

roots®

EcoGuard™

BIOFUNGICIDE

Ornamental Turf and
Ornamental Plant Liquid
Concentrate Fungicide

FOR USE ON GOLF COURSES, LAWNS AND OTHER
ORNAMENTAL TURFGRASS

Active Ingredients:

Bacillus licheniformis SB3086*0.14% (w/v)

Indole-3-butyric Acid0.00096% (w/v)

Other Ingredients:99.85904% (w/v)

Total100.00%

* Contains a minimum of 1.0×10^9 Colony Forming Units (CFU)/ml

EPA Reg. No.: 70127-2-961

U.S. Patent No. 6,569,425

EPA Est. No.: 961-VA-012

Keep Out of Reach of Children

CAUTION

PRECAUTIONARY STATEMENTS:

Hazards to Humans and Domestic Animals - CAUTION:

Personal Protective Equipment (PPE):

Applicators and other handlers must wear:

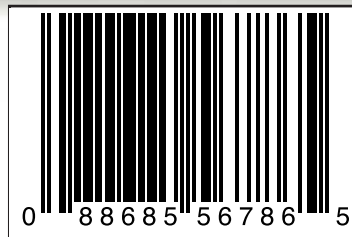
- Long-sleeved shirt and long pants
 - Shoes plus socks
 - For handling activities use a non-powered air purifying NIOSH approved respirator with any N, P, R, or HE filter
- Follow the manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

USER SAFETY RECOMMENDATIONS

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on 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 high-water mark. Do not contaminate water when disposing of residual product or equipment washwaters. Do not use this product on plants intended for food or feed. Do not feed treated plants to livestock or domestic animals.



15-56786

For information on product use, availability or MSDS requests, please contact



Manufactured by:
Lebanon Seaboard Corporation
1600 E. Cumberland St. • Lebanon, PA 17042
Made in the U.S.A.
www.LebanonTurf.com

NET CONTENTS 2.5 GAL (9.46 L)

For best results, store within the recommended storage temperature range of 40° F to 95° F (4° C to 35° C).

DIRECTIONS FOR USE: This is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Do not apply this product when weather conditions, cultural practices, extreme moisture conditions or other environmental conditions are outside of the ranges that are generally recognized as conducive to good growing practices. Do not apply with solutions containing strong acids, bases, oxidizing agents, or solvents.

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 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), notification to workers, and restricted-entry interval. The requirements in this box 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 (REI) of 4 hours.

PPE required 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, and shoes plus socks and protective eyewear.

Product Description: EcoGuard™ Biofungicide is a concentrated suspension of the bacterial spores of the organism *Bacillus licheniformis* SB3086 (U.S. Patent No. 6,569,425), which has been found effective as a natural inhibitor of a variety of agronomically important fungal disease species

Product Use Sites: EcoGuard™ Biofungicide is applied as a foliar spray or soil drench on ornamental turf, ornamental plants, and conifers at the following sites: lawns, golf courses, sports turf, turf farms, greenhouses, nurseries, ornamental gardens, conifer farms and arboretums. EcoGuard™ Biofungicide is a preventative or curative treatment for a variety of fungal diseases, such as those listed below.

Targeted Diseases on Ornamental Turf, Lawns, Golf Courses and Other Turfgrasses:

For control of:	Dollar Spot	<i>Sclerotinia homoeocarpa</i>
	Gray Leaf Spot	<i>Pyricularia grisea</i> , <i>P. oryzae</i>
	Red Thread	<i>Laetisaria fuciformis</i>
	Copper Spot	<i>Gloeocercospora sorghi</i>
	Stem Rust	<i>Puccinia graminis</i>
	Dichondra Leaf Spot	<i>Alternaria spp.</i>
	Gray Snow Mold	<i>Typhula spp.</i>
	Pink Snow Mold	<i>Microdochium nivale</i>
	Leaf Spot/Melting Out	<i>Drechslera poae</i>
	Rust	<i>Puccinia spp., Uromyces spp.</i>
	Anthraxnose	<i>Colletotrichum graminicola</i>
To aid in the suppression of:	Brown Patch (Rhizoctonia Blight)	<i>Rhizoctonia solani, R. zeae, R. cerealis</i>

Targeted Diseases on Ornamental Plants:

Actinopelte Leafspot	<i>Alternaria Leafspot/Leafblight</i>
Anthraxnose Leaf Blotch, Spot	<i>Ascochyta Blight</i>
Bipolaris Leafspot	Black Spot on roses
Botrytis Leafspot, Leaf Blight	Botrytis Flower Spot, Flower Blight
Cephalosporium Leafspot	Cercospora Leafspot
Cercosporidium Leafspot	Coryneum Blight
Corynespora Leafspot	Curvularia Leafspot
Curvularia Flower Spot	Cylindrosporium Leafspot
Cylindrocladium Stem Canker	Dactyaria Leafspot
Didymellina Leafspot	Drechslera Ink Spot
Drechslera Leafspot	Fabraea Leafspot
Fusarium Leafspot	Gloeosporium Black Leafspot
Marssonina Leafspot	Monilinia Blossom Blight
Mycosphaerella Ray Blight	Myrothecium Leafspot
Nematostoma Leaf Blight	Ovulinia Flower Blight
Phyllosticta Leafspot	Phytophthora Leaf Blight, Dieback
Powdery Mildew:	Rhizoctonia Web Blight
<i>Mycosphaera spp., Erysiphe cichoracearum</i>	Ramularia Leafspot
Rust: <i>Gymnosporangium spp., Puccinia spp.</i>	Sclerotinia Flower Blight
Septoria Leafspot	Scab: <i>Venturia inaequalis</i>
Sphaerospora Leafspot	Stagonospora Leaf Scorch
Tan Leafspot (Curvularia)	Volutella Leaf Blight

Golf Course greens, tees, fairways, ornamental turfgrass, lawns, and sports turf

Apply EcoGuard™ Biofungicide in an adequate amount of water to provide complete coverage. For greens and tees, amount of water to deliver EcoGuard™ Biofungicide may vary from 2-4 gallons per 1000 square feet depending on application equipment. For fairways, the amount of water to deliver EcoGuard™ Biofungicide may vary from 0.7-2.0 gallons per 1000 square feet. See the following chart for application rates, timing, and mixing instructions. EcoGuard™ Biofungicide contains small amounts of urea to enhance the rate of spore germination. At the standard application rate (20 fl. oz. of EcoGuard™ Biofungicide / 1000 ft²), 0.14 lb. Nitrogen is applied per 1000 ft². For best results, use the diluted product within 8 hours of mixing. Do not store diluted product for more than 24 hours.

Disease	Application Rate ² (fl. oz./1000 ft ²)	Frequency of Application ¹		
		Pre-disease/ Low Pressure	Moderate Pressure	High Pressure
Dollar Spot	20	7 - 14 days	7 - 14 days	3 - 7 days
Anthraxnose	20	7 - 14 days	7 - 14 days	3 - 7 days
Other Listed Diseases	20	7 - 14 days	7 - 14 days	3 - 7 days

¹Note nitrogen contribution per application: at application rate (20 fl. oz./1000 ft²), 0.14 lb. nitrogen is applied per 1000 ft².

²Mixing instructions (ex. when applying in 2 gal./1000 ft²). Mix 8 gallons of EcoGuard™ Biofungicide in 100 gallons of water.

Ornamental Plants including Greenhouse Applications, Nursery, Ornamental Gardens, and Arborcultural Uses:

Apply in a spray or soil drench to run-off. Apply when symptoms of the disease (see "Target Diseases on Ornamental Plants" for listed diseases) are evident on the target plants, when typical disease symptoms are known to occur in your area, or when the disease is reported in your area (check with your local USDA Extension Service Office). Repeat application every 7-14 days until disease symptoms have resolved. For best results, use the diluted product within 8 hours of mixing. Do not store diluted product for more than 24 hours.

Treatment Sites	Conditions	Application Rate (fl.oz.EcoGuard™/gal.water)	Frequency of Application	Mixing Instructions
Ornamental Plants including Greenhouse Applications, Nursery, Ornamental Gardens, Conifers and Arborcultural Uses	Standard Application Use this rate when light disease symptoms have become evident; or when conditions are conducive to disease development in areas with historical occurrence.	1.3	7-14 days	Mix 12.8 fl. oz. (1 gallon) EcoGuard™ in 100 gallons water. Spray or soil drench to run-off.
	High Application Use this rate when high disease pressure has become evident.	2.6	7-14 days	Mix 2 gallons EcoGuard™ in 100 gallons water. Spray or soil drench to run-off.

INCLUSION IN PEST MANAGEMENT PROGRAM:

EcoGuard™ Biofungicide also works well as part of an Integrated Pest Management (IPM) program, especially to help reduce the occurrence of disease resistance to other fungicide products. In addition, during times of high disease pressure, such combinations may provide optimal pest management while reducing overall yearly pesticide application amounts. Such an integrated program may be achieved by regular rotation of the treatments using EcoGuard™ Biofungicide with treatments of other fungicides. Another approach is to apply EcoGuard™ Biofungicide until the onset of high disease pressure, then to substitute another fungicide (at standard application rates) for a brief period (1-4 treatments) followed by a return to standard applications of EcoGuard™ Biofungicide.

Tank Mixing:

Due to the nature of this microbial product (contains live spores), tank mixing of EcoGuard™ Biofungicide with solutions containing strong acids, bases, oxidizing agents, or solvents should be avoided.

Do not apply this product through any type of irrigation system.

STORAGE AND DISPOSAL:

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

Pesticide Storage: EcoGuard™ Biofungicide is a stable suspension of microbial spores. For best results, store within the recommended storage temperature range of 40° F to 95° F (4° C to 35° C). Avoid longer-term storage at warmer temperatures or in direct sunlight. This product can also be stored at lower temperatures (<40° F) for up to 2 weeks as freezing will not affect its usefulness. Store product in original container in a secure location.

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 incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

WARRANTY: The Directions for Use of this product reflect the opinion of experts based on field use and tests. The directions are believed to be reliable and must be followed carefully. Lebanon Seaboard Corporation warrants that at the time of the first sale of this product it conforms to the chemical description on the label and when used according to the label directions under normal growing conditions is reasonably fit for the purposes referred to above. To the extent consistent with applicable law, buyers/users of this product assume full risk for any use contrary to the specified directions. If this product does not perform as warranted above, customer's sole remedy for breach of warranty, to the extent consistent with applicable law, shall be replacement of the product or refund of the purchase price paid, at the option of Lebanon Seaboard Corporation. **TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, EXCEPT AS PROVIDED ELSEWHERE IN WRITING CONTAINING AN EXPRESS REFERENCE TO THIS WARRANTY AND LIMITATION OF DAMAGES, SELLER MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OR GUARANTEE, INCLUDING ANY OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR OF MERCHANTABILITY, AND NO AGENT OF SELLER IS AUTHORIZED TO DO SO.**

Prompt Notice of Claim: To the extent consistent with applicable law, Lebanon Seaboard Corporation must have prompt notice as soon as Buyer or User has reason to believe they may have a claim (not to exceed twenty-one days from date of application) so that an inspection of the affected property and growing crops may be made. To the extent consistent with applicable law, unless Buyer or User(s) shall promptly notify Lebanon Seaboard Corporation of any claims, the manufacturer does not intend to pay any damages.