#### AUG 0 7 2012

Ms Jamie Aggas Regulatory Coordinator for BioWorks Inc 100 Rawson Road Suite 205 Victor NY 14564

Re BioWorks Inc T 22 WP Biological Fungicide EPA Registration No 68539 4 Minor Label (Fast Track) Amendment Submissions dated 06/22/2012 and 08/06/2012 Decision No 467061

Dear Ms Aggas

The U S Environmental Protection Agency (EPA) reviewed your request to amend the subject product registration which included the following changes to the product label

- 1) Correction of minor formatting inconsistencies and typographical errors
- 2) Addition of the following labeling text to account for small containers
  - a) See attached label booklet for First Aid Precautionary Statements Storage and Disposal Instructions and Directions for Use
  - b) See foldout panel for First Aid
  - c) See foldout panel for Directions for Use
- 3) Addition of BioWorks phone number to the contact information
- 4) Addition of another container size (i e 2 63 oz) to the options already provided in the Net Weight statement
- 5) Replacement of Use Before with Expiration Date (re product stability)
- 6) Modification of one statement in the Warranty and Disclaimer section to comport with information presented in Chapter 12 Section IX of the Label Review Manual
- 7) Addition of a consumer access number for CHEMTREC
- Addition of information presenting where the product is made and BioWorks company logo

Some of these changes were proposed with a notification request (Decision No 468010) that was submitted to EPA on June 18 2012 Such changes are now considered to be part of this label amendment

CONCURRENCES								
SYMBOL	7511P	7511P	7511P					
SURNAME >	KAUSCH 1	Doron	Messo					
DATE	08/07/2012 8	3/7/12	817112					
EPA Form 1	320-1A (1/90)	1 1	P	rınted on Recycl	ed Paper	-	OFFICIAL	FILE COPY

Jamie Aggas EPA Registration No 68539 4

All the changes referred to above submitted in connection with registration under section 3(c)(5) of the Federal Insecticide Fungicide and Rodenticide Act are acceptable provided that you submit two (2) copies of your final printed labeling before you release the product for shipment Refer to the A 79 enclosure for further description of final printed labeling

Your release for shipment of the product bearing the amended labeling constitutes acceptance of these conditions. If you have any questions regarding this letter please contact Ms. Jeannine Kausch by telephone (703–347–8920) or email (kausch jeannine@epa gov)

A stamped copy of the label 1s enclosed for your records

Sincerely

Kimberly Nesci Acting Chief Microbial Pesticides Branch Biopesticides and Pollution Prevention Division (7511P)

# T-22 WP Biological Fungicide

(Alternate Brand Names PlantShield® HC Biological Foliar and Root Fungicide PlantShield® HC Biological Fungicide T  $22^{TM}$  Planter Box Biological Fungicide T  $22^{TM}$  HC Biological Fungicide RootShield® Home and Garden Biological Fungicide Invigorate T)

#### **ACTIVE INGREDIENT**

Trichoderma harzianum Rifai strain T 22\*
OTHER INGREDIENTS

1 15% 98 85%

TOTAL

100 00%

\*Contains at least 1 0 x 10<sup>7</sup> colony forming units per gram dry weight

### **ACCEPTED**

AUG 0 7 2012

Under the Federal Insecticide Fungiciand Rodenticide Act as amended for the pesticide registered under EPA Reg No 68539 - 4

### KEEP OUT OF REACH OF CHILDREN CAUTION

[See attached label booklet for First Aid Precautionary Statements Storage and Disposal Instructions and Directions for Use]

[See foldout panel for First Aid]

[See foldout panel for Directions for Use]

	FIRST AID					
If on skin or clothing	<ul> <li>Take off contaminated clothing</li> <li>Rinse skin immediately with plenty of water for 15 20 minutes</li> <li>Call a poison control center or doctor for treatment advice</li> </ul>					
If in eyes	<ul> <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 then continue rinsing eye</li> <li>Call a poison control center or doctor for treatment advice</li> </ul>					
If inhaled	Move person to fresh air  If person is not breathing call 911 or an ambulance then give artificial respiration preferably mouth to mouth if possible  Call a poison control center or doctor for further treatment advice					
If swallowed	Call a poison control center or doctor immediately for treatment advice  Have person sip a glass of water if able to swallow  • Do not induce vomiting unless told to by a poison control center or doctor  Do not give anything by mouth to an unconscious person					
	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.					

## 4/17

#### PRECAUTIONARY STATEMEN

#### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**CAUTION** Harmful if absorbed through skin inhaled or swallowed Causes moderate eye irritation. Avoid contact with skin eyes or clothing. Avoid breathing dust. 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.

#### PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear protective eyewear long sleeved shirt long pants waterproof gloves shoes and 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. Wash the outside of gloves before removing. 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**

(Agricultural Use) For terrestrial uses 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.

(Residential Home and Garden Use) To protect the environment do not allow pesticide to enter or run off into storm drains drainage ditches gutters or surface waters. Applying this product in calm weather when rain is not predicted for the next 24 hours will help to ensure that wind or rain does not blow or wash pesticide off the treatment area.

EPA Reg No EPA Est No	68539 4 068539 NY 001
Manufactured by	<b>BioWorks Inc</b> 100 Rawson Road Ste 205 Victor NY 14564 (800) 877 9443
Net Weight Lot No Expiration Date	(2 63 oz 4 oz (Residential Use)) (1 lb 3 lb 30 lb (Agricultural))

#### **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 State or Tribal 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.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 4 hours

Exception If the product is soil injected or soil incorporated the Worker Protection Standard under certain circumstances allows workers to enter the treated area if there will be no contact with anything that has been treated

PPE required for early entry to treated areas (that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated such as plants soil or water) is protective eyewear coveralls waterproof gloves shoes and socks

#### NON AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are **not** within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms forests nurseries or greenhouses.

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

#### PRODUCT INFORMATION

T 22 WP Biological Fungicide (T 22 WP) is a preventative biological fungicide for control of plant diseases. The active ingredient is a microbe *Trichoderma harzianum* Rifai strain T 22 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*. In the greenhouse T 22 WP is a preventative that suppresses foliai\*\* pathogens such as *Botrytis* and mildews on flowers bedding plants and ornamentals T 22 WP can be used alone or in conjunction with certain chemical fungicides consult the appropriate tank mix compatibility charts below or your BioWorks Representative for more information

This product must not be tank mixed with chemicals that contain the following active ingredients imazilil propicanazole tebuconazole and triflumizole. Do not apply T 22 WP immediately before these pesticides are used. See specific instructions for tank mixing. Where early season seed rot and seedling diseases are expected use chemically treated seed or other appropriate measures for stand establishment and T 22 WP for root disease control.

Note T 22 WP contains live spores of a microbe that must be used prior to disease onset T 22 WP becomes active in soil or on plants when temperatures are above 50 F and is not effective while temperatures remain cold T 22 WP can be applied to sterilized or fumigated soil but must be applied after sterilization or fumigation

\*\*This product is not intellal for foliar application in California

T 22 WP is for use in soil applications (drench in soil furrow and potting soil) seed treatments and greenhouse foliar applications on ornamentals landscape plants turf and ornamental trees including tree seedlings for transplanting into the forest

ATTENTION DO NOT APPLY to sugarcane, pechay, rice, mushrooms, kiwi, tobacco, barley oats, lemon, apple, and chickpea Not for use on aquatic crops Greenhouse foliar applications are for non food crops only This product is not intended for foliar application in California

For food commodities In the table immediately following this paragraph, greenhouse chemigation and field chemigation of food commodities are annotated with an asterisk (\*) to indicate that these methods are limited to flood, drip, furrow micro irrigation, and ebb and flow systems with NO OVERHEAD SPRAY Do not apply product when above ground harvestable food commodities are present Refer to Chemigation section for additional specific directions

#### APPLY VIA GROUND APPLICATION ONLY

#### **CROPS ON WHICH T 22 WP MAY BE USED**

CROPS USE APPLICATION RATE				
CROFS	USE			
70 117		22 WP		
Berries and Small Fruits	Cutting or bare rooted transplant	0.25 - 5.0  lb / 5  gal water or dip		
Blackberries Blueberries	dıp	directly into dry powder		
Currants Elderberries	Greenhouse soil drench	1 0 - 32 0 oz / 100 gal water		
Gooseberries Huckleberries	Nursery soil drench	1 0 - 32 0 oz / 100 gal water		
Loganberries Raspberries	In furrow spray or transplant	10 - 320  oz / acre		
Strawberries Grapes	starter solution			
	Home & garden soil drench	10-30 tbsp / gal water		
	*Greenhouse chemigation	1 0 - 32 0 oz / 100 gal water		
	*Field chemigation	10 - 32 0 oz / 100 gal water		
Bulb Vegetables Garlic Leeks	Dust (pre plant)	0 03 – 3 0 lb / cwt seed		
Onions Shallots Ornamental	Home & garden soil drench	10-30 tbsp / gal water		
Bulbs				
Cereal Grains Buckwheat	Planter box (onsite)	1 0 10 0 oz / cwt seed		
Corn (grain seed sweet corn	Commercial seed treatment	0 0176 – 0 529 lb / cwt seed		
silage popcorn high oil) Rye	*Field chemigation	10 - 320 oz / $100$ gal water		
Wheat Sorghum Millet		Ū		
Citrus Fruits	Cutting or bare rooted transplant	0.25 - 5.0 lb / 5 gal water or dip		
Citrus Hybrids Grapefruit	dip	directly into dry powder		
Kumquat Limes Oranges	Greenhouse soil drench	10 - 320  oz / 100  gal water		
Pummelos	Nursery soil drench	10 - 320  oz / 100  gal water		
	In furrow spray or transplant	10 - 32 0 oz / acre		
	starter solution			
	*Greenhouse chemigation	10 - 320  oz / 100  gal water		
	*Field chemigation	1 0 - 32 0 oz / 100 gal water		
		1 0 02 002 7 100 gas		

CROPS	USE	PLICATION RATE OF T
		22 WP
Cucurbit Vegetables	Planter box (onsite)	10 - 100 oz / cwt seed
Cucumbers Melons (1 e Chinese	Commercial seed treatment	0.088 - 3.5  lb / cwt seed
waxgourd Citron melon	Greenhouse soil drench	10 - 320  oz / 100  gal water
Muskmelons of Watermelon)	In furrow spray or transplant	10 - 320  oz/acre
Gourds Pumpkins Squash	starter solution	
<u>-</u>	Home & garden soil drench	10-30 tbsp / gal water
	*Greenhouse chemigation	10 - 320  oz / 100  gal water
	*Field chemigation	10 - 320  oz / 100  gal water
Flowers, Bedding Plants and	Cutting or bare rooted transplant	0 25 - 5 0 lb / 5 gal water or dip
Ornamentals	dıp	directly into dry powder
	Commercial seed treatment	0 088 – 26 4 lb / cwt seed
	Greenhouse soil drench	10 - 320  oz / 100  gal water
	Nursery soil drench	10-320  oz / 100  gal water
	Home & garden soil drench	10-30 tbsp / gal water
	Greenhouse foliar spray**	0 1 - 1 0 oz / gal water
	Greenhouse chemigation	10 - 320  oz / 100  gal water
	Field chemigation	10 - 320  oz / 100  gal water
Fruiting Vegetables Eggplant	Commercial seed treatment	0 35 – 26 4 lb / cwt seed
Sweet and Hot Peppers	Greenhouse soil drench	10 - 320  oz / 100  gal water
Tomatillos Tomatoes	In furrow spray or transplant	10 - 320  oz/acre
	starter solution	
	Home & garden soil drench	10-30 tbsp / gal water
	*Greenhouse chemigation	10 - 320  oz / 100  gal water
	*Field chemigation	10 - 32 0 oz / 100 gal water
Herbs Spices and Mints	Commercial seed treatment	0 35 – 26 4 lb / cwt seed
•	Greenhouse soil drench	10 - 320  oz / 100  gal water
	In furrow spray or transplant	10 - 320  oz / acre
	starter solution	
	Home & garden soil drench	1 0 – 3 0 tbsp / gal water
	*Greenhouse chemigation	10 - 320  oz / 100  gal water
	*Field chemigation	10 - 320  oz / 100  gal water
Hydroponic Crops Cucumbers	Greenhouse soil drench	10-320  oz / 100  gal water
Tomatoes Lettuce Herbs and	Home & garden soil drench	10-30 tbsp / gal water
Spices	*Greenhouse chemigation	10 - 320  oz / 100  gal water
Leafy and Brassica (Cole)	Cutting or bare rooted transplant	0.25 - 5.0 lb / 5 gal water or dip
Leafy Vegetables Arugula	dip	directly into dry powder
Celery Chervil Endive Fennel	Commercial seed treatment	0 35 – 26 4 lb / cwt seed
Lettuce (head and leaf) Parsley	Greenhouse soil drench	10 - 32 0 oz / 100 gal water
Radicchio Rhubarb Spinach	In furrow spray or transplant	10 - 320  oz / acre
Swiss Chard Broccoli Brussels	starter solution	
Sprouts Cabbage Cauliflower	Home & garden soil drench	10-30 tbsp / gal water
Collards Kale Kohlıabı	*Greenhouse chemigation	10 - 320  oz / 100  gal water
Mustard Greens	*Field chemigation	1 0 - 32 0 oz / 100 gal water
Asparagus		
Legume Vegetables (Succulent	Planter box (onsite)	10 - 100 oz / cwt seed
or Dried) Beans (soybean snap	Commercial seed treatment	0 0004 – 0 529 lb / cwt seed
dry) Lentils Peas	Home & garden soil drench	10-30 tbsp / gal water
	*Field chemigation	10 - 320  oz / 100  gal water

CROPS	USE	PLICATION RATE OF T 22 WP
Nongrass Animal Feeds	Planter box (onsite)	10 - 100 oz / cwt seed
(Forage Fodder, Straw, and Hay) Alfalfa Clover Vetch Trefoil	Commercial seed treatment	0 35 – 26 4 lb / cwt seed
Oilseed Crops Cotton Canola	Planter box (onsite)	10 - 100 oz / cwt seed
Safflower Sunflower	Commercial seed treatment	0 0176 – 0 529 lb / cwt seed
	*Field chemigation	10 - 320  oz / 100  gal water
Peanuts	Planter Box (onsite)	10 - 100  oz/cwt seed
	Commercial seed treatment	0 0004 – 0 529 lb / cwt seed
	Home & garden soil drench	10-30 tbsp / gal water
Pome Fruits Pears Quince	Greenhouse soil drench	10 - 320  oz / 100  gal water
	Nursery soil drench	10 - 320  oz / 100  gal water
	In furrow spray or transplant starter solution	1 0 - 32 0 oz / acre
	Home & garden soil drench	1.0. 2.0 then / gol water
	*Greenhouse chemigation	1 0 - 3 0 tbsp / gal water 1 0 - 32 0 oz / 100 gal water
	*Field chemigation	10 - 320  Gz / 100  gal water 10 - 320  oz / 100  gal water
Root and Tuber Vegetables	Planter box (onsite)	10 - 100  oz/cwt seed
Beets Sugar Beets Carrots	Commercial seed treatment	0 088 – 3 52 lb / cwt seed
Celeriac Chicory Horseradish Parsnip Radish Rutabaga Salsify Turnips		
Potatoes Sweet Potatoes Yams	Planter box (onsite)	0.03 - 3.0 lb / cwt seed tubers or
Jerusalem Artichoke Cassava	In furrow spray or transplant	cut potato seed pieces
Ginger Cassava	starter solution	10 - 320  oz / 100  gal water
Jinger	*Field chemigation	10 - 320  oz / 100  gal water
Shadehouse and Outdoor	Cutting or bare rooted transplant	0 25 - 5 0 lb / 5 gal water or dip
Nursery Crops Deciduous	dıp	directly into dry powder
Trees (1 e Maple Oak)	Greenhouse soil drench	1 0 - 32 0 oz / 100 gal water
Ornamentals Grapes Citrus	Nursery soil drench	10 - 320  oz / 100  gal water
Pine	In furrow spray or transplant	1 0 - 32 0 oz / acre
	starter solution	10 30 then / gal water
	Home & garden soil drench *Greenhouse chemigation	10-30 tbsp / gal water 10-320 oz / 100 gal water
	*Field chemigation	10 - 320  oz / 100  gal water
Stone Fruits Apricots Cherries	Cutting or bare rooted transplant	0.25 - 5.0  lb / 5  gal water
Nectarines Peaches Plums	dip	directly into dry powder
Prunes	Greenhouse soil drench	10-320 oz $/100$ gal water
	Nursery soil drench	10 - 320  oz / 100  gal water
	In furrow spray or transplant	10-320 oz/acre
	starter solution	
	Home & garden soil drench	10-30 tbsp / gal water
	*Greenhouse chemigation	10 - 320  oz / 100  gal water
	*Field chemigation	10-320  oz / 100  gal water
	<u> </u>	

CROPS	USE	PLICATION RATE OF T
		22 WP
Tree Nuts Almonds Beech	Cutting or bare rooted transplant	0 25 5 0 lb / 5 gal water or dip
Nuts Brazil Nuts Butternuts	dıp	directly into dry powder
Cashews Chestnuts Filberts	Greenhouse soil drench	10 320 oz / 100 gal water
Hickory Nuts Macadamia Nuts	Nursery soil drench	10 - 320  oz / 100  gal water
Pecans Pistachios Walnuts	In furrow spray or transplant	10 - 320  oz / acre
	starter solution	
	Home & garden soil drench	10-30 tbsp / gal water
	*Greenhouse chemigation	10 - 320  oz / 100  gal water
	*Field chemigation	10 - 320  oz / 100  gal water
Turfgrass Turf Sports Fields	Planter box (onsite)	10 - 100 oz / cwt seed
Parks Established and New	Commercial seed treatment	0 35 – 26 43 lb / cwt seed
Preparation of Golf Course Tees		
Greens Fairways and Roughs		
Seed Production Sod Production		

<sup>\*\*</sup> This product is not intended for foliar application in California

#### SEED TREATMENT FOR TRUE SEED CROPS

ONSITE APPLICATION TO SEED For protection against root diseases apply 1 0 10 0 ounces of T 22 WP/hundredweight of seed For example for large smooth seeds such as soybean and dry bean and smaller or rougher seeds such as peas and field corn apply 10-80 ounces of T 22 WP /hundredweight For sweet corn apply 10-100 ounces T 22 WP/hundredweight of seed. To assure uniform application add half the required amount of T 22 WP to half the seed in the hopper mix with a wooden paddle and then add the remaining seed and T 22 WP T 22 WP can also be applied in sufficient water to coat seeds For maximum seed protection especially in cold soils apply T 22 WP to commercially treated seed such as seed treated with Captan Apron and or Demosan for stand establishment

Do not use treated seed for food or feed purposes or process for oil Treat only those seeds needed for immediate use minimizing the interval between treatment and planting. Do not store excess treated seeds beyond planting time

COMMERCIAL SEED TREATMENT Apply T 22 WP as a slurry a coating in a pellet or during seed priming See table below

Note This product does not contain dye and is not covered by an appropriate tolerance exemption or other clearance under the Federal Food Drug and Cosmetic Act To comply with 40 CFR 153 155 there fore all seeds treated commercially with this product must be colored with an EPA approved dye or colorant of suitable color to prevent accidental use as food for man or feed for animals

The Federal Seed Act requires that bags containing seed treated with this product shall be labeled with the following information This seed has been treated with Trichoderma harzianum Rifai strain T 22 Do not use for food feed or oil purposes

Seed Size (#seeds/oz)	Grams of T 22 WP per lb of seed	Ounces of T 22 WP per lb of seed
Large (1 100)	0 0016 0 32 g	0 00006 - 0 0113
such as peanuts green		oz
& dry beans field		
corn		
Medium (100 1 000)	0 08 2 4 g	0 0028 0 0847 oz
such as sweet corn		
soybeans sorghum		
Small (1 000 10 000)	0.4 - 16 g	0 0141 – 0 564 oz
such as cabbage		
cucumbers sugar		
beets		
Fine (10 000 100 000)	16-120 g	0 0564 – 4 23 oz
such as tomatoes		

#### **ORNAMENTAL CROPS**

Seed Size (#seeds/oz)	Grams of T 22 WP per lb of seed	Ounces of T 22 WP per lb of seed	
Small (1 000 -	04-16 g	0 0141 – 0 564 oz	
10 000)	-		
such as Echinacea			
Cosmos			
Fine (10 000 –	16-120 g	0 0564 – 4 23 oz	
100 000)			
such as Texas			
bluegrass ryegrass			
Very Fine (100 000 -	80-80 g	0 282 – 2 82 oz	
500 000)			
such as bentgrass			

### SEED TREATMENT FOR VEGETATIVELY PROPAGATED CROPS (INCLUDING POTATOES, OTHER ROOT AND TUBER VEGETABLES, AND BULB VEGETABLES)

For planting or storage treat at 0.03 - 3.0 pounds T 22 WP to 100 lbs (1 cwt) of bulbs or cut potato seed pieces. Alternatively dip bulbs tubers or cut potato seed pieces in a suspension consisting of 0.25 - 5.0 pounds of T 22 WP in 5 gallons of water.

For potatoes apply T 22 WP with compatible chemical seed dusts. Consult your BioWorks Representative for more 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 or they may be planted immediately.

#### DIP FOR CUTTINGS AND BARE ROOTED TRANSPLANTS

Dip cuttings and bare rooted transplants in T 22 WP dry powder or in a suspension of 0 25 5 0 pounds of T 22 WP in 5 gallons of water Plant treated cuttings and bare rooted transplants in potting mix or soil in the usual manner

#### SOIL DRENCH

**GREENHOUSE SOIL DRENCH** Suspend 10-320 ounces of T 22 WP in 100 gallons of water with agitation and apply prepared suspension as a soil drench to greenhouse planting mixes. For seeding flats or shallow (up to 4 inch depth) beds or pots apply prepared suspension at a rate of 50 100 gallons per 800 square feet. For deeper beds or pots apply prepared suspension at a rate of 100 gallons per 400 square feet. 1/2 cup (4 fluid ounces) for pots with a 3 inch diameter or 1 cup (8 fluid ounces) for pots with a 6 inch diameter.

Apply T 22 WP directly to the soil through low pressure watering nozzles such as fan nozzles or other drench watering systems. Constant agitation is required to maintain T 22 WP in suspension. T 22 WP can be tank mixed and is compatible with many commonly used fungicides liquid fertilizers herbicides insecticides and biological control products registered for use on greenhouse/ornamental plants. If tank mixes are desired observe the most restrictive of labeling limitations and precautions of all products used in mixtures. Consult the tank mix compatibility chart below or your BioWorks representative for more information.

NURSERY SOIL DRENCH Suspend 10-320 ounces of T 22 WP in 100 gallons of water with agitation and apply prepared suspension as a soil drench to container nursery crops. For shallow (up to 4 inch depth) beds or pots apply prepared suspension at a rate of 50 100 gallons per 800 square feet. For deeper beds or pots apply prepared suspension at a rate of 100 gallons per 400 square feet. 1/2 cup (4 fluid ounces) for pots with a 3 inch diameter or 1 cup (8 fluid ounces) for pots with a 6 inch diameter. Apply T 22 WP directly to the soil through low pressure watering nozzles such as fan nozzles other drench watering systems, handheld sprayers or backpack sprayers.

Constant agitation is required to maintain T 22 WP in suspension T 22 WP can be tank mixed and is compatible with many commonly used fungicides liquid fertilizers herbicides insecticides and biological control products registered for use on nursery plants. If tank mixes are desired observe the most restrictive of labeling limitations and precautions of all products used in mixtures. Consult the tank mix compatibility chart below or your BioWorks representative for more information.

IN FURROW SPRAY OR TRANSPLANT STARTER SOLUTION Apply T 22 WP as an in furrow spray or transplant starter solution at a rate of 10-320 ounces/acre in sufficient water to achieve uniform application. Maintain constant agitation. T 22 WP can be tank mixed and is compatible with many commonly used fungicides liquid fertilizers herbicides insecticides and biological control products registered for use on nursery plants. If tank mixes are desired observe the most restrictive of labeling limitations and precautions of all products used in mixtures. Consult the tank mix compatibility chart below or your BioWorks representative for more information.

TANK MIXING T 22 WP 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 the tank mix compatibility chart below or your BioWorks representative for more information. This product must not be tank mixed with chemicals that contain the following active ingredients imazilil, propicanazole, tebuconazole, and triflumizole. Do not apply T 22 WP immediately before these pesticides are used

In accordance with the most restrictive of label limitations and precautions (for all products used in a tank mixture) this product can be mixed with specific products (see table immediately below) their active ingredient percentages and their application rates for use in greenhouse soil drench nursery drench in furrow spray and transplant starter solution. Do not exceed label dosage rates. This product cannot be mixed with any product containing a label prohibition against such mixing.

I DRENCH, IN FURROW

# COMPATIBILITY FOR REENHOUSE SOIL DRENCH, NURSESPRAY OR TRANSPLANT STARTER SOLUTION TANK MIXES

Note While the information presented in this table is believed to be up to date the user must always read the label of the other products used in a tank mix to confirm application rates and dilutions

Chemical Name	% A I Formulation Type	Product Name	Application Rate (Amount of Product / Unit Area)	Dilution (Amount of Product / Amount of Water
Captan	85% Wettable Powder	Captan 85WP	1 88 lb/Acre	0 1 oz/gal
Chlorothalonil	82 5% Water Dispersible Granules	Daconıl Ultrex	3 7 ounces per 1000 ft <sup>2</sup>	0 56 oz/gal
Iprodione	23 3% Flowable	Chipco 26019 Flo	4 ounces per 1000 ft <sup>2</sup>	0 6 oz/gal
Thiophanate methyl	50% Wettable Powder	Cleary s 3336 in water soluble bags	8 ounces per 1000 ft <sup>2</sup>	1 2 oz/gal
Iprodione	50% Soluble Granules	Rovral	0 75 lb/Acre	0 04 oz/gal
Metalaxyl	21 3% Liquid	Subdue Maxx	0 25 ounces per 800 ft <sup>2</sup>	0 05 oz/gal
Chlorpyrıfos	50% Emulsıfiable Lıquıd	Lorsban 4E	3 2 ounces per gallon	3 2 oz/gal

HOME & GARDEN SOIL DRENCH For preventative control of root diseases of vegetable flower and ornamental plants For drench application to seeds mix 1 0 to 3 0 tablespoons of T 22 WP per gallon of water and apply mixture with a watering can or other device to 25 feet of planting furrow before covering the seeds with soil

For transplants mix 1 0 to 3 0 tablespoons of T 22 WP per gallon of water and apply 1/2 1 cup (4-8) fluid ounces) of mixture per plant at transplanting. For new plant beds mix 1 0 - 3 0 tablespoons of T 22 WP per gallon of water and apply mixture at a rate of one gallon per 25 square feet of plant bed. For established beds or potted plants mix 1 0 3 0 tablespoons of T 22 WP per gallon of water and apply mixture at a rate of 1 gallon per 25 square feet of plant bed or 1/2 1 cup (4-8) fluid ounces) per 4 8 inch diameter pot

T 22 WP is designed for application to seeds plant roots and soil for control of plant root diseases and is not to be used for spray application to foliage or fruit

#### **FOLIAR SPRAY**

GREENHOUSE FOLIAR SPRAY\*\* Greenhouse foliar applications are for non food crops only For preventative control of *Botrytis* powdery mildew and other fungal pathogens on greenhouse grown flowers bedding plants and ornamentals apply T 22 WP to foliage and blossoms every 7 – 14 days depending on disease pressure T 22 WP can be applied 7 – 10 days after application of a chemical/biorational fungicide Consult manufacturer or sales representative for specific product recommendations

NOTE \*\*This product is not intended for foliar application in California

Apply T 22 WP at a rate (10-1.0) ounce per gallon of water Use (10-1.0) ounce per gallon of water Use (10-1.0) ounce per gallon of water Use (10-1.0) on the spray to wet but avoid runoff T 22 WP can be applied using hand held backpack or ground spray equipment. Do not use in low volume sprayers

To improve plant surface coverage consider tank mixing T 22 WP with a nonionic spreader sticker Agitation is required to maintain suspension. Clean application equipment before use of this product and use sprays within 4 hours of preparation.

To prevent nozzle tip clogging the manufacturer recommends using 50 100 mesh inlet screens in all spray equipment

TANK MIXING T 22 WP can be tank mixed and is compatible with many commonly used fungicides liquid fertilizers herbicides insecticides and biological control products registered for use on greenhouse plants. If tank mixes are desired observe the most restrictive of labeling limitations and precautions of all products used in mixtures. Consult the tank mix compatibility chart below or your BioWorks representative for more information. This product must not be tank mixed with chemicals that contain the following active ingredients: imazilil, propicanazole, tebuconazole, and triflumizole. Do not apply T 22 WP immediately before these pesticides are used

In accordance with the most restrictive of label limitations and precautions (for all products used in a tank mixture) this product can be mixed with specific products (see table immediately below) their active ingredient percentages and their application rates for use in greenhouse foliar spray. Do not exceed label dosage rates

This product cannot be mixed with any product containing a label prohibition against such mixing

#### COMPATIBILITY FOR GREENHOUSE FOLIAR SPRAY TANK MIXES\*\*

Note While the information presented in this table is believed to be up to date the user must always read the label of the other products used in a tank mix to confirm application rates and dilutions

Chemical Name	% A I Formulation Type	Product Name	Application Rate (Amount of Product / Unit Area)	Dilution (Amount of Product / Amount of Water
Captan	85% Wettable Powder	Captan 85WP	1 88 lb/Acre	0 1 oz/gal
Chlorothalonil	82 5% Water Dispersible Granules	Daconıl Ultrex	3 7 ounces per 1000 ft <sup>2</sup>	0 56 oz/gal
Iprodione	23 3% Flowable	Chipco 26019 Flo	2 ounces per 1000 ft <sup>2</sup>	0 3 oz/gal
Triadimefon	25% Soluble Granules	Bayleton 25 Turf & Ornamental Fungicide	0 75 ounces per 1000 ft <sup>2</sup>	0 11 oz/gal
Azoxystrobin	50% Soluble Granules	Heritage	0 4 ounces per 1000 ft <sup>2</sup>	0 06 oz/gal
Vinclozolin	50% Wettable Powder	Ronilin DF	0 75 lb/Acre	0 04 oz/gal
Iprodione	50% Soluble Granules	Rovral	0 75 lb/Acre	0 04 oz/gal

<sup>\*\*</sup>This product is not intended for foliar application in California

To reduce potential residue and minimize clogging of spray equipment the manufacturer recommends the following decanting procedure Place one gallon of water in a container Add the desired nonionic

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spreader sticker Mix Ba on the final spray volume add approprometer amount of T 22 WP Let the solution sit for 10 minutes. Agitate for 10 minutes. Let the solution sit for less than one minute. Pour off the liquid that now contains T 22 WP into the spray tank. Add a small amount of water to the settled material in the container to remove any remaining T 22 WP. Briefly mix and let solution sit for less than one minute. Pour off liquid into the spray tank. Bring spray volume to the desired level.

#### GREENHOUSE AND FIELD CHEMIGATION

Suspend 10-320 ounces T 22 WP in 100 gallons of water with agitation and apply only through the following systems 1) pressurized drench (flood) or drip (trickle) 2) furrow 3) micro irrigation such as spaghetti tube or individual tube irrigation 4) hand held calibrated irrigation equipment such as the hand held wand with injector and 5) ebb and flow. Do not apply this product through any other type of irrigation system

Crop injury or lack of effectiveness can result from non uniform distribution of treated water

If you have questions about calibration you should contact State Extension Service specialists equipment manufacturers or other experts

Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label prescribed safety devices for public water systems are in place

A person knowledgeable of the chemigation system and responsible for its operation or under supervision of the responsible person shall shut the system down and make necessary adjustments should the need arise

#### Requirements for Chemigation Systems Connected to Public Water Systems

- 1) Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year
- 2) Chemigation systems connected to public water systems must contain a functional reduced pressure zone back flow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the flow outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.
- 3) The pesticide injection pipeline must contain a functional automatic quick closing check valve to prevent the flow of fluid back toward the injection pump
- 4) The pesticide injection pipeline must also contain a functional normally closed solenoid operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down
- 5) The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops or in cases where there is no water pump when the water pressure decreases to the point where pesticide distribution is adversely affected
- 6) Systems must use a metering pump such as a positive displacement injection pump (e.g. diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock
- 7) Do not apply when wind speed favors drift beyond the area intended for treatment

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- 8) Apply T 22 WP ( ng the last half of the water application of Mix T 22 WP in enough water to be able to draw through the system for the last half of the water application Maintain constant agitation
- 9) Apply enough water to move T 22 WP into the root zone Amounts will vary depending on soil type and existing moisture level Do not apply water volumes that would cause runoff or excessive leaching

#### Drip (Trickle) Chemigation and Micro irrigation Requirements

- 1) The system must contain a functional check valve vacuum relief valve and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from back flow
- 2) The pesticide injection pipeline must contain a functional automatic quick closing check valve to prevent the flow of fluid back toward the injection pump
- 3) The pesticide injection pipeline must also contain a functional normally closed solenoid operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down
- 4) The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops
- 5) The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected
- 6) Systems must use a metering pump such as a positive displacement injection pump (e g diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock
- 7) Apply T 22 WP during the last half of the water application period Mix T 22 WP in enough water to be able to draw through the system for the last half of the water application Maintain constant agitation
- 8) Apply enough water to move T 22 WP into the root zone. Amounts will vary depending on soil type and existing moisture level. Do not apply water volumes that would cause runoff or excessive leaching.

#### Flood and Furrow Chemigation Requirements

- Systems using a gravity flow pesticide dispensing system must meter the pesticide into the water
  at the head of the field and downstream of a hydraulic discontinuity such as a drop structure or
  weir box to decrease potential for water source contamination from back flow if water flow
  stops
- 2) Systems utilizing a pressurized water and pesticide injection system must meet the following requirements
  - a The system must contain a functional check valve vacuum relief valve and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from back flow
  - b The pesticide injection pipeline must contain a functional automatic quick closing check valve to prevent the flow of fluid back toward the injection pump
  - c The pesticide injection pipeline must also contain a functional normally closed solenoid operated valve located on the intake side of the injection pump and connected to the system

interlock to prev fluid from being withdrawn from the sup, ank when the irrigation system is either automatically or manually shut down

- d The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops
- e The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected
- f Systems must use a metering pump such as a positive displacement injection pump (e g diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock
- 3) Apply T 22 WP during the last half of the water application period Mix T 22 WP in enough water to be able to draw through the system for the last half of the water application. Maintain constant agitation
- 4) Apply enough water to move T 22 WP into the root zone Amounts will vary depending on soil type and existing moisture level. Do not apply water volumes that would cause runoff or excessive leaching

**PLANT SAFETY** T 22 WP has been tested on numerous plant varieties with no phytotoxic effects However since T 22 WP has not been tested on all plant varieties or in combination with all available tank mixes the manufacturer recommends testing T 22 WP on a small number of plants to check for adverse plant effects before applying to a larger number of plants

#### STORAGE AND DISPOSAL (Agricultural Use)

Do not contaminate water food or feed by storage and disposal

**PESTICIDE STORAGE** Store in a cool dry place Do not store at temperatures above 75°F for prolonged periods. Keep container tightly closed when not in use

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

CONTAINER HANDLING Nonrefillable container Do not reuse or refill this container Completely empty bag by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application equipment. 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 burned stay out of smoke If outer box is contaminated dispose of in same manner as required for the bag.

#### STORAGE AND DISPOSAL (Residential, Home and Garden Use)

Do not contaminate water food or feed by storage and disposal

**PESTICIDE STORAGE** Store original container in a cool dry and locked place inaccessible to children and pets. Do not store at temperatures above 75 F for prolonged periods. Keep container tightly closed when not in use

**PESTICIDE DISPOSAL AND CONTAINER HANDLING** Nonrefillable container Do not reuse or refill this container **If empty**—Place in trash or offer for recycling if available **If partly filled**—Call your local solid waste agency or 1 800 CLEANUP for disposal instructions Never place unused product down indoor or outdoor drain

NOTICE TO BUYER AND SELLER Seller warrants that this product conforms to the description on this label and is reasonably fit for the purposes stated on this label when used and stored in accordance with the directions for 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. To the extent consistent with applicable law. Seller disclaims all other warranties express or implied including any warranty of fitness or merchantability. To the extent consistent with applicable law. 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.

[Country United States of America]

[In Case of Emergency Call CHEMTREC (800) 424 9300]

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