| Diagon and incomedant on   | 2519-2  |  | 8/11/3  | ~ -                | T                   |   |  |
|--|---|--|---|--------------------|---------------------|---|--|
| SEPA   | Un<br>Environmental   | nited States   |   | Regis              | stration<br>ndment  | OPP Identifier Nymber   |  |
|  |   | Application for  | Pesticide - Se  | ction I            |                     |   |  |
| 1. Company/Product Number<br>42519-24  |   |  | 2. EPA Product Manager Sheryl Reilly  3. Proposed Classification Restricted |                    |                     |   |  |
| 4. Company/Product (Name)<br>VITAL   |   |  | PM# Biochemical Pesticides Br./BPPD   |                    |                     |   |  |
| 5. Name and Address of App<br>Luxembourg-Pamol, I<br>5100 Poplar Avenue,<br>Memphis, TN 38137              | Inc.  | <b>e</b> )   | 1 -   | t is similar or id |                     | FIFRA Section 3(c)(3)<br>emposition and labeling              |  |
| Check if this  | is a new address  |  | Product Name  |                    |                     |   |  |
|  |   | Sec  | ction - II  |                    |                     |   |  |
| Amendment - Explain below.  Resubmission in response to Agency letter dated  Notification - Explain below. |   |  | Agency I Me Too   |                    | NOTIFI<br>Reviewe   | CATION ed: 8/11/04 y: apallaca                                |  |
| labeling or the confidential state to EPA. I further understand FIFRA and I may be subject to              | that if this notification is r  | not consistent with the<br>d penalties under secti   | terms of PR Notice 98   | 3-10 and 40 CFR 1  |                     |   |  |
| . Material This Product Will   | T.  |  |   |                    |                     |   |  |
| Child-Resistant Packaging Yes  | Unit Packaging Yes No   | Water  | r Sołubie Packaging<br>Yes<br>No  | 2. Typ             | Metal Plastic Glass | •   |  |
| No No rtification must   | If "Yes"  | No. per If "Ye   |   |                    | Paper<br>Other (S   | Specify)  |  |
| * `vtification must<br>bmitted   | If "Yes"<br>Unit Packaging wgt.   |  | es" No. pe<br>age wgt contail   |                    |                     | Specify)  |  |
| * * **Tification must  | If "Yes"<br>Unit Packaging wgt.   |  | aga wgt contail   |                    | Other (S            |   |  |
| * * * * * * * * * * * * * * * * * * *  | If "Yes" Unit Packaging wgt. Information 4  | container Packa 4. Size(s) Retail Conta  | aga wgt contail   | 5. Location of     | Other (S            |   |  |
| * ************************************   | If "Yes" Unit Packaging wgt. Information 4  | Container Packa  Size(s) Retail Conta  Lithograph Paper glued Stenciled  | age wgt contain   | 5. Location of     | Other (S            |   |  |
| * Tification must ubmitted  Location of Net Contents   Label C.  Manner in Which Label is                  | If "Yes" Unit Packaging wgt.  Information ontainer  Affixed to Product  | 4. Size(s) Retail Conta Lithograph Paper glued Stenciled SeC   | einer Oti   | 5. Location of     | Other (S            | ons .   |  |
| * * * * * * * * * * * * * * * * * * *  | If "Yes" Unit Packaging wgt.  Information ontainer  Affixed to Product  | 4. Size(s) Retail Conta Lithograph Paper glued Stencifed  Sec  | einer Oti   | 5. Location of     | Other (S            | e spplication.)   |  |
| * * * * * * * * * * * * * * * * * * *  | If "Yes" Unit Packaging wgt.  Information | Lithograph Paper glued Stenciled  Sec ridentification of indiv   | einer  Otl  Stion - IV  vidual to be contacte  story Consultant             | 5. Location of her | Other (S            | e No. (Include Area Code)                                     |  |
| Triffication must ibmitted  3. Location of Net Contents I  | If "Yes" Unit Packaging wgt.  Information | Lithograph Paper glued Stenciled  Sec ridentification of indiv Title Regular  Certification his form and all attack isleeding statement in | einer  Otl  Stion - IV  vidual to be contacte  story Consultant             | 5. Location of her | Other (S            | e No. (Include Area Code) 3-8964 6. Date Application Received |  |



#### WASHINGTON

1101 17th Street, N.W.

Sheryl Reilly

March 3, 2004

Suite 500

Chief, Biochemical Pesticides Branch

Washington, D.C. 20036

Biopesticides and Pollution Prevention Division (7511C)

Office of Pesticide Programs, EPA

Telephone 202 223-4392

1921 Jefferson Davis Highway

Fax 202 872-0745

Arlington, VA 22202

RE: VITAL™

EPA Reg. No. 42519-24

#### Notification to add an alternate brand name

#### SAN FRANCISCO

Spear Tower, Suite 3622

Dear Dr. Reilly:

One Market San Francisco, CA 94105

Enclosed with this letter you will find the following in support of a label notification for the above referenced product:

Telephone 415 293-8061

Fax 415 293-8001

- 1) Notification form:
- 2) One (1) copy of the product label with the added alternate brand name highlighted in shading.

you have any questions or comments, please do not hesitate to let me know.

This label notification is to add the following alternate brand name:

"VITAL-Sign™."

SACRAMENTO

712 Fifth Street

The above changes are consistent with 40 CFR 156 and PR Notice 98-10. If

Suite A

Davis, CA 95616

Davis, CA 93011

Telephone 530 757-1298

98

Sincerely,

Fax 530 757-1299

**Amy Plato Roberts** 

Regulatory Consultant for Luxembourg-Pamol, Inc.

Direct dial (202) 828-8964; email aroberts@tsgusa.com

# **VITAL**<sup>TM</sup>

(Alternate Brand Names: "VITAL™-GC," "VITAL™-G," "VITAL-Sign™")

# **Fungicide**

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 lbs / gal.).

# KEEP OUT OF REACH OF CHILDREN CAUTION

| OAO11014                  |  |  |  |  |  |
|---------------------------|--|--|--|--|--|
| 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>  |  |  |  |  |
| lf on skin or<br>clothing | <ul> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15 – 20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>  |  |  |  |  |
| Have the pro              | oduct 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.: 42519-24

Net Contents: 1 or 2.5 gailons

EPA Establishment No.: 42519-ISR-001

Manufactured for: Luxembourg-Pamol, Inc.

5100 Poplar Avenue, Suite 2700 Memphis, Tennessee 38137, U.S.A.

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 areenhouses.

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

### **General Information:**

V!TAL™ is a systemic product, which contains potassium and phosphate. The phosphonic anion is effective in prevention and control of diseases caused by Peronospora, Phytophthora and Pythium, 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 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.

**Application:** 

Begin spraying when environmental conditions are favorable for the development of disease or as indicated below. Do not apply above the recommended rates. **Important:** Do not apply on plants when they are under water stress, or during severe weather conditions such as high or very low temperatures.

| Use Site                                   | Disease  | Rate  | Application         | Remarks  |
|--|--|---|---------------------|--|
| Turf                                       | Pythium  | 6 fl. oz. per 1000<br>sq. ft.                         | Interval<br>14 days | Begin preventative applications when conditions first favor disease. Repeat at   |
|  | Yellow Tuft  | 12 fl. oz. per 1000<br>sq. ft.                        | 21 days             | recommended interval. Do not mow or water, treated areas until foliage is completely dry.  |
| Bedding Plants<br>FOLIAR APPLICATION       | Downy Mildew   | 4 pints/100 gal.                                      | 7 days              | Plants such as Begonia,  |
|  | Phytophthora<br>Pythium                              | 2-4 pints*/100 gal.                                   | 14 days             | Geranium, Impatiens, Marigold,<br>Pansy, Petunia, Phlox, Salvia,<br>Snapdragon, Verbena, Vinca and<br>Zinnia.  |
| Conifers in Nurseries DIP at Transplanting | Phytophthora<br>Pythium                              | 4 pints/100 gal.                                      | 14 days             | Plants such as Douglas fir,<br>spruce and pines. Thoroughly wet<br>plant and root mass. Spray to<br>wet using no more than 400   |
| FOLIAR APPLICATION                         |  | 2-4 pints*/100 gal.                                   |                     | gallons per acre.  |
| Ornamentals FOLIAR APPLICATION             | Downy Mildew   | 4 pints/100 gal.                                      | 7 days              | Plants such as Aglaonema, Aphelandra, Azalea, Bougainvillea, Boxwood, Cattelya   |
|  | Phytophthora<br>Pythium<br>Xanthomonas<br>campestris | 2-4 pints*/100<br>gal.                                | 14 days             | skinneri, Cissus, Diffenbachia, Hibiscus, Juniper, Leather Leaf Fern, Pittosporum, Philodendron, Pothos, Rhododendron, Spathaphyllum, and Taxus media, English Ivy, Schefflera authurium, Syngonium fills.               |
| DRENCH<br>APPLICATION                      | Phytophthora<br>Pythium                              | 0.65 to 1.25<br>pints*/100 gal.<br>per 400 sq. ft.    | 30 days             | Plants such as Aphelandra,<br>Azalea, Boxwood, Cissus,<br>Dieffenbachia, Japanese Holly,<br>Monterey Pine, Philodendron,<br>Pieris, Pittosporum,<br>Rhododendron, Schefflera,<br>Spathiphyllum, and <i>Taxus media</i> . |
| SOIL<br>INCORPORATION                      | Phytophthora   | 0.80 to 1.25 pints*<br>per cubic<br>yard of soil mix. | 30 days             | Plants such as Rhododendron,<br>Azalea, or Pieris. Apply<br>immediately prior to potting.<br>Follow this with FOLIAR<br>APPLICATIONS as needed.  |

| Roses<br>FOLIAR APPLICATION | Downy Mildew         | 4 pints/100 gal.   | 7 days  | In field, container, or landscape in conjunction with disease sanitation. No more than 400 gallons per acre.   |
|-----------------------------|----------------------|--|---|--|
| Oak TREE INJECTION          | Phytophthora ramorum | 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. | Not more<br>than one<br>application<br>per year | <ol> <li>Tree Preparation:</li> <li>Carefully remove 2-4 inches of soil from the base of the tree to uncover the top of the root flares.</li> <li>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.</li> <li>Disinfect the drill bit with Lysol® or 20% Clorox® between trees.</li> <li>Inject only Vital™ and water.</li> </ol> |

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

Clorox® is a registered trade mark of the Clorox Company. Lysol® is a registered trade mark of Reckitt-Benckister.

#### 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.