen of this request has been conducted for its applicability under PRN 98-10, and it has been determined that the action(s) requested falls within the scope of this Notice. Our records have been duly noted, and the label submitted with this application has been stamped "Notification Accepted" and will be placed accordingly in our records.

Three (3) copies of final printed labeling must be submitted to the Agency before your product as modified, may be sold or distributed [PR Notice 82-2 and 40 CFR 156.10(a)(6)]

If you have any questions regarding this action, you may contact Mr Sylvester George at (703) 603-0688 or via e-mail at [george\\_sylvester@epa.gov](mailto:george_sylvester@epa.gov)

Sincerely,

*Linda A Hollis*

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

# NOTIFICATION

Please read instructions on reverse before completing form

Form Approved OMB No 2070 0060 Approval expires 05 31 98

	United States <b>Environmental Protection Agency</b> Washington DC 20460	<input type="checkbox"/> Registration <input type="checkbox"/> Amendment <input checked="" type="checkbox"/> Other	OPP Identifier Number
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## Application for Pesticide - Section I

1 Company/Product Number <b>55146 83</b>	2 EPA Product Manager <b>Linda Hollis</b>	3 Proposed Classification <input checked="" type="checkbox"/> None <input type="checkbox"/> Restricted
4 Company/Product (Name) <b>PHOSTROL® Agricultural Fungicide</b>	PM# <b>BPPD</b>	
5 Name and Address of Applicant (Include ZIP Code) <b>Nufarm Americas Inc AGT Division          C/O Nufarm Americas Inc          4020 Aerial Center Parkway Suite 101          Morrisville, NC 27560</b> <input type="checkbox"/> Check if this is a new address	6 <b>Expedited Review</b> In accordance with FIFRA Section 3(c)(3) (b)(1) my product is similar or identical in composition and labeling to EPA Reg No _____ Product Name _____	

## Section - II

<input type="checkbox"/> Amendment – Explain below	<input type="checkbox"/> Final printed label in response to Agency letter dated _____
<input type="checkbox"/> Resubmission in response to Agency letter dated _____	<input type="checkbox"/> Me Too Application
<input checked="" type="checkbox"/> Notification Explain below	<input type="checkbox"/> Other Explain below

**Explanation** Use additional page(s) if necessary (For Section I and Section II)

**NOTIFICATION per PR Notice 98-10** Label amendment adding 1) the control of Silver Sulfide to the use directions for post-harvest potatoes 2) Note to reviewer and statement under the Container Handling section and container type designation below the Net Contents information on page 1 to aid the end user to the correct use instructions for the container in their possession Minor editorial changes were also made on pages 1 10 and 14

**CONTACT** Danielle A Larochelle Nufarm Americas Inc 4020 Aerial Center Parkway Suite 101 Morrisville NC 27560  
 Tel (919) 379 2530 email danielle.larochelle@us.nufarm.com

## Section - III

1 Material This Product Will Be Packaged In			
Child Resistant Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Unit Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes Unit Packaging wgt _____ No per container _____	Water Soluble Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes Package wgt _____ No per container _____	2 Type of Container <input type="checkbox"/> Metal <input checked="" type="checkbox"/> Plastic <input type="checkbox"/> Glass <input type="checkbox"/> Paper <input type="checkbox"/> Other (Specify) _____
*Certification must be submitted			
3 Location of Net Contents Information <input checked="" type="checkbox"/> Label <input type="checkbox"/> Container	4 Size(s) Retail Container <b>2 5 30 250 Gallons</b>	5 Location of Label Directions <input checked="" type="checkbox"/> On Label <input type="checkbox"/> On labeling accompanying product	
6 Manner in Which Label is Affixed to Product <input type="checkbox"/> Lithograph <input type="checkbox"/> Other <input checked="" type="checkbox"/> Paper glued <input type="checkbox"/> Stenciled			

## Section - IV

1 Contact Point (Complete items directly below for identification of individual to be contacted if necessary to process this application)		
Name <b>Danielle A Larochelle</b>	Title <b>Registration Manager</b>	Telephone No (Include Area Code) <b>919-379 2530</b>
I certify that the statements I have made on this form and all attachments thereto are true accurate and complete I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law		6 Date Application Received (Stamped)
2 Signature 	3 Title <b>Registration Manager</b>	
4 Typed Name <b>Danielle A Larochelle</b>	4 Date <b>April 4, 2012</b>	



# PHOSTROL®

## AGRICULTURAL FUNGICIDE

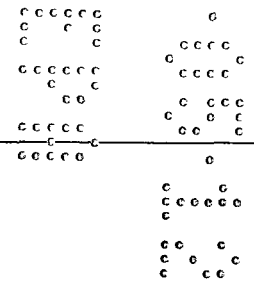
**ACTIVE INGREDIENTS**

Mono- and dibasic sodium, potassium, and ammonium phosphites\* 53.6%

**OTHER INGREDIENTS** 46.4%

**TOTAL** 100.0%

Contains 6.27 lb/gallon of the active ingredients mono- and dibasic sodium, potassium, and ammonium salts of phosphorus acid  
Equivalent to 4.17 lb/gallon of phosphorus acid or 35.6% by 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)

[Designation as "NONREFILLABLE" or "REFILLABLE" for containers > 5 GAL]

# 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

FIRST AID	
<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>
HOT LINE NUMBER	
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

## 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

**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

## 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.



## 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
<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</i> and/or <i>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</i> and/or <i>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> )  Downy Mildew ( <i>Pseudoperonospora cubensis</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) <b>All members of Crop Group 4 including</b> 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>25 – 50</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 <b>NOTE DO NOT</b> exceed 7 applications per season</p>
<p><b>LEGUME VEGETABLES</b> (Beans and Peas) <b>All members of Crop Group 6 including</b> <b>Edible Podded</b> <b>Succulent Shelled</b> <b>Dried Shelled</b>  <b>Lupines types – including</b> grain sweet white and white sweet lupin beans</p>	<p>Cottony Leak (<i>Pythium aphanidermatum</i>)</p>	<p>40 – 50</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  This product may be used at a reduced rate in combination with another class of chemistry that is labeled for <i>Pythium spp</i> 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  <b>Pisum types</b> including dwarf edible pod English field garden green snow and sugar snap peas  <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>Downy Mildew (<i>Phytophthora phaseoli</i>)</p>	<p>40</p>	<p>Apply at 7 day intervals  The number of applications depends on how long favorable conditions for infection persist and/or if downy mildew is present in the area  NOTE 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>20 – 40</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
<b>ONION (DRY BULB)</b>	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>
<b>PEPPER</b> 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
<b>PINEAPPLE</b>	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
<b>POME FRUIT</b> All members of Crop Group 11 including Apple Crabapple Loquat Mayhaw Pear Oriental pear Quince	Fire Blight <i>(Erwinia amylovora)</i>  Collar and Root Rot <i>(Phytophthora spp)</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
	Suppression of Blister Spot <i>(Pseudomonas syringae pv papulans)</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
<b>STONE FRUIT</b> <b>All members of Crop Group 12 including</b> 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	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  Treat nursery tree resets and new plantings after leaf emergence
	Almond Pruning Wound Canker <i>(Phytophthora syringae)</i>	2.5 – 5.0	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  Under severe disease conditions (e.g active canker lesions) use the higher rate  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

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	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 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 Plant within 24 hours of dipping Use this application for both annual and perennial varieties <b>NOTE</b> When using this product for Dip Treatments follow PPE requirements specified on this label
	<b>FOLIAR APPLICATIONS</b>		
Red Stele* ( <i>Phytophthora fragariae</i> )	2.5 – 5.0*	<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 <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 <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	
Leather Rot ( <i>Phytophthora cactorum</i> )	2.5 – 5.0*	Apply at 10% bloom and early fruit set Repeat applications at 7 to 14 day intervals while conditions favor disease development  *Under heavy disease pressure use higher rates (3.75 to 5.0 pints product per acre) and 7 day application intervals	
TOBACCO *	Black Shank ( <i>Phytophthora parasitica</i> var <i>nicotiana</i> )	2.5 – 5.0*	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  *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 <b>* Not registered for Use in California</b>
TOMATO	Root Rot ( <i>Phytophthora spp</i> )	2.5 to 5.0*	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  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
<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	

Crop	Target Disease	Rate (pints product / A)	Remarks
<b>TREE NUTS and PISTACHIO (Continued)</b>	<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.  <b>* Not registered for use in California</b>
<b>TUBEROUS AND CORM VEGETABLES</b> <b>All members of Crop Subgroup 1C and 1D including</b> 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.
	<b>POST HARVEST - POTATOES ONLY</b>		
Late Blight ( <i>Phytophthora infestans</i> )  Pink Rot ( <i>Phytophthora erythroseptica</i> )  Silver Scurf * ( <i>Helminthosporium solani</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.  <b>Maximum disease control will result from the integration of Phostrol post harvest applications with best management practices that include thorough sanitation of storage facilities and storing the potatoes at the lowest temperature possible depending on the targeted end use of the commodity.</b>  <b>*Not registered for use in California</b>		

## 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</i> <i>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>
<b>ORNAMENTALS</b> English Ivy Schefflera Anthurium Dieffenbachia Spathiphyllum Syngonium and Ficus to control <i>Xanthomonas campestris</i> pathovars hederiae dieffenbachiae syngoni 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 Margold 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

Treatment	Use Rate (pints of product)	Remarks
<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, Pteris, 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 Pythium 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.
<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 TANK MIXTURES</b> <b>SUMMER STRESS COMPLEX</b> To control Summer Decline caused by <i>Pythium spp</i> and <i>Rhizoctonia spp</i>		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

[Note to Reviewer The following statement will be included on all Final Printed Labels bearing multiple Container Handling statements] "NOTE This product is available in multiple containers Refer to the Net Contents section of this product s labeling for the applicable ' Nonrefillable" or Refillable" designation Follow the container handling instructions below that apply to your container type/size '

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

Nonrefillable container Do not reuse or refill this container 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 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 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

#### [Refillable containers larger than 5 gallons ]

Refillable container Refill this container with pesticide only Do not reuse this container for any other purpose Cleaning the container before final disposal is the responsibility of the person disposing of the container Cleaning before refilling is the responsibility of the refiller To clean the container before final disposal empty the remaining contents from this container into application equipment or a mix tank Fill the container about 10% full with water Agitate vigorously or recirculate water with the pump for two minutes Pour or pump rinsate into application equipment or rinsate collection system Repeat this rinsing 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

#### [Refillable, Returnable Containers]

Refillable Container Refill this container with pesticide only Do not reuse this container for any other purpose Close all openings and replace all caps Contact Nufarm s Customer Service Department at 1-800 345-3330 to arrange for return of the empty refillable container

**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**

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**If you DO NOT agree with or DO NOT accept any of the 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**

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