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**MATERIAL SAFETY DATA SHEET**

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**1. CHEMICAL PRODUCT and COMPANY IDENTIFICATION**

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GENERAL USE: Biological Fungicide

COMMON NAME: RootShield® WP Biological Fungicide

MANUFACTURED FOR:

EMERGENCY TELEPHONE NUMBER:

BioWorks, Inc.

BioWorks, Inc: 800-877-9443

100 Rawson Rd, Suite 205

Victor, NY 14564

CHEMTREC: 800-424-9300

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**2. COMPOSITION, INFORMATION ON INGREDIENTS**

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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
Inert ingredients	confidential	98.85	N/E	N/E

N/E = Not Established

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**3. HAZARDS IDENTIFICATION**

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EMERGENCY OVERVIEW: Grey or green powder with earthy odor. Dust may cause eye, skin and respiratory tract irritation.

POTENTIAL HEALTH EFFECTS:

INHALATION: Dust may irritate the respiratory tract.

EYE CONTACT: Dust may cause irritation.

SKIN CONTACT: Dust may cause irritation.

INGESTION: Active ingredient has shown no mammalian toxicity.

CHRONIC: No known effects.

CARCINOGENICITY: The ingredients in this product are not listed by NTP, OSHA, or IARC as a carcinogen.

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**4. EMERGENCY AND FIRST AID MEASURES**

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INHALATION: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

SKIN CONTACT: Remove contaminated clothing. Wash thoroughly with soap and water immediately. Get medical attention if irritation develops.

EYE CONTACT: In cases of contact, hold eyelids apart and immediately flush eyes with plenty of water for at least 15 minutes. Call a physician.

INGESTION: If swallowed, do NOT induce vomiting. Call a physician.

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## 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, sulfur, sodium and silicon.

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## 6. ACCIDENTAL RELEASE MEASURES

GENERAL: 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.

SPECIFIC: In case of spill, collect material immediately. Wipe residual material from surfaces with cloth. Do not wash residues into drains or other waterways.

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## 7. HANDLING and STORAGE

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.

Store in original container under refrigerated conditions. Short periods at room temperatures below 75°F will not affect performance. Do not store near food or feed commodities. Prevent exposure to moisture. Keep container tightly closed when not in use.

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## 8. EXPOSURE CONTROLS, PERSONAL PROTECTION

Avoid contact with skin, eyes or clothing. Use only outdoors. Keep container tightly closed.

PERSONAL PROTECTION:

RESPIRATORY: When opening or dumping bags, or other operations where dusts may be created, wear a dust/mist filtering respirator meeting NIOSH standards of at least N-95, R-95, or P-95.

PROTECTIVE GLOVES: Wear waterproof gloves.

OTHER: Applicators and other handlers must wear: long-sleeved shirt and long pants, waterproof gloves, and shoes plus socks. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.

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## 9. PHYSICAL and CHEMICAL PROPERTIES

APPEARANCE: grey or green powder  
VAPOR PRESSURE: Not applicable  
SPECIFIC GRAVITY: 0.61 g/cm<sup>3</sup>  
SOLUBILITY in water: Insoluble

ODOR: earthy odor  
MELTING POINT: Not determined  
BOILING POINT: Not determined  
VISCOSITY: Not determined

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## 10. STABILITY and REACTIVITY

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, sulfur, sodium and silicon.

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## 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.

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## 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.

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## 13. DISPOSAL CONSIDERATIONS

**PESTICIDE DISPOSAL:** Do not contaminate food or feed by disposal. Wastes resulting from use of this product may be disposed of on site or at an approved waste disposal facility.

**CONTAINER DISPOSAL:** Non-refillable container. Do not reuse or refill this container. Completely empty bag into the application equipment by shaking and tapping sides and bottom to loosen clinging particles. Then offer for recycling if available, or dispose of empty bag in sanitary landfill or by incineration. Do not burn, unless allowed by state and local ordinances. If outer box is contaminated, dispose of in same manner as bag.

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## 14. TRANSPORT INFORMATION (not meant to be all inclusive)

D.O.T.- Land, air and sea

PROPER SHIPPING NAME: Not regulated

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**15. REGULATORY INFORMATION (not meant to be all inclusive)**

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**UNITED STATES**

FIFRA (Federal Insecticide, Fungicide and Rodenticide Act): Regulated,  
EPA Reg. No. 68539-7

SARA Hazard Class: ☐ Acute ☐ Chronic ☐ Flammable ☐ Pressure ☐ Reactive  
☒ None

SARA 313 ☐ Yes ☒ No, Chemical

SARA 302 ☐ Yes ☐ No, Chemical  
RQ: none

CERCLA: ☐ Yes ☐ No, Chemical

RCRA: ☐ Yes ☐ No

NFPA Hazard Rating:

NFPA Hazard Rating Scale:

Health: [1]

0 = Minimal 3 = Serious

Fire: [1]

1 = Slight 4 = Severe

Reactivity: [0]

2 = Moderate

Special: [1]

HMIS Codes:

HMIS Hazard Rating Scale:

Health: [1]

0 = Minimal 3 = Serious

Fire: [1]

1 = Slight 4 = Severe

Reactivity: [0]

2 = Moderate

**CANADA**

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*.

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**16. OTHER INFORMATION**

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MSDS SUMMARY: Revised March 30, 2012

CONTACT: BioWorks, Inc.

TELEPHONE: 800-877-9443

100 Rawson Rd, Suite 205

Victor, NY 14564

**DISCLAIMER AND LIMITATION OF LIABILITY**

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