

# TurfShield PLUS WP Biological Fungicide

USE IN FIELD APPLICATIONS, LANDSCAPES. USE IN TANK MIXES OR ROTATIONAL ALTERNATING APPLICATION PROGRAMS WITH OTHER CROP PROTECTION PRODUCTS. USE IN RESISTANCE MANAGEMENT PROGRAMS. FOR USE ON ORNAMENTALS, LANDSCAPE PLANTS, TREES, SHRUBS, TURF, LAWNS, SOD, SOD FARMS, ATHLETIC FIELDS, GOLF COURSES (GREENS, TEES, FAIRWAYS AND ROUGHS)

## ACTIVE INGREDIENTS:

*Trichoderma harzianum* Rifai strain T-22\* ..... 1.15%

*Trichoderma virens* strain G-41\*\* ..... 0.61%

OTHER INGREDIENTS: ..... 98.24%

TOTAL: ..... 100.00%

\*Contains at least  $1.0 \times 10^7$  colony forming units per gram dry weight.

\*\*Contains at least  $5.3 \times 10^6$  colony forming units per gram dry weight.

KEEP OUT OF REACH OF CHILDREN  
**CAUTION**

EPA Reg. No.: 68539-9  
EPA Est. No.: 68539-NY-001

## Manufactured by:

BioWorks, Inc.  
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Victor, NY 14564  
800-877-9443  
www.bioworksinc.com

U.S. Patent Pending

## FIRST AID

### If in eyes

- 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.

HOT LINE NUMBER: Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-222-1222 for emergency medical treatment information.

## PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**CAUTION:** Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.

## PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear protective eyewear, long-sleeved shirt and long pants, and shoes plus socks. Mixers/loaders and applicators must wear a dust/mist filtering respirator meeting NIOSH standards of at least N-95, R-95, or P-95. Repeated exposure to high concentrations of microbial proteins can cause allergic sensitization. Follow 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 PPE immediately after handling this product. As soon as possible, wash thoroughly and change into clean clothing. Users should remove clothing / PPE 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 equipment washwaters or rinsate.

This biological fungicide is for use in soil applications (drench, soil surface spray, and soil injection) on turf, food plants, ornamentals, landscape plants, and ornamental trees. This biological fungicide is also for use in foliar applications (foliar spray) on turf.

**ATTENTION: DO NOT APPLY** to sugarcane, pechay (bok choy), rice, mushrooms, kiwi, tobacco, barley, oats, lemon, apple, and chickpea. Not for use on aquatic crops. **DO NOT APPLY** this product through any type of irrigation system.

#### TURF USES

TURF	USE	APPLICATION RATE OF TURFSHIELD PLUS WP BIOLOGICAL FUNGICIDE
Turf: Golf Courses, Sports fields, Seedbed preparation of golf course tees, greens fairways and roughs, Seed production, Sod production	Soil surface spray Foliar spray	0.5 – 1.5 oz / 1,000 sq ft turf 0.5 – 1.5 oz / 1,000 sq ft turf

**TURF APPLICATION:** Begin application of TURFSHIELD PLUS WP **Biological Fungicide** when soil temperature reaches 46° – 48° F or when turf begins to grow. Reapply at 30 day intervals at the application rates given directly below until turf becomes dormant. The first two applications of the season must be thoroughly watered into the soil with at least ½ inch of rainfall or irrigation to ensure adequate root colonization.

First and second applications:

1.5 ounces of TurfShield PLUS WP per 1,000 square feet of turf

Subsequent monthly applications on greens:

1.0 ounce of TurfShield PLUS WP per 1,000 square feet of turf

Subsequent monthly applications on turf other than greens:

0.5 ounce of TurfShield PLUS WP per 1,000 square feet of turf

Mix the above application rates in a minimum of 1 – 5 gallons of water per 1,000 sq ft of turf. TURFSHIELD PLUS WP Biological Fungicide is fully compatible with fertilizers and can be tank mixed and applied when making fertilizer applications. Apply tank mixes containing TURFSHIELD PLUS WP Biological Fungicide and fertilizers within 4 hours of mixing. Constant agitation of the spray tank is required.

For new turf seedlings apply TURFSHIELD PLUS WP Biological Fungicide at 1.5 oz per 1000 square feet just after seeding. Follow application with at least 1/8" of irrigation water.

Apply TurfShield PLUS WP directly to turf through low pressure watering nozzles such as fan nozzles, other drench watering systems, handheld sprayers or backpack sprayers.

#### LANDSCAPE USES

##### PLANTS ON WHICH TURFSHIELD PLUS WP BIOLOGICAL FUNGICIDE MAY BE USED:

For plants that could bear food commodities: Do not apply product when above-ground harvestable food commodities are present.

TURFSHIELD PLUS WP Biological Fungicide has a 0-Day PreHarvest Interval (PHI) for all crops contained on this label.

PLANT	USE	APPLICATION RATE OF TURFSHIELD PLUS WP BIOLOGICAL FUNGICIDE
<b>Berries and Small Fruits:</b> Blackberries, Blueberries, Currants, Elderberries, Gooseberries, Huckleberries, Loganberries, Raspberries, Strawberries, Grapes	Landscape soil drench Soil injection	3 – 8 oz / 1,000 sq ft landscape plantings 3 – 8 oz / 1,000 sq ft shrubs
<b>Ornamental Bulbs</b>	Landscape soil drench	3 – 8 oz / 1,000 sq ft landscape plantings
<b>Citrus Fruits:</b> Citrus Hybrids, Grapefruit, Kumquat, Limes, Oranges, Pummelos	Landscape soil drench Soil injection	3 – 8 oz / 1,000 sq ft landscape plantings 3 – 8 oz / 1,000 sq ft trees
<b>Conifer Trees</b>	Landscape soil drench Soil injection	3 – 8 oz / 1,000 sq ft landscape plantings 3 – 8 oz / 1,000 sq ft trees
<b>Flowers, Bedding Plants, and Ornamentals</b>	Landscape soil drench Soil injection	3 – 8 oz / 1,000 sq ft landscape plantings 3 – 8 oz / 1,000 sq ft shrubs
<b>Herbs, Spices, and Mints</b>	Landscape soil drench Soil injection	3 – 8 oz / 1,000 sq ft landscape plantings 3 – 8 oz / 1,000 sq ft shrubs
<b>Pome Fruits:</b> Pears, Quince	Landscape soil drench Soil injection	3 – 8 oz / 1,000 sq ft landscape plantings 3 – 8 oz / 1,000 sq ft trees
<b>Trees and shrubs:</b> Deciduous Trees (Maple, Oak, etc.), Ornamentals, Grapes, Citrus, Pine	Landscape soil drench Soil injection	3 – 8 oz / 1,000 sq ft landscape plantings 3 – 8 oz / 1,000 sq ft trees and shrubs
<b>Stone Fruits:</b> Apricots, Cherries, Nectarines, Peaches, Plums, Prunes	Landscape soil drench Soil injection	3 – 8 oz / 1,000 sq ft landscape plantings 3 – 8 oz / 1,000 sq ft trees
<b>Tree Nuts:</b> Almonds, Beech Nuts, Brazil Nuts, Butternuts, Cashews, Chestnuts, Filberts, Hickory Nuts, Macadamia Nuts, Pecans, Pistachios, Walnuts	Landscape soil drench Soil injection	3 – 8 oz / 1,000 sq ft landscape plantings 3 – 8 oz / 1,000 sq ft trees

**LANDSCAPE SOIL DRENCH:** Apply 3 – 8 ounces TURFSHIELD PLUS WP Biological Fungicide per 1,000 square feet of landscape plantings. Mix required dosage in sufficient water (50 – 75 gallons of water/1,000 sq ft) and apply prepared suspension as a soil drench to landscape plantings. Apply TURFSHIELD PLUS WP Biological Fungicide directly to the soil through low pressure watering nozzles such as fan nozzles, other drench watering systems, or hydraulic, handheld or backpack sprayers. Constant agitation of the spray tank is required. After application, lightly irrigate landscape plantings with 1/8 – 1/4 inch of water to move product below soil surface.

**SOIL INJECTION FOR TREES AND SHRUBS:** Apply 3.0 to 8.0 oz TURFSHIELD PLUS WP Biological Fungicide per 1,000 sq ft of trees and shrubs. Mix required dosage in sufficient water (50 – 75 gallons of water/1,000 sq ft) to inject an equal amount of solution in each hole. Constant agitation of the spray tank is required. Use a grid system for soil injection of TURFSHIELD PLUS WP Biological Fungicide by spacing holes on 2.0 to 3.0 foot centers, in a grid pattern, extending at least to the drip line of the tree. Inject prepared solution into the soil at least 3" deep for shrubs and 6" deep for trees.

#### TANK MIXING

TURFSHIELD PLUS WP Biological Fungicide can be tank mixed and is compatible with many commonly used fungicides, liquid fertilizers, herbicides, insecticides and biological control products. If tank mixes are desired, observe the most restrictive of labeling limitations and precautions of all products used in mixtures. Consult your BioWorks representative for more information. **This product must not be tank mixed with chemicals that contain the following active ingredients: imazilil, propiconazole, tebuconazole, and triflumizole.** Do not apply TURFSHIELD PLUS WP Biological Fungicide immediately before these pesticides are used.

Do not combine TURFSHIELD PLUS WP Biological Fungicide in the spray tank with pesticides, surfactants, adjuvants, or fertilizers if there has been no previous experience or use of the combination to show it is physically compatible, effective and non-injurious under your use conditions.

<https://www.bioworksinc.com/products/turfgrass/turfshield/TurfShield-PLUS-WP-Label.pdf>