

# T-22™ HC

## Biological Fungicide

### ACTIVE INGREDIENT

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

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

US Patent No. 5,260,213  
EPA Reg.No. 68539-4

EPA Est. No. 068539-NY-001

## KEEP OUT OF REACH OF CHILDREN CAUTION

### First Aid

If in eyes	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15 – 20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, and then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	

### PRECAUTIONARY STATEMENTS

#### HAZARDS TO HUMANS & DOMESTIC ANIMALS

**CAUTION:** Avoid contact with skin or eyes. Avoid breathing dust.

#### 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 an appropriate 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.

#### USER SAFETY REQUIREMENTS

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 cleaning equipment or disposing of equipment wash water.

### GENERAL INFORMATION

T-22 HC is a preventative biological fungicide for control of plant diseases. The active ingredient is a microbe, *Trichoderma harzianum* Strain T-22 (KRL-AG2), which when applied to seeds, transplants or other propagative material, or to soil or planting mixes, grows onto plant roots as they develop and provides protection against plant root pathogens such as *Pythium*, *Rhizoctonia*, *Fusarium*, *Cylindrocladium* and *Thielaviopsis*. T-22 HC can be used alone or in conjunction with certain chemical fungicides; consult the T-22 HC compatibility chart for more information. **This product should not be tank mixed with chemicals that contain the following active ingredients: benomyl, imazilil, propiconazole, tebuconazole, and triflumizole.** Do not apply T-22 HC immediately before these pesticides are used. Where early season seed rot and seedling diseases are expected, use chemically treated seed or other appropriate measures for stand establishment and T-22 HC for root disease control.

**NOTE:** T-22 HC contains live spores of a microbe that must be used prior to disease onset. T-22 HC becomes active in soil or on plants when temperatures are above 50°F and is not effective while temperatures remain cold. T-22 HC can be applied to sterilized or fumigated soil but **MUST BE APPLIED AFTER STERILIZATION OR FUMIGATION.**

### 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.

#### For enclosed environments:

There is a restricted entry of zero (0) hours for this product when applied as a soil application via soil drench, in-furrow spray, transplant starter solution, dip, soak, chemigation or other non-spraying or non-dusting foliar application methods when used in enclosed environments such as glasshouses and greenhouses.

#### For field applications:

Keep unprotected persons out of treated areas until sprays have dried or dusts have settled.

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

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

### APPLY VIA GROUND APPLICATION ONLY.

#### CROPS ON WHICH T-22 HC MAY BE USED

CROPS	RATE
<b>Agronomic Field and Row Crops:</b> Buckwheat, Beans (soybeans, snap, dry), Corn (grain, seed, sweet corn, silage, popcorn, high oil), Cotton, Canola, Peas (dry, succulent) Safflower, Sunflower.	1.5 – 3.0 oz / cwt seed
<b>Alfalfa Hay and Forage Crops:</b> Alfalfa, Clover, Vetch, Trefoil.	2.0 – 4.0 oz / cwt seed
<b>Bulb Crops:</b> Garlic, Leeks, Onions, Shallots.	Dust: 4.0 – 8.0 oz / cwt seed
<b>Cucurbit Vegetables:</b> Cucumbers, Melons, Gourds, Pumpkins, Squash.	2.0 – 8.0 oz / cwt seed In-furrow spray or starter solution: 1.0 – 2.0 oz / acre
<b>Fruiting Vegetables:</b> Eggplant, Sweet and Hot Peppers, Tomatillos Tomatoes.	In-furrow spray or starter solution: 3.0 – 5.0 oz / acre
<b>Herbs, Spices and Mints.</b>	In-furrow spray or starter solution: 3.0 – 5.0 oz / acre
<b>Leafy Vegetables and Cole Crops:</b> Arugula, Asparagus, Broccoli, Brussels sprouts, Cabbage, Cauliflower, Celery, Chervil, Collards, Endive, Fennel, Kale, Kohlrabi, Lettuce (head and leaf), Mustard greens, Parsley, Radicchio, Rhubarb, Spinach, Swiss chard	In-furrow spray or starter solution: 3.0 – 5.0 oz / acre

CROPS	RATE
<b>Legume Vegetable and Field Crops:</b> Snap and Dry Beans, Lentils, Succulent and Dry Peas, Peanuts, Soybeans.	1.5 – 3.0 oz / cwt seed
<b>Root Crops:</b> Beets, Sugar beets, Red Beets, Carrots, Celeriac, Chicory, Horseradish, Parsnip, Radish, Rutabaga, Salsify, Turnips.	4.0 – 8.0 oz / cwt seed
<b>Small Grains:</b> Rye, Sorghum, Wheat, Millet.	1.5 – 2.0 oz / cwt seed
<b>Tuber Crops:</b> white potatoes, sweet potatoes, yams, artichoke, cassava, ginger.	0.5 – 2.0 oz /cwt seed

**VEGETATIVELY PROPAGATED CROPS, INCLUDING POTATOES, OTHER TUBERS AND BULBS:** For planting or storage, treat at 0.5 – 2.0 oz T-22 HC to 100 pounds (1 cwt) bulbs or cut potato seed pieces. Apply to seed pieces or bulbs so surfaces are thoroughly covered with dust or aqueous suspension.

For potatoes, T-22 HC should be used with compatible chemical seed dusts. Consult the T-22 HC compatibility chart for detailed information. All surfaces, knives, and other equipment used to cut and plant potatoes should be thoroughly sterilized before cutting and planting and at regular intervals. The cut and treated seed pieces may be held for a week or more at cool temperatures, 45-50° F, and high relative humidity to promote suberization, however, they may be planted immediately.

**IN-FURROW SPRAY OR TRANSPLANT STARTER SOLUTION:** Apply as an in-furrow spray or transplant starter solution at a rate of 1-2 oz/acre in sufficient water to achieve uniform application. *Maintain constant agitation.* T-22 HC can be tank mixed with certain fertilizers and pesticides; consult the T-22 HC compatibility chart for detailed information.

**ONSITE APPLICATION TO SEED:** T-22 HC biological fungicide is applied to seeds at the rate of 1.0 – 8.0 oz per hundredweight (oz/cwt) for protection against root diseases. For example, for large, smooth seeds such as soybean or dry bean, apply 1.5 oz/cwt of seed. For smaller or rougher seed such as peas or corn, apply 1.5 – 2.0 oz/cwt. For sweet corn, apply 2.0 oz/cwt. To assure uniform application, add half the required amount of T-22 HC to half the seed in the hopper, mix with a wooden paddle, and then add the remaining seed and T-22 HC. T-22 HC can be applied in sufficient water to coat seeds. For maximum seed protection, especially in cold soils, apply T-22 HC to commercially treated seed such as seed treated with Captan, Apron and or Demosan for stand establishment. Consult the T-22 HC compatibility chart for detailed information.

T-22 HC Compatibility Chart for in-furrow spray or transplant starter solution tank mix:

Chemical Name	% A.I. Formulation	Product Name	Product Rate	Dilution
Captan	85% WP	Captan 85 WP	1.88 lb/acre	0.1 oz/gal
Chlorothalonil	82.5% WDG	Daconil Ultrex	3.7 oz/1000 sq. ft.	0.56 oz/gal
Iprodione	23.3% FL	Chipco 26019 Flo	4.0 oz/1000 sq. ft.	0.6 oz/gal
Iprodione	50% SG	Rovral	0.75 lb/acre	0.04 oz/gal
Thiophanate methyl	50% WP	Cleary's 3336 in water soluble bags	8.0 oz/1000 sq. ft.	1.2 oz/gal
Metalaxyl	21.3% L	Subdue Maxx	0.25 oz/800 sq. ft.	0.05 oz/gal
Chlorpyrifos	50% EL	Lorsban 4E	3.2 oz/gal	3.2 oz/gal

#### STORAGE AND DISPOSAL

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

**STORAGE:** Store in a cool, dry place. Do not store near food or feed commodities. 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.

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