

42519-24

11-4-2002

1/7

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY



U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Pesticide Programs
Registration Division (7505C)
401 "M" St., S.W.
Washington, D.C. 20460

EPA Reg. Number:
42519-24

Date of Issuance:
NOV 04 2002

Term of Issuance: Unconditional

Name of Pesticide Product:
VITAL

NOTICE OF PESTICIDE:

Registration
 Reregistration

(under FIFRA, as amended)

Name and Address of Registrant (include ZIP Code):

Luxembourg-Pamol Inc,
5100 Poplar Avenue, Suite 2700
Memphis, TN 38137

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is unconditionally registered in accordance with FIFRA sec. 3(c) (5) provided that you:

1. Submit and/or cite all data required for registration/ reregistration of your product under FIFRA sec. 3(c)(5) when the Agency requires all registrants of similar products to submit such data; and submit acceptable responses required for reregistration of your product under FIFRA section 4.
2. Make the following label change before you release the product for shipment:
Revise the EPA Registration Number to read, "EPA Reg. No.42519-24.

Signature of Approving Official:

(See second page for signature)

Date:

EPA Form 8570-6

CONCURRENCES

SYMBOL	7511C	7511C				
SURNAME	R. Wilkin	Reilly				
DATE	11/04/02	11/4/02				

2/7

Page 2

EPA Reg. No.42519-24

3. Submit five (5) copies of the final printed labeling for the record before you release the product for shipment.

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

A stamped copy of the label is enclosed for your records.

Sincerely,



Janet L. Andersen, Ph.D., Director
Biopesticides and Pollution
Prevention Division

Enclosure

3/7

(Front Panel)

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 Phosphate* 54.50%

OTHER INGREDIENTS: 45.50%

TOTAL 100.00%

*Phosphorous acid equivalent: 34.30% (4.2 lbs / gal.).

KEEP OUT OF REACH OF CHILDREN CAUTION

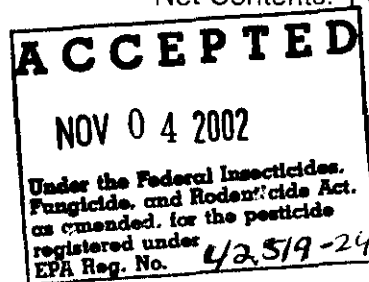
FIRST AID	
If swallowed	<ul style="list-style-type: none"> • Call poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by the poison control center or doctor. • Do not give anything by mouth to an unconscious person.
If in eyes	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15 – 20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
If on skin or clothing	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15 – 20 minutes. • Call a poison control center or doctor for treatment advice.
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	
See back panel for additional precautionary statements.	

EPA Reg. No.: (Pending as File Symbol 42519-EU)
EPA Establishment No.: 42519-ISR-001

Net Contents: 1 or 2.5 gallons

Manufactured by:
Luxembourg Industries (Pamol) Ltd.
P.O. Box 13
Tel Aviv 61000, ISRAEL

Batch No. XXXX-XX



FOR CHEMICAL SPILL, LEAK,
FIRE OR EXPOSURE CALL
TOLL FREE: 1-800-424-9300

AGRICULTURAL CHEMICAL
DO NOT SHIP OR STORE WITH FOODS, FEEDS,
DRUGS OR CLOTHING

(Back Panel)

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, and 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: 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.

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.

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 and 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.

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 one 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.

It is recommended that tank-mix combinations be used 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. We therefore recommend testing for phytotoxicity a small portion of the area to be treated, prior to treating the entire area.

6/7

Application Rate:

Begin spraying when environmental conditions are favorable for the development of disease or as indicated below. Do not apply above the recommended rates.

Use Site	Disease	Rate	Application Interval	Remarks
Turf	<i>Pythium</i>	6 fl. oz. per 1000 sq. ft.	14 days	Begin preventative applications when conditions first favor disease. Repeat at recommended interval. Do not mow or water, treated areas until foliage is completely dry.
	Yellow Tuft	12 fl. oz. per 1000 sq. ft.	21 days	
Bedding Plants FOLIAR APPLICATION	<i>Downy Mildew</i>	4 pints/100 gal.	7 days	Plants such as Begonia, Geranium, Impatiens, Marigold, Pansy, Petunia, Phlox, Salvia, Snapdragon, Verbena, Vinca and Zinnia.
	<i>Phytophthora</i> <i>Pythium</i> spp.	2-4 pints ¹ /100 gallons	14 days	
Conifers in Nurseries DIP at Transplanting	<i>Phytophthora</i> <i>Pythium</i> spp.	4 pints/100 gallons	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.
FOLIAR APPLICATION		2-4 pints ¹ /100 gallons		
Ornamentals FOLIAR APPLICATION	Downy Mildew	4 pints/100 gal.	7 days	Plants such as Aglaonema, Aphelandra, Azalea, Bougainvillea, Boxwood, <i>Cattelya skinneri</i> , Cissus, Dieffenbachia, Hibiscus, Juniper, Leather Leaf Fern, Pittosporum, Philodendron, Pothos, Rhododendron, Spathiphyllum, and <i>Taxus media</i> , English Ivy, Schefflera, <i>anthurium</i> , Syngonium fills.
	<i>Phytophthora</i> <i>Pythium</i> spp. <i>Xanthomonas campestris</i>	2-4 pints ¹ /100 gallons	14 days	
	DRENCH APPLICATION	<i>Phytophthora</i> <i>Pythium</i> spp.	0.65 to 1.25 pints ¹ /100 gallons per 400 sq. ft.	
SOIL INCORPORATION	<i>Phytophthora</i>	0.80 to 1.25 pints ¹ per 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.
Roses FOLIAR APPLICATION	Downy Mildew	4 pints/100 gallons	7 days	In field, container, or landscape in conjunction with disease sanitation. No more than 400 gallons per acre.

7/7

<p>Oak TREE INJECTION</p>	<p><i>Phytophthora ramorum</i></p>	<p>Measure the area under the tree canopy. Apply 1ml. of Vital in 20ml. 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.</p>	<p>Not more than one application per year</p>	<p>Tree Preparation:</p> <ol style="list-style-type: none"> 1. Carefully remove 2-4 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 3/16-5/16inch) 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 3-6 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.
--------------------------------------	------------------------------------	---	---	--

Notes:

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

Important:

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

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.

Warranty Limitations and Disclaimer

Luxembourg 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. Luxembourg 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 acknowledges the use of its own independent skill and expertise in the selection and use of the product and does not rely on any oral or written statements or representations.