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# T-22G Biological Fungicide

**ACTIVE INGREDIENT**

<i>Trichoderma harzianum</i> Rifai strain KRL-AG2 .....	1.15%
<b>OTHER INGREDIENTS</b> .....	<b>98.85%</b>
<b>TOTAL</b>	<b>100.00%</b>

\*Contains at least 1.0 x 10<sup>7</sup> colony forming units per gram dry weight.

**KEEP OUT OF REACH OF CHILDREN**

**CAUTION**

**STATEMENT OF PRACTICAL TREATMENT**

In case of contact, flush eyes with plenty of water. Get medical attention if irritation persists.

**PRECAUTIONARY STATEMENTS**

**HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

**CAUTION:** Avoid contact with skin or eyes. Avoid breathing dust. Do not store near food or feed.

**USER SAFETY RECOMMENDATIONS**

Users should: wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.

**ENVIRONMENTAL HAZARDS**

Do not apply directly to water, 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 wash water.

**GENERAL INFORMATION**

T-22G is a biological fungicide for control of soilborne plant pathogens and plant root diseases. The active ingredient is a beneficial microbe, *Trichoderma harzianum* Strain T-22 (KRL-AG2). Applied as an inoculant to soil, planting mixes or turf, T-22 actively grows onto plant roots as they develop and provides prolonged protection against plant root pathogens such as *Pythium*, *Rhizoctonia* and *Fusarium*. T-22G can be used alone or in conjunction with certain chemical fungicides; consult ROOTSHIELD® compatibility chart for detailed information. Where early season seed rot and seedling diseases are expected, use chemically treated seed or other appropriate measures for stand establishment and T-22G for prolonged root disease control.

Note: T-22G contains live spores of a beneficial microbe. For best results, product must be used prior to disease onset. Strain T-22 becomes active in soil at temperatures above 50°F and is not effective while temperatures remain cold. T-22G can be applied to sterilized or fumigated soil but must be applied after sterilization or fumigation.

EPA Reg. No. 68539-3  
EPA Est. No. 068539-NY-001

**BioWorks, Inc.**  
122 North Genesee Street  
Geneva, New York 14456

Net Contents:  
Lot No.

**ACCEPTED**

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**DIRECTIONS FOR USE**

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected workers may be in the area during application. For any requirement 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) and restricted entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

**PERSONAL PROTECTIVE EQUIPMENT**

Applicators and other handlers must wear: a) long sleeved shirt and long pants; b) shoes plus socks; c) when dumping or opening bags, or other operations where dusts may be created, wear a dust/mist filtering respirator (MSHA/NIOSH approval number prefix TC-21C) or a NIOSH approved respirator with any N-95, R-95, P-95 or HE filter for biological products.

Follow manufacturer's directions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

**There are no restrictive entry interval (RED) requirements.**

Biological fungicide for use in soil applications (drench, in soil furrow, potting soil and broadcast) and seed treatments in or on all raw agricultural commodities, food and fiber crops, ornamentals, landscape plants, turf, and trees, including tree seedlings for transplanting into the forest.

**NOTE: DO NOT APPLY** to sugarcane, peachay, rice, mushrooms, kiwi, tobacco, wheat, barley, oats, lemon, apple, and chickpea. Not for use on aquatic crops.

**APPLY VIA GROUND APPLICATION ONLY.**

**CROPS ON WHICH T-22G MAY BE USED:**

CROPS	USE	RATE
<b>Agronomic Row or Other Field Crops</b> such as: Buckwheat, Corn (grain, seed, sweet corn, silage, popcorn, high oil), Cotton, Canola, Safflower, Sunflower.	In-furrow	5.0 – 12.0 lbs. / acre
<b>Berries and Small Fruits</b> such as: Strawberries, Blackberries, Raspberries, Currents, Blueberries, Gooseberries, and Grapes.	In-furrow	5.0 – 12.0 lbs. / acre
<b>Bulb Crops</b> such as: Garlic and Onions.	In-furrow	5.0 – 12.0 lbs. / acre

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<p><b>Citrus Fruits</b> such as: Oranges, Grapefruit, and Tangerine.</p>	<p>In-furrow</p>	<p>5.0 – 12.0 lbs. / acre</p>
<p><b>Cucurbit Vegetables</b> such as: Cucumbers, Melons, Gourds and Squash.</p>	<p>In-furrow</p>	<p>5.0 – 12.0 lbs. / acre</p>
<p><b>Flowers, Bedding Plants, and Ornamentals</b> such as: Anthurium, Azalea, Carnation, Chrysanthemum, Dianthus, Dieffenbachia, Dracaena, Ficus, Gardenia, Gladiolus, Impatiens, Lilies, Marigold, Pansy, Petunia, Poinsettia, Pothos, Rhododendron, Roses, Schefflera, Spathiphyllum, Tulips, Vinca.</p>	<p>In-furrow Greenhouse planting mix Nursery planting mix Nursery bed applications</p>	<p>5.0 – 12.0 lbs. / acre 1.0 – 3.0 lbs. / cubic yd. soil mix 1.0 – 3.0 lbs. / cubic yd. soil mix 0.5 – 7.5 lbs. / 1000 sq. ft. incorporated with rake or tiller</p>
<p><b>Fruiting Vegetables</b> such as: Eggplant, Sweet and Hot Peppers, and Tomatoes.</p>	<p>In-furrow Greenhouse planting mix</p>	<p>5.0 – 12.0 lbs. / acre 1.0 – 3.0 lbs. / cubic yd. soil mix</p>
<p><b>Herbs, Spices, and Mints</b> such as: Sage, Rosemary, Thyme, Peppermint, and Dill.</p>	<p>In-furrow Greenhouse planting mix</p>	<p>5.0 – 12.0 lbs. / acre 1.0 – 3.0 lbs. / cubic yd. soil mix</p>
<p><b>Hydroponic Crops</b> such as: Cucumbers, Tomatoes, Lettuce, Herbs and Spices.</p>	<p>Greenhouse planting mix</p>	<p>1.0 – 3.0 lbs. / cubic yd. soil mix</p>
<p><b>Leafy Vegetables and Cole Crops</b> such as: Broccoli, Brussels Sprouts, Cabbage, Cauliflower, Celery, Collards, Endive, Kale, Kohlrabi, Lettuce (head and leafy), Mustard Greens, Parsley, Spinach.</p>	<p>In-furrow Greenhouse planting mix Nursery bed application</p>	<p>5.0 – 12.0 lbs. / acre 1.0 – 3.0 lbs. / cubic yd. soil mix 0.5 – 7.5 lbs. / 1000 sq. ft. incorporated with rake or tiller</p>
<p><b>Legume Vegetable and Field Crops</b> such as: Snap and Dry Beans, Lentils, Succulent and Dry Peas, Peanuts, Soybeans.</p>	<p>In-furrow</p>	<p>5.0 – 12.0 lbs. / acre</p>
<p><b>Pome Fruit</b> such as: Pear.</p>	<p>In-furrow Greenhouse planting mix Nursery planting mix Trees, shrubs, and other transplants</p>	<p>5.0 – 12.0 lbs. / acre 1.0 – 3.0 lbs. / cubic yd. soil mix</p>
<p><b>Root and Tuber Crops</b> such as: Radish, Carrot, Potatoes, Sugarbeets, Red Beets, and Turnips.</p>	<p>In-furrow</p>	<p>1.0 – 3.0 lbs. / cubic yd. soil mix 0.2 – 8.0 oz. / transplant hole and incorporate</p>

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<p><b>Shadehouse and Outdoor Nursery Crops</b> such as: Deciduous trees (Maple, Oak, etc.), Grapes, Citrus, and Pine.</p>	<p>In-furrow Greenhouse planting mix Nursery planting mix Trees, shrubs, and other transplants</p>	<p>5.0 – 12.0 lbs. / acre</p>
<p><b>Stone Fruit</b> such as: Peaches, Plums, and Nectarines.</p>	<p>In-furrow Greenhouse planting mix Nursery planting mix Trees, shrubs, and other transplants</p>	<p>5.0 – 12.0 lbs. / acre 1.0 – 3.0 lbs. / cubic yd. soil mix 1.0 – 3.0 lbs. / cubic yd. soil mix 0.2 – 8.0 oz. / transplant hole and incorporate</p>
<p><b>Tree Nuts</b> such as: Pecans, Pistachios, Almonds, and Walnuts.</p>	<p>In-furrow Greenhouse planting mix Nursery planting mix Trees, shrubs, and other transplants</p>	<p>5.0 – 12.0 lbs. / acre 1.0 – 3.0 lbs. / cubic yd. soil mix 1.0 – 3.0 lbs. / cubic yd. soil mix</p>
<p><b>Turfgrass</b> such as: Turf, sports fields, parks, established and new preparation of golf course tees, greens, fairways and roughs, seed production, sod production.</p>	<p>Broadcast to established turf  New turf seedlings</p>	<p>0.2 – 8.0 oz. / transplant hole and incorporate 5.0 – 12.0 lbs. / acre 1.0 – 3.0 lbs. / cubic yd. soil mix 1.0 – 3.0 lbs. / cubic yd. soil mix 0.2 – 8.0 oz. / transplant hole and incorporate  1.0 – 3.0 lbs. / 1000 sq. ft. or 40 – 120 lbs. / acre 1.0 – 4.0 lbs. / 1000 sq. ft. and incorporate</p>

**IN-FURROW SOIL TREATMENT:** Apply T-22G from a granular applicator at the rate of 5-12 pounds per acre. For best results apply granules using a metering device, such as a Gandy applicator or equivalent, mounted to deliver granules into the furrow just behind the furrow opener. Apply in furrow at seeding or to established crops as a side dress.

**BROADCAST APPLICATION TO ESTABLISHED TURF:** Apply T-22G at 1-3 pounds per 1000 square feet of turf, or 40-120 pounds per acre, as a preventative treatment to control the below-ground phases of plant diseases, such as *Pythium*, *Rhizoctonia*, *Fusarium* and *Sclerotinia homeocarpa*. Application of T-22G should be made when turf is actively growing. The initial application should be made when soil temperatures reach 50°F to insure colonization of the turf roots by the beneficial microbe. In general, a second application four weeks after the initial treatment is necessary to establish Strain T-22 on turf roots. Additional applications of T-22G every 4-6 weeks may be needed to maintain effectiveness when conditions favor root disease development.

T-22G is used as a component of a disease management program to control the belowground phase of various turf pathogens. Other components of a disease management program should be used to control foliar phases of diseases; consult ROOTSHIELD® compatibility chart for detailed information.

**NEW TURF SEEDINGS:** Broadcast T-22G at 1-4 pounds per 1000 square feet just prior to or at the time of seeding. Incorporate into the soil surface or cover with mulch along with the grass seed. Application of irrigation water will help move T-22G into the soil.

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**GREENHOUSE PLANTING MIX AMENDMENT:** Mix T-22G with planting mixes at a rate of 1-3 pounds per cubic yd. (loose) mix. For best results, thoroughly incorporate T-22G into planting mixes during mix preparation or at pot filling. T-22G can be used in combination with or in rotation with other fungicides, insecticides, miticides, fertilizers or micronutrients; consult ROOTSHIELD® compatibility chart for detailed information.

**NURSERY PLANTING MIX AMENDMENT:** For nursery planting mixes apply T-22G at the rate of 1-3 pounds per cubic yd. (loose) mix. For nursery beds, incorporate at a rate of 0.5-7.5 pounds per 1000 square feet of bed by raking or tilling. Application of irrigation water will help move T-22G into the soil. If soil is fumigated or steam sterilized apply T-22G after treatment. T-22G can be used in combination with or in rotation with other fungicides, insecticides, miticides, fertilizers or micronutrients; consult ROOTSHIELD® compatibility chart for detailed information.

**TREES, SHRUBS, AND OTHER TRANSPLANTS:** Apply T-22G granules to the planting hole at a rate of 0.2 - 8.0 ounces and incorporate into the planting soil or soil mix.

**STORAGE AND DISPOSAL**

**STORAGE:** Store in a cool dry place. Do not contaminate food or feed during storage. Do not store at temperatures above 75°F for prolonged periods. Keep container tightly closed when not in use.

**DISPOSAL:** Do not contaminate food or feed by disposal. Wastes resulting from the use of this product may be disposed of on-site or at an approved waste disposal facility. Do not reuse container. Dispose of empty container in a sanitary landfill, or by incineration, or by open burning if allowed by state and local authorities. If burned, keep out of smoke.

**NOTICE TO BUYER AND SELLER:** Seller warrants that this product conforms to the description on the label and is reasonably fit for the purposes stated on the label when used and stored in accordance with directions under normal conditions of use. This warranty does not extend to use of this product contrary to label directions or under conditions not reasonably foreseeable by the Seller, and Buyer and User assume the risk of any such use. Seller disclaims all other warranties express or implied, including any warranty of fitness or merchantability. Seller shall not be liable for consequential, special or indirect damages resulting from use or handling of this product and Seller's sole liability and Buyer's and User's exclusive remedy shall be limited to refund of the purchase price.

This product is sold only for uses stated on its label. No express or implied license is granted to use or sell this product under any patent in any country except as specified.

Country: United States of America

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