



**BioWorks®**

RootShield® Granules  
Biological Fungicide

Revision Date: 23OCT2018

## SAFETY DATA SHEET

### 1. IDENTIFICATION

GENERAL USE: Biological Fungicide

COMMON NAME: RootShield® Granules Biological Fungicide

MANUFACTURED BY: BioWorks, Inc.  
100 Rawson Rd, Suite 205  
Victor, NY 14564

EMERGENCY TELEPHONE NUMBERS: BioWorks, Inc: 800-877-9443  
CHEMTREC: 800-424-9300 (USA and Canada)

### 2. HAZARDS IDENTIFICATION

GHS Classification: Eye Irritation – Category 2B  
Signal Word: Warning  
Pictogram: None  
Hazard Statement: Causes eye irritation  
Precautionary Statements: Wash exposed areas thoroughly after handling.  
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
If eye irritation persists: Get medical attention.  
Unclassified Hazards: Dust may cause skin and respiratory tract irritation.  
Ingredients with Unknown: None  
Toxicity:

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Product contains the following ingredients:

COMPONENT	CAS No.	%	OSHA PEL	ACGIH
<i>Trichoderma harzianum</i> Rifai strain T-22	67892-31-3	1.15	N/E	N/E
Other ingredients	Confidential	98.85	N/E	N/E

N/E = Not Established

The specific chemical identities and percentages of composition have been withheld as trade secrets.

## 4. FIRST-AID MEASURES

**EYE CONTACT:** In cases of contact, hold eyelids apart and immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a physician.

**MOST IMPORTANT SYMPTOMS:** Causes eye irritation.

**IMMEDIATE MEDICAL ATTENTION NEEDED:** None.

## 5. FIRE-FIGHTING MEASURES

**FLASH POINT:** Not applicable.

**AUTOIGNITION TEMPERATURE:** Not determined

**EXTINGUISHING MEDIA:** Not combustible.

**SPECIAL FIRE-FIGHTING PROCEDURES:** Evacuate personnel to a safe area. Keep personnel removed and upwind of fire. Wear self-contained breathing apparatus and full protective equipment.

**UNUSUAL FIRE and EXPLOSION HAZARDS:** None known.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Thermal decomposition will produce oxides of carbon and silicon.

## 6. ACCIDENTAL RELEASE MEASURES

**PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT, AND EMERGENCY PROCEDURES:** Take all additional action necessary to prevent and remedy the adverse effects of the spill. This product should be prevented from entering bodies of water.

**METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP:** In case of spill, collect material immediately. Wipe residual material from surfaces with cloth. Do not wash residues into drains or other waterways.

## 7. HANDLING AND STORAGE

**PRECAUTIONS FOR SAFE HANDLING:** 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. Remove and wash contaminated clothing before reuse.

**PESTICIDE STORAGE:** Do not contaminate water, food or feed by storage and disposal. Store in original container under refrigerated conditions. Short periods at room temperatures below 75°F will not affect performance. Keep container tightly closed when not in use.

## 8. EXPOSURE CONTROLS, PERSONAL PROTECTION

EXPOSURE LIMITS: None.

Avoid contact with eyes or clothing. Keep container tightly closed.

PERSONAL PROTECTION:

RESPIRATORY: Mixer/loaders and applicators must wear a dust/mist filtering respirator meeting NIOSH standards of at least N-95, R-95, or P-95.

OTHER: Applicators and other handlers must wear: protective eyewear, long-sleeved shirt and long pants, and shoes plus socks.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: grey and green granules

ODOR: earthy odor

ODOR THRESHOLD: Not determined

pH: Not determined

MELTING POINT: Not determined

BOILING POINT: Not determined

FLASH POINT: Not determined

EVAPORATION RATE: Not determined

FLAMMABILITY: Not determined

FLAMMABILITY/EXPLOSIVE LIMITS: Not determined

VAPOR PRESSURE: Not applicable

VAPOR DENSITY: Not applicable

BULK DENSITY: 0.61 g/cm<sup>3</sup>

SOLUBILITY in water: Insoluble

PARTITION COEFFICIENT: Not determined

AUTO-IGNITION TEMPERATURE: Not determined

DECOMPOSITION TEMPERATURE: Not determined

VISCOSITY: Not determined

## 10. STABILITY AND REACTIVITY

REACTIVITY: Not reactive under normal conditions of use.

STABILITY: Stable under normal recommended storage and handling conditions. (see section 7)

HAZARDOUS POLYMERIZATION: Will not occur.

INCOMPATIBILITY: Strong acidic materials.

HAZARDOUS THERMAL DECOMPOSITION PRODUCTS: Thermal decomposition will produce oxides of carbon and silicon.

## 11. TOXICOLOGICAL INFORMATION

Active ingredient is practically non-toxic, non-allergenic and non-pathogenic to mammals. Pre-existing medical conditions should not be aggravated by exposure. Repeated exposure to high concentrations of microbial proteins can cause allergic sensitization.

## 12. ECOLOGICAL INFORMATION

FISH TOXICITY: No data available.

DAPHNIA MAGNA TOXICITY: No data available.

ALGAE: No data available.

OTHER: Do not apply directly to water, to areas where surface water is present.

## 13. DISPOSAL CONSIDERATIONS

Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

## 14. TRANSPORT INFORMATION

Land: ADR / RID Class: Not controlled under ADR (Europe)

Water: IMDG Class: Not controlled under IMDG

Air: IATA - DGR Class: Not controlled under IATA

US DOT: Not Regulated

Canadian TDG: Not Regulated under Canadian Transport of Dangerous Goods Regulations

PROPER SHIPPING NAME: Not regulated

## 15. REGULATORY INFORMATION

UNITED STATES (EPA Reg. No. 68539-3)

This pesticide product is registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other information, including direction for use.

### CAUTION

Dust may irritate the respiratory tract.

Dust may cause eye irritation.

Dust may cause skin irritation.

SARA Hazard Class: [ ] Acute [ ] Chronic [ ] Flammable [ ] Pressure [ ] Reactive [X] None

SARA 313 [ ] Yes [X] No, Chemical SARA 302 [ ] Yes [X] No, Chemical  
CERCLA: [ ] Yes [X] No, Chemical RQ: none  
RCRA: [ ] Yes [X] No

NFPA Hazard Rating:

Health: [1]  
Fire: [1]  
Reactivity: [0]  
Special: [1]

NFPA Hazard Rating Scale:

0 = Minimal 3 = Serious  
1 = Slight 4 = Severe  
2 = Moderate

HMIS Codes:

Health: [1]  
Fire: [1]  
Reactivity: [0]

HMIS Hazard Rating Scale:

0 = Minimal 3 = Serious  
1 = Slight 4 = Severe  
2 = Moderate

CANADA (PCP Reg. No. 27116)

WHMIS: This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

## 16. OTHER INFORMATION

DATE OF PREPARATION: 23OCT2018

CONTACT: BioWorks, Inc.  
100 Rawson Rd, Suite 205  
Victor, NY 14564

TELEPHONE: 800-877-9443

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