



**Phoenix**  
ENVIRONMENTAL CARE

FUNGICIDE

# Vital®

**A Systemic Fungicide for the Control of Diseases Caused by *Peronospora* spp.,  
*Phytophthora* spp. and *Pythium* spp. on Turf and Ornamentals**

**ACTIVE INGREDIENT**

Potassium Phosphite\* ..... 54.50%

**OTHER INGREDIENTS** ..... 45.50%

**TOTAL** ..... 100.00%

\* Phosphorous acid equivalent: 34.30% (4.2 pounds per gallon)

## KEEP OUT OF REACH OF CHILDREN CAUTION

### FIRST AID

<b>IF SWALLOWED:</b>	<ul style="list-style-type: none"> <li>• Call a poison control center or doctor immediately for treatment advice.</li> <li>• Have person sip a glass of water if able to swallow.</li> <li>• Do not induce vomiting unless told to do so by the poison control center or doctor.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>
<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>
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	
<b>For chemical spill, leak, fire or exposure, call toll free 1-888-875-1724.</b>	
AGRICULTURAL CHEMICAL, DO NOT SHIP OR STORE WITH FOODS, FEEDS, DRUGS OR CLOTHING.	
See page 2 of label for additional precautionary statements.	

**Manufactured for: Phoenix Environmental Care, LLC**  
400 E. Jane Street • Valdosta, GA 31601

EPA Reg. No. 42519-24-81943

**PRECAUTIONARY STATEMENTS**  
**Hazard to humans and domestic animals**  
**CAUTION**

Harmful if swallowed or if absorbed through skin. Causes eye irritation. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling.

**PERSONAL PROTECTIVE EQUIPMENT (PPE)**

Applicators and other handlers must wear:

- long-sleeved shirt and long pants
- waterproof gloves
- shoes plus socks.

Follow manufacturer's instructions for cleaning/maintaining PPE. Keep and wash PPE separately from other laundry.

**USER SAFETY REQUIREMENTS**

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- 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 uses: Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean highwater mark. Do not contaminate water when cleaning equipment or disposing of equipment washwater or rinsate.

**DIRECTIONS FOR USE**

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation. 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.

**AGRICULTURAL USE REQUIREMENTS**

Use this product only in accordance with its labeling and with the Worker Protection Standard, 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 intervals (REI). The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted-entry interval of 4 hours unless wearing appropriate PPE.

PPE requirement for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil or water, is coveralls, waterproof gloves, shoes plus socks.

**NON-AGRICULTURAL USE REQUIREMENTS**

The requirements in this box apply to uses of this product that are not within the scope of the Worker Protection Standard 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.

Keep unprotected persons out of treated areas until sprays have dried.

**STORAGE AND DISPOSAL**

Do not contaminate water, food or feed by storage or disposal.

**Pesticide Storage:** Store in a dry, cool place.

**Pesticide Disposal:** Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

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

**GENERAL INFORMATION**

Vital is a systemic product, which contains potassium and phosphate. The phosphonic anion is effective in prevention and control of diseases caused by *Peronospora* spp., *Phytophthora* and *Pythium* spp., by fungicidal activity and activation of the plants' natural resistance mechanism. Vital is intended for use as part of an Integrated Pest Management (IPM) system. When used in conjunction with good cultural management practices and as part of a complete disease control program, Vital will control downy mildew, *Phytophthora*, *Pythium* spp. and *Xanthomonas campestris*. In order to achieve maximum results in controlling the disease, spraying should be carried out before the appearance of the disease or when disease is first observed. Applications should be initiated when environmental conditions are favorable for disease development.

**MIXING AND APPLICATION INSTRUCTIONS**

Apply in sufficient water to ensure thorough coverage. Fill spray tank halfway with clean water. Add the required amount of Vital to the tank as indicated in the table below. While agitating, add the remaining amount of water. Apply solution directly to turfgrass or ornamental foliage, unless directed otherwise in the Directions for Use. For optimum control, thorough coverage is required.

## COMPATIBILITY

Vital is believed to be compatible with most commonly used pesticides. Consult specific product labels for additional information. It is always advisable to conduct a tank spray compatibility test when you plan to mix this product with other products. To determine the physical compatibility of this product with other products, use a jar test. Using a quart jar, add the proportionate amounts of the products to approximately 1 quart of water with agitation. Add dry formulations first, then flowables, and then emulsifiable concentrates last. After thorough mixing, allow this mixture to stand for 5 minutes. If the combination remains mixed or can be readily remixed, it is physically compatible. Once compatibility has been proven, use the same procedure for adding products to the spray tank.

Test the tank-mix combinations on a small number of plants before treating large areas, as the sensitivity of plants to these mixtures may vary.

Vital has been evaluated for phytotoxicity on a large variety of plants under various normal field conditions. However, testing all plant species, in all mixtures and combinations is not feasible. Where feasible, test for phytotoxicity a small portion of the area to be treated, prior to treating the entire area.

## APPLICATION RATE

Begin spraying when environmental conditions are favorable for the development of disease or as indicated below.

**Important:** Do not apply on plants when they are under water stress, or during severe weather conditions such as high or very low temperatures.

Do not apply above the recommended rates.

Use Site	Disease	Rate	Application Interval	Remarks
<b>Turf</b>	<i>Pythium</i>	4-6 fl. oz./1000 sq. ft.	14 days	Begin preventative applications when conditions <b>first</b> favor disease. Repeat at recommended interval. Do not mow or water treated areas until foliage is completely dry.
<b>Bedding Plants</b> Foliar Application	Downy Mildew	4 pts./100 gal.	7 days	Plants such as Impatiens, Pansy, Petunia, Salvia, Snapdragon and Vinca.
	<i>Phytophthora</i> <i>Pythium</i> spp.	2-4 pts.*/100 gal.	14 days	
<b>Conifers in Nurseries</b> Dip at Transplanting Foliar Application	<i>Phytophthora</i> <i>Pythium</i> spp.	4 pts./100 gal.	14 days	Plants such as Douglas fir, spruce and pines. Thoroughly wet plant and root mass. Spray to wet using no more than 400 gallons per acre.
		2-4 pts.*/100 gal.		
<b>Ornamentals</b> Foliar Application	Downy Mildew	4 pts./100 gal.	7 days	Plants such as Aglaonema, Azalea, Bougainvillea, Hibiscus, Pittosporum, Philodendron, Pothos, Rhododendron, Spathiphyllum, Schefflera athurium, and Syngonium fills.
	<i>Phytophthora</i> <i>Pythium</i> spp. <i>Xanthomonas campestris</i>	2-4 pts.*/100 gal.	14 days	
Drench Application	<i>Phytophthora</i> <i>Pythium</i> spp.	0.65-1.25 pts.*/100 gal. per 400 sq. ft.	30 days	Plants such as Aphelandra, Azalea, Boxwood, Cissus, Dieffenbachia, Japanese Holly, Monterey Pine, Philodendron, Pieris, Pittosporum, Rhododendron, Schefflera, Spathiphyllum, and <i>Taxus media</i> .
Soil Incorporation	<i>Phytophthora</i>	0.80-1.25 pts.*/ cubic yard of soil mix	30 days	Plants such as Rhododendron, Azalea, or Pieris. Apply immediately prior to potting. Follow this with FOLIAR APPLICATIONS as needed.
<b>Roses</b> Foliar Application	Downy Mildew	4 pts./100 gal.	7 days	In field, container, or landscape in conjunction with disease sanitation. No more than 400 gallons per acre.
<b>Oak</b> Tree Injection	<i>Phytophthora ramorum</i>	Measure the area under the tree canopy. Apply 1 ml. of Vital in 20 ml. water for each 10 square feet of area under the canopy. Divide the total amount needed per tree by the number of syringes or injections to be used.	Not more than one application per year	Tree Preparation: 1. Carefully remove 2 to 4 inches of soil from the base of the tree to uncover the top of the root flares. 2. Drill holes through the bark into the sapwood under the root flares. Drill hole diameter (typically 3/16 to 5/16 inch) should be adequate to allow insertion of syringe or injection tee and formation of airtight contact between active xylem and delivery point of the injection. The key is to deliver the product to the active xylem. Space holes 3 to 6 inches apart around the base of the tree with a slight downward angle into only healthy tissue. 3. Disinfect the drill bit with Lysol® or 20% Clorox® between trees. 4. Inject only Vital and water.

\*Use the higher rate when conditions favor disease development and/or with increased disease pressure.

## **WARRANTY LIMITATIONS AND DISCLAIMER**

To the fullest extent permitted by law, Phoenix Environmental Care, LLC warrants that at the time of delivery, the product will conform to its chemical description on the label, that it will pass without objection in the trade under the contract description, that seller will convey good title thereto, and that such product will be delivered free from any lawful security interest, lien or encumbrance.

This is the only warranty made on this product. Phoenix Environmental Care, LLC EXPRESSLY DISCLAIMS ANY IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE AND, EXCEPT AS SET FORTH IN THE ABOVE PARAGRAPH, ANY OTHER EXPRESS OR IMPLIED WARRANTIES.

Buyer assumes all risk of use of this material when such use is contrary to label instructions. Read and follow the label directions carefully.

Vital® is a registered trademark of Luxembourg Industries Ltd.

Clorox® is a registered trademark of The Clorox Co.

Lysol® is a registered trademark of Reckitt Benckister Inc.

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