

# U.S. ENVIRONMENTAL PROTECTION AGENCY

Office of Pesticide Programs
Biopesticides and Pollution Prevention Division (7511P)
1200 Pennsylvania Avenue NW
Washington, DC 20460

EPA Reg. Number:

42519-**29** 

Term of Issuance:

Date of Issuance:

6/13/06

Unconditional

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\_\_X\_ Registration \_\_\_\_

\_\_\_\_ Re-registration

(under FIFRA, as amended)

Name of Pesticide Product:

Vital-Sign

Name and Address of Registrant (include ZIP Code):

r a semboury-Pamol, The

5106 Poplar Ave., Suite 2700

Memphis 48/38137

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

On the basis of information furnished by the registrant, the above named pesticide is hereby registered 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 you:

Early Under

- 1. Submit and/or cite all data required for registration/ reregistration of your product under FIFRA section 3(c)(5) and section 4 when the Agency requires all registrants of similar products to submit such data.
- 2. Make the following label change before you release the product for shipment: Revise the EPA Registration Number to read, "EPA Reg. No. 42519-29.
- 3. Submit three (3) copies of the revised final printed labeling 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.

Signature of Approving Official

Janet L. Andersen, Ph.D., Director

Biopesticides and Pollution

Prevention Division

Date:

6/13/06

# VITAL-SIGNTM

# Fungicide

A systemic fungicide for the control of diseases caused by Pythlum spp. and other pathogens on turf.

#### **ACTIVE INGREDIENT:**

Potassium Phosphite\* ......53.30% OTHER INGREDIENTS: ......46<u>.70%</u> ......100.00% \*Phosphorous acid equivalent: 34.30% (4.2 lbs/gal).

# KEEP OUT OF REACH OF CHILDREN CAUTION

FIRST AID						
If swallowed	<ul> <li>Call 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>					
If in eyes	<ul> <li>Hold eye open and rinse slowly and gently with water for 15 – 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>					
If on skin or clothing	on skin or • Take off contaminated clothing.					
	duct container or label with you when calling a poison control center or doctor, or tment. You may also contact 1-800-424-9300 for emergency medical information.					

See back panel for additional precautionary statements.

EPA Reg. No.: 42519-

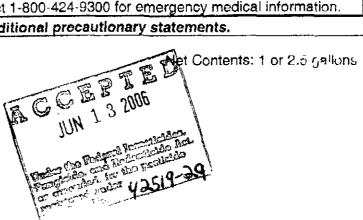
EPA Est. No.: 42519-ISR-001

#### Manufactured for:

Luxembourg-Pamol, Inc. 5100 Poplar Avenue, Suite 2700 Memphis, Tennessee 38137, U.S.A. . Customer Service (713) 661-8800

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, 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-SIGN™ is a systemic product, which contains potassium and phosphate. The phosphonic anion is effective in prevention and control of diseases caused by *Pythium*, by fungicidal activity and activation of the plants' natural resistance mechanism. VITAL-SIGN™ is intended for use as part of an Integrated Pest Management (IPM) system. When used in conjunction with good cultural management practices, and the recommended tank mixtures, and as part of a complete disease control program, VITAL-SIGN™ will control *Pythium*, summer stress and anthracnose. 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-SIGN™ to the tank as indicated in the table below. While agitating, add the remaining amount of water. Apply solution directly to turfgrass, unless directed otherwise in the directions for use. For optimum control, thorough coverage is required.

#### Compatibility:

VITAL-SIGN™ 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.

VITAL-SIGN<sup>TM</sup> has been evaluated for phytotoxicity on a large number of turf grasses under various growing conditions. However, testing all plant species, with all tank mixtures and combinations is not feasible. Test a small portion of the area to be treated for phytotoxicity, prior to treating the entire area.



# Application for Pythium Disease Control:

VITAL-SIGN™ is a systemic fungicide, which provides control of the three forms of *Pythium* disease that attack turf grass, when the product is applied in a preventative manner. Begin spraying when environmental conditions are favorable for the development of *Pythium* diseases. It may be used on turf on golf courses, sod farms or other turf areas.

Use Site	Disease	Rate	Application Interval	Remarks
Turi	Pythium blight	4-8 fl. oz. per 1000 sq. ft.	7-14 days	Begin preventative applications when conditions first favor blight. As disease pressure increases, increase the rate of VITAL-SIGN.
	Pythium root & crown rot	6-8 fi. oz. per 1000 sq. ft.	7-14 days	Best applied in combination, as shown below, in a stress decline program.
	Pythium damping	6-8 fl. oz. per 1000 sq. ft.	7-14 days	Apply to the seedbed and continue on a protective program.

- Do not apply to turf under stress or during severe weather conditions, such as very high temperatures.
- Do not mow or water treated areas until the foliage is completely dry.
- Apply in a spray solution of 1 to 5 gallons per 1000 square feet.
- Do not apply above the recommended rates.
- Use a shorter spray interval and a higher rate under extra disease pressure.

# **TURF TANK MIXES TO CONTROL:**

(1) Summer Stress Complex (Pythium, Anthracnose, and Rhizoctonia)

VITAL-SIGN<sup>TM</sup> can be tank-mixed with the products registered to control this disease complex on turf (including common turfgrasses on golf courses sod farms, industrial or municipal turf areas and professional applications to residential lawns) in accordance with the most restrictive of label limitations and precautions. Do not exceed the label dosage rates. Preventive applications must be made prior to the appearance of the disease and reapplied on a 14 day interval while conditions favor the disease. This product cannot be mixed with any product containing a label prohibiting against such mixture

#### (2) Anthracnose (Colletotrichum graminicola)

For improved control of authracnose VITAL-SIGN tank mixed with Chlorothalonil products can be applied on a 14 day program for use on common turfgrasses on golf courses, sod farms, industrial or municipal turr areas in accordance with the most restrictive of label limitations and precautions. A preventative, multi-application program must be started prior to the appearance of the disease and when the conditions are favorable for anthracnose.

NOTE: To improve the control of dollar spot (Sclerotinia homoeocarpa) apply Banner Maxx at 1-2 oz /1000 sq. ft. to the tank mix.

Use the same restrictions as shown above for Pythium control.

#### 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

To the fullest extent permitted by law, 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 assumes all risk of use of this material when such use is contrary to label instructions. Read and follow the label directions carefully.