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Spot-Less™ Biofungicide

BIOLOGICAL FUNGICIDE FOR THE CONTROL OF FUNGAL DISEASES ON TURF

ACTIVE INGRDIENT

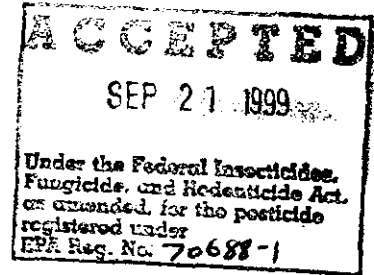
<i>Pseudomonas aureofaciens</i> strain Tx-1*	1.0%
INERT INGREDIENTS	99.0%
TOTAL	100.0%

* Contains at least 2.9 x 10¹¹ viable cells/fl. oz.

KEEP OUT OF REACH OF CHILDREN

CAUTION

EPA Registration Number: 70688-1
EPA Establishment Number: 70571-MN-1
Net Contents:



Manufactured for:



Eco Soil Systems, Inc.
10740 Thommint Road
San Diego, CA 92127
(800)-331-8773

Precautionary Statements

Hazards to Humans and Domestic Animals

Avoid contact with eyes. Wash thoroughly with soap and water after handling. Refer to boom-type sprayer directions for use of personal protective equipment (PPE) required for sprayer use.

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 by cleaning of equipment or disposal of equipment washwaters.

Statement of Practical Treatment (First Aid)
IF IN EYES: Flush with plenty of water. Cal a physician if irritation persists.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Application Site

Spot-Less Biofungicide is a biological fungicide for use on turfgrass including golf courses. Do not use Spot-Less Biofungicide on turf being grown for sale or other commercial use as sod, or for commercial seed production, or for research purposes.

Target Pests

Dollar Spot (*Sclerotinia homeocarpa*); Anthracnose (*Colletotrichum graminicola*), Pythium (*Pythium aphanadermatium*); Microdochium patch (pink snow mold) (*Microdochium nivale*).

Application

Spot-Less Biofungicide can be applied through over-head irrigation systems, after fermentation in the BioJect[®] Automatic Fermentation System, or directly using a boom-type sprayer.

Application Using the BioJect Automatic Fermentation System

Refer to the BioJect Operators Manual for specific operating and handling instructions. Only trained operators may use the BioJect System.

Application of Spot-Less Biofungicide, using the BioJect System, can only be made when the turf to be treated is not occupied by people (preferably when the golf course or other facility is closed to the public) and in a sufficient time-frame such that turf is not expected to be occupied until mists have settled and sprays have dried.

A quality control check is required for each BioJect System fermentation cycle. The "BioJect System Quality Control Checklist" must be followed for each fermentation cycle. If any of the items listed in the checklist do not function properly, the resulting batch must be aborted and appropriately disposed.

NOTE: Only potable water can be used as a water source for the BioJect System both for operation (fermentation) and disinfection.

Frequency of Application

Apply 1-7 times per week through over-head irrigation systems.

Chemigation

Refer to the section entitled **Chemigation Instructions** for use directions for chemigation. Do not apply this product through any irrigation system unless the labeling on chemigation is followed.

Application Using Boom-Type Sprayer

1. Apply Spot-Less Biofungicide using a boom-type sprayer when spot treating fungal disease on golf greens, tee boxes and infected areas on fairways. Apply when conditions are favorable for disease development.
2. Applicators and other handlers must wear the Personal Protective Equipment (PPE) described below.
3. Application can only be made when the turf to be treated is not occupied by people (preferably in the evening when the golf course is closed to the public) and in a sufficient time-frame such that the treated area is not expected to be occupied until mists have settled and sprays have dried.
4. Fill the boom-type sprayer with water; make sure the pH range is between 6-8. Add the entire contents of the Spot-Less Biofungicide bag directly into the sprayer. Apply Spot-Less Biofungicide at a rate of 3 oz./1000 sq. ft. (1 gal/acre) in a total spray volume of 1.2-2.5 gal/1000 sq. ft. (50-100 gal/acre). Apply at intervals of 7-14 days.
5. Spot-Less Biofungicide can be tank-mixed with fungicides approved for turf application in accordance with the most restrictive of label limitations and precautions. No label dosage rates should be exceeded. This product cannot be mixed with any product containing a prohibition against such mixing. Spot-Less Biofungicide can increase fungicide spray intervals.

Personal Protective Equipment (PPE)

- Applicators and other handlers must wear a long-sleeved shirt and long pants, waterproof gloves, shoes plus socks and protective eyewear.
- As a general precaution when exposed to potentially high concentrations of living microbial products such as this product, all mixer/loaders and applicators must wear a dust/mist filtering respirator meeting NIOSH standards of at least N-95, R-95 or P-95.
- Follow the manufacturer's instructions for cleaning/maintaining PPE. If no such instructions are available for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.
- Remove PPE clothing immediately if Spot-Less Biofungicide gets inside. Then wash thoroughly and put on clean clothing.

BIOJECT SYSTEM QUALITY CONTROL CHECKLIST

THE FOLLOWING PROCEDURES MUST BE FOLLOWED PRIOR TO THE INITIATION OF EACH FERMENTATION CYCLE FOR SPOT-LESS BIO-FUNGICIDE. IF ANY OF THE PROCEDURES ARE NOT FOLLOWED, THE RESULTING BATCH MUST BE ABORTED AND APPROPRIATELY DISPOSED.

Item	Quality Control Check
UV light is operating properly.	Visually observe and confirm that the UV light is attached to the make-up water input line and that the light gives off a purple glow. Verify the scheduled maintenance and replacement, as per bulb manufacturer's instructions, are followed.
Inoculum is properly added to the BioJect fermentation tank.	Visually observe and confirm the inoculum pump's activity during addition.
Disinfecting cycle has occurred immediately prior to fermentation.	Visually observe and confirm that the peracetic acid pump is operating during the clean-in-place (CIP) cycle.
Appropriate media is added to fermentation tank.	Confirm that the nutrient medium added to the BioJect is MD ½ .

STORAGE AND DISPOSAL

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

Storage: Store in original bags and keep closed. To preserve the live bacterial active ingredient of Spot-Less Biofungicide store at temperatures between 40 - 55 °F.

Bag Disposal: After the Spot-Less Biofungicide bag has been completely used, dispose of empty bag in a sanitary landfill or by incineration, or if allowed by state and local authorities, by burning. If burned, keep out of smoke.

Disposal of Defective batches: Prior to disposal, defective (including partially used batches) must be disinfected with peracetic acid, a high-level disinfectant. Add 1 liter (0.25 gal) of peracetic acid per 25 gal fermentation batch (1% v/v or 10,000 ppm). Then dispose of the disinfected batch in the sewer system.

CHEMIGATION INSTRUCTIONS

Apply Spot-Less Biofungicide (after the fermentation cycle in the BioJect Automatic system) only through over-head sprinkler systems. Do not apply this product through any other type of irrigation system. Check the irrigation system and emitters to ensure the system is operating normally before injecting Spot-Less Biofungicide. Lack of effectiveness and crop injury can result from non-uniform distribution of treated water. If you have any questions about calibration, you should contact State Extension Service Specialist, equipment manufacturer or other experts.

Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system, unless the safety devices, prescribed below, are in place. In addition, check local and state regulations regarding pesticide injection into public water systems.

A person knowledgeable about the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

The over-head sprinkler system must meet the following requirements:

- The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.
- The pesticide injection pipeline must also contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the irrigation pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor system stops.
- The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to a point where pesticide distribution is adversely affected.
- Systems must use a metering pump, such as positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
- Do not apply when wind speed favors drift beyond the area intended for treatment.

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- Application of Spot-Less Biofungicide can be continuous for the duration of the water application.

Over-Head Irrigation Systems Connected to Public Water Systems must meet the following requirements:

- Public water systems means a system for the provision to the public of piped water for human consumption if such system has as least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.
- Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.
- The pesticide injection pipeline must also contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the irrigation pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor system stops.
- The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to a point where pesticide distribution is adversely affected.
- Systems must use a metering pump, such as positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
- Do not apply when wind speed favors drift beyond the area intended for treatment.
- Application of Spot-Less Biofungicide can be continuous for the duration of the water application