

42519-29

6/17/2013

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

June 17, 2013

SciReg Inc.
12733 Director's Loop
Woodbridge, VA 22192
Attn: Frederick T. Smith

Subject: Notification: Addition of alternate brand name, and inclusion of a 264 gallon (1,000 liter) package size, consistent with the provisions of PR Notice 98-10.

Product name: **VITAL- SIGN.**
Alternate brand name: **VITAL-GREEN.**
Additional container size – **264 gallon (1,000 liter).**
EPA Reg. No: 42519-29.
Your Submission dated June 7, 2013.

Dear Mr. Smith:

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 actions requested fall 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.

Sincerely,

Linda A. Hollis

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

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United States
Environmental Protection Agency
Washington, DC 20460

☐ Registration
☐ Amendment
☒ Other

OPP Identifier Number

Application for Pesticide - Section I

1. Company/Product Number 42519-29	2. EPA Product Manager L. Hollis	3. Proposed Classification <input checked="" type="checkbox"/> None <input type="checkbox"/> Restricted
4. Company/Product (Name) Vital-SIGN	PM# 91	
5. Name and Address of Applicant (Include ZIP Code) Luxembourg-Pamol, Inc. 3647 Willowbend Blvd., Suite 810 Houston, TX 77054 <input type="checkbox"/> Check if this is a new address		6. Expedited Review. In accordance with FIFRA Section 3(c)(3) (b)(i), 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 labels in response to Agency letter dated _____	Notification Accepted Date: <u>6/7/2013</u> Reviewer: <u>Sylvester George</u>
<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 consistent with PR Notice 98-10 to include additional container size.

This notification is consistent with the provisions of PR Notice 98-10 and EPA regulations at 40 CFR 152.46, and no other changes have been made to the labeling or the Confidential Statement of Formula for this product. I understand that it is a violation of 18 U.S.C. Sec. 1001 to willfully make any false statement to EPA. I further understand that if this notification is not consistent with the terms of PR Notice 98-10 and 40 CFR 152.46, this product may be in violation of FIFRA and I may be subject to enforcement action and penalties under sections 12 and 14 of FIFRA.

Section - III

1. Material This Product Will Be Packaged In:				2. Type of Container	
Child-Resistant Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Unit Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Water Soluble Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<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 1, 2, 2.5, 250, 264 gal.		5. Location of Label Directions <input checked="" type="checkbox"/> On label. <input type="checkbox"/> On label accompanying product.	
6. Manner in Which Label is Affixed to Product		<input checked="" 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 Frederick T. Smith	Title Agent (SciReg, Inc.)	Telephone No. (Include Area Code) (703) 494-6500
Certification I certify that the statements which 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 Agent (SciReg, Inc.)	
4. Typed Name Frederick T. Smith	5. Date 6/7/13	

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SciReg, Inc.
Science and Regulatory Consultants

June 7, 2013

Ms. Linda Hollis
Document Processing Desk (NOTIF)
Office of Pesticide Programs (7504P)
U.S. Environmental Protection Agency
One Potomac Yard
2777 S. Crystal Drive
Arlington, VA 22202

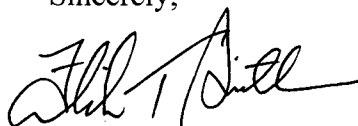
Re: Vital-SIGN (EPA Reg. No. 42519-29)
- Notification Consistent with PR Notice 98-10

Dear Ms. Hollis:

On behalf of Luxembourg-Pamol, Inc., SciReg, Inc. is submitting a notification, consistent with PR Notice 98-10, for Vital-SIGN (alternate brand name, Vital-Green; EPA Reg. No. 42519-29). The notification consists of inclusion of a 264 gallon (1,000 liter) package size. Two copies of the revised label, one of which is redlined to show the change, are included. Other than the package size, no other changes were made.

Should you have any questions, please let me know.

Sincerely,



Frederick T. Smith
Senior Regulatory Specialist

Enclosures

Master Label

Notification Accepted

VITAL-SIGN®

Date: 6/17/2013

Reviewer: Sylvester George

Sublabel A: Agricultural Use

Sublabel B: Non-Agricultural Use

ACTIVE INGREDIENT:

Potassium Phosphite* 53.30%

OTHER INGREDIENTS: 46.70%

TOTAL 100.00%

*Phosphorous acid equivalent: 33.50% (4.1 lbs/gal).

KEEP OUT OF REACH OF CHILDREN

CAUTION

EPA Reg. No.: 42519-29

EPA Est. No.: 42519-ISR-002

Manufactured for:

Luxembourg-Pamol, Inc.

3647 Willowbend Blvd., Suite 810

Houston, TX 77054, U.S.A.

Customer Service (713) 661-8800

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(Front Panel)

VITAL-SIGN®

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

ACTIVE INGREDIENT:

Potassium Phosphite* 53.30%

OTHER INGREDIENTS: 46.70%

TOTAL 100.00%

*Phosphorous acid equivalent: 33.50% (4.1 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.

HOTLINE NUMBER 1-800-424-9300

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-424-9300 for emergency medical information.

See back panel for additional precautionary statements.

EPA Reg. No.: 42519-29
EPA Est. No.: 42519-ISR-002
Batch Code:

Net Contents: 1, 2, 2.5-or, 250, or 264 gallons

Manufactured for:

Luxembourg-Pamol, Inc.
3647 Willowbend Blvd., Suite 810
Houston, TX 77054, U.S.A.
Customer Service (713) 661-8800

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

ABN = Vital-Green

(Back Panel)

PRECAUTIONARY STATEMENTS

Hazards to humans and domestic animals

CAUTION

Harmful if swallowed or if absorbed through skin. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

Personal Protective Equipment (PPE)

Applicators and other handlers must wear:

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

Follow the 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 in. 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.

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 wash water or rinsate.

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, 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. The requirements in this box apply only 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 (REI) 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,
- 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 (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.

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

GENERAL INFORMATION

VITAL-SIGN® is a systemic product, which contains potassium phosphite (phosphonate). 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, carry out spraying before the appearance of the disease or when disease is first observed. Initiate applications when environmental conditions are favorable for disease development.

MIXING AND APPLICATION INSTRUCTIONS

Apply in 1-5 gallons of water per thousand square feet. 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. Do not apply this product through any type of irrigation system.

COMPATIBILITY

VITAL-SIGN® is believed to be compatible with most commonly used pesticides. Consult specific product labels for additional information. 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

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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® 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* diseases 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. Use VITAL-SIGN® on areas with turf, golf courses, and sod farms.

Use Site	Disease	Rate	Application Interval	Remarks
Turf	<i>Pythium</i> blight	3-4 fl. oz. per 1000 sq. ft.	7-14 days	Use the low rate program when applications are started early in the season or when tank mixing multiple products under high temperatures (>90°F).
		4-6 fl. oz. per 1000 sq. ft.	14 days	Begin preventative applications when conditions first favor blight. As disease pressure increases, increase the rate of VITAL-SIGN®.
	<i>Pythium</i> root & crown rot	6-8 fl. oz. per 1000 sq. ft.	7-14 days	Best applied in combination, as shown below, in a stress decline program.
	<i>Pythium</i> 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 apply water to 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.
- When VITAL-SIGN® is applied to stressed turf, in combination with several products in the same spray tank, there is a risk of causing tip burn. This tip burn is more prevalent when the spray solution has a pH of 5.5 or less, and under high temperatures. The tip burn is temporary and usually disappears after 3-5 days. Use the following strategies to mitigate tip burn when using multiple product applications: 1) not mowing immediately before application, 2) spraying early in the day, 3) lightly watering before application, and 4) watering 2-4 hours after product application.

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TURF TANK MIXES TO CONTROL:

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

Tank-mix VITAL-SIGN® with 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. Do not mix this product with any product containing a label prohibiting such mixture.

(2) Anthracnose (*Colletotrichum graminicola*)

For improved control of anthracnose, apply VITAL-SIGN® - tank-mixed with chlorothalonil products such as Pegasus® and Pegasus DF® - on a 14-day program for use on common turfgrasses on golf courses, sod farms, industrial or municipal turf areas in accordance with the most restrictive of label limitations and precautions. Start a preventative, multi-application program 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 products containing propiconazole, such as Kestrel® at 0.5-2 fl. 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: To avoid wastes, use all material in this container by application according to label directions. If wastes 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 or by industry).

Container Handling (Container sizes of 5 gallons or less): Nonrefillable container. Do not reuse or refill this container. Triple rinse (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into the application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ 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, if available, or puncture or dispose of in a sanitary landfill, or by incineration. Do not burn unless allowed by state and local ordinances.

Container Handling (Container sizes greater than 5 gallons): Nonrefillable container. Do not reuse or refill this container. Triple rinse (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into the application equipment or a mix tank. Fill the container ¼ 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. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling, if available, or puncture or dispose of in a sanitary landfill, or by incineration. Do not burn unless allowed by state and local ordinances.

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WARRANTY LIMITATIONS AND DISCLAIMER

To the extent consistent with applicable 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. To the extent consistent with applicable law, 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.

VITAL-SIGN® is a registered trademark of Luxembourg Industries Ltd.

Pegasus®, Pegasus DF®, and Kestrel® are registered trademarks of Phoenix Environmental Care, LLC.

VITAL-SIGN®

Fungicide

A systemic fungicide for the control of diseases caused by *Pythium* spp. and other pathogens on turf of: golf courses; [parks; recreational areas and sports fields; lawns around residential, institutional, public, commercial and industrial buildings; and other turfgrass areas (except sod farms)].

ACTIVE INGREDIENT:

Potassium Phosphite* 53.30%

OTHER INGREDIENTS: 46.70%

TOTAL 100.00%

*Phosphorous acid equivalent: 33.50% (4.1 lbs/gal).

KEEP OUT OF REACH OF CHILDREN

CAUTION

See first aid, additional precautionary statements and directions for use inside booklet.

EPA Reg. No.: 42519-29

EPA Est. No.: 42519-ISR-002

Net Contents 1, 2, 2.5, or 264 gallons

Manufactured for:

Luxembourg-Pamol, Inc.

3647 Willowbend Blvd., Suite 810

Houston, TX 77054, U.S.A.

Customer Service (713) 661-8800

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. You may also contact for emergency medical information.	
HOT LINE NUMBER For 24-Hour Medical Emergency Assistance (Human or Animal) Or Chemical Emergency Assistance (Spill, Leak, Fire or Accident) Call 1-800-888-8372	

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

CAUTION

Harmful if swallowed or if absorbed through skin. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

Personal Protective Equipment (PPE)

Applicators and other handlers must wear:

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

Follow the 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 in. 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.

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 wash water or rinsate.

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.

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 (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.

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

PRODUCT INFORMATION

VITAL-SIGN is a systemic fungicide which contains potassium phosphite. VITAL-SIGN is effective in prevention and control of diseases caused by *Pythium* spp. VITAL-SIGN, applied in tank mixes, also provides excellent control of summer stress caused by *Pythium*, Anthracnose and *Rhizoctonia* spp. VITAL-SIGN, applied as part of an Integrated Pest Management (IPM) program with good cultural management, promotes a vigorous, healthy stand of turf that is better able to tolerate stress. In order to achieve maximum disease control, apply before the resistance of disease or when disease is first observed. Initiate applications when environmental conditions are favorable for disease development.

MIXING INSTRUCTIONS

Apply in 1-5 gallons of water per thousand square feet. 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.

Compatibility

VITAL-SIGN is believed to be compatible with most commonly used pesticides. Consult specific product labels for additional information. 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 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 INSTRUCTIONS

VITAL-SIGN is a systemic fungicide, which provides control of the three *Pythium* diseases 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*.

- Apply solution directly to turfgrass unless directed otherwise in the **DIRECTIONS FOR USE**. For optimum control, thorough coverage is required.
- Do not apply this product through any type of irrigation system.
- Do not mow or apply water to treated areas until the foliage is completely dry.

Turf Pythium Control

Disease	VITAL-SIGN fl oz/1,000 sq ft	VITAL-SIGN fl oz/Acre	Application Interval	Instructions
<i>Pythium</i> blight	3-4 4-6	130-75 175-260	7-14 days 14 days	Begin preventative applications when conditions first favor blight. As disease pressure increases, increase the rate of VITAL-SIGN.
<i>Pythium</i> root and crown rot	6-8	260-350	7-14 days	Best used as part of an overall agronomic program.
<i>Pythium</i> damping off	6-8	260-350	7-14 days	Apply to the seedbed and continue on a protective

program.

Use a shorter spray interval and a higher rate under extra disease pressure.

Turf Tank Mixes for Control of Summer Stress and Anthracnose

A VITAL-SIGN program encourages the development a vigorous, healthy stand of turf that is better able to tolerate stress as part of a complete disease control program. Apply VITAL-SIGN with products registered to control the disease complex on turf in accordance with the most restrictive of label limitations and precautions. Do not exceed the label dosage rates.

Disease	VITAL-SIGN fl oz/1,000 sq ft	Tank Mix Product	Application Interval	Instructions
Summer Stress (<i>Pythium</i> , Anthracnose, <i>Rhizoctonia</i> spp.)	4-8	Daconil Action™ Secure™	14 days	Applications must be made prior to the appearance of the disease and reapplied on a 14 day interval while conditions favor the disease.
Anthracnose (<i>Colletotrichum cereale</i>)	4-8	Daconil Action Medallion®	14 days	Preventive applications should be made prior to the appearance of the disease and reapplied on a 14 day interval while conditions are favorable for disease.

Use a shorter spray interval and a higher rate under extra disease pressure.

The following fungicides are physically compatible with VITAL-SIGN and may be substituted for use with VITAL-SIGN in the summer decline program: Daconil Weatherstik®, Daconil Ultrex®, Daconil Zn®, Banner Maxx® II, Briskway™, Renown™, Concert® II, Heritage®, Heritage® TL, Headway®, Secure™ and Subdue MAXX®.

Note: To improve the control of dollar spot (*Sclerotinia homoeocarpa*), apply products containing propiconazole registered for this use to the tank mix.

STORAGE AND DISPOSAL

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

Pesticide Storage: Store in a dry, cool place.

Pesticide Disposal: To avoid wastes, use all material in this container by application according to label directions. If wastes 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 or by industry).

Container Handling (Container sizes of 5 gallons or less): Nonrefillable container. Do not reuse or refill this container. Triple rinse (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into the application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ 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, if available, or puncture or dispose of in a sanitary landfill, or by incineration. Do not burn unless allowed by state and local ordinances.

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Container Handling (Container sizes greater than 5 gallons): Nonrefillable container. Do not reuse or refill this container. Triple rinse (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into the application equipment or a mix tank. Fill the container ¼ 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. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling, if available, or puncture or dispose of in a sanitary landfill, or by incineration. Do not burn unless allowed by state and local ordinances.

WARRANTY LIMITATIONS AND DISCLAIMER

To the extent consistent with applicable 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. To the extent consistent with applicable law, 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.

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