70506-298

11/5/2013

#### United States Environmental Protection Agency WASHINGTON, DC 20460

OFFICE OF **CHEMICAL SAFETY AND** POLLUTION PREVENTION

Dr. Gary Orr Regulatory Affairs Manager United Phosphorus, Inc. 630 Freedom Business Center, Suite 402 King of Prussia, PA 19406

NOV 0 5 2013

Subject:

Elixir Fungicide

EPA Reg. No. 70506-298

EPA Decision Number: 483273

Your label submitted on 9/5/13 to simplify use directions and correct a

typographical error in the use directions for potato

Dear Dr. Orr:

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, is acceptable.

A stamped copy of the label "Accepted" is enclosed for your records. This label supersedes all other previously accepted labels. Please submit one copy of the final printed labels before the product is released for shipment. Products released for shipment after eighteen (18) months from the date of this letter must bear the new revised label. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA §6(e). Your release for shipment of the product constitutes acceptance of these conditions.

If you have any questions please contact Heather Garvie by phone at: 703-308-0034 or via email

at: garvie.heather@epa.gov.

Hope A. Johnson Product Manager 21

Fungicide Branch

Registration Division (7505P)

Enclosure: Stamped label "Accepted"

GROUP M3, M5 FUNGICIDES

# **ELIXIR**<sup>TM</sup> fungicide

ACTIVE INGREDIENTS  Mancozeb: A coordination product of zinc ion and man	
in which the ingredients are:  Manganese++	12.5%
Zinc++	
Ethylenebisdithiocarbamate ion (C <sub>4</sub> H <sub>6</sub> N <sub>2</sub> S <sub>4</sub> )	
Chlorothalonil (tetrachloroisophthalonitrile)	
OTHER INGRÈDIENTS	
TOTAL	
Contains 0.625 pound of mancozeb and 0.125 pound of	of chlorothalonil per pound of product
Patent pending. EPA Reg. No. 70506-298	EPA Est. No. XXX-XXX-XXX

## WARNING - AVISO

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

#### **FIRST AID**

**IF IN EYES:** Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for 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 do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

**IF ON SKIN OR CLOTHING:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

Contact the Rocky Mountain Poison Center at 1-866-673-6671 for emergency medical treatment information.

FOR CHEMICAL EMERGENCY: Spill, leak, fire, exposure, or accident, call CHEMTREC at 1-800-424-9300.

Net Contents: 45 pounds

(I) UPI

United Phosphorus, Inc. 630 Freedom Business Center, Suite 402 King of Prussia, PA 19406 1-800-438-6071 ACCEPTED

NOV 0 5 2013

Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg No. 7650-298

## PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

WARNING. Causes substantial but temporary eye injury. Do not get in eyes or on clothing. May be harmful if swallowed or absorbed through skin. Avoid contact with skin, eyes and clothing. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

#### PHYSICAL AND CHEMICAL HAZARDS

Mancozeb decomposes in acid and alkaline conditions, with heat, and upon exposure to moisture and air. May be ignited by heat or open flame Keep away from fire or sparks.

#### PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical resistant to this product are listed below. If you want more options, follow the instructions for Category A on an EPA chemical resistance category selection chart.

#### Mixers, loaders, applicators, and other handlers must wear:

- Long-sleeved shirt
- Long pants
- Chemical resistant gloves made of any waterproof material (except pilots, groundboom applicators, and airblast applicators)
- Shoes and socks
- Protective eyewear

Follow the manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry. Discard clothing or other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

#### **ENGINEERING CONTROL STATEMENTS:**

When handlers use enclosed cabs or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR part 170.240 (d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS. During aerial application, human flaggers must be in enclosed cabs.

#### **USER SAFETY RECOMMENDATIONS**

- Users should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Users should remove clothing/ PPE immediately if pesticide gets inside, then wash thoroughly and put on clean clothing.
- 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

#### **ENVIRONMENTAL HAZARDS**

This product is toxic to aquatic organisms. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. 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 by disposing of equipment washwater or rinsate.

#### 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 handlers may be in the area during application. For any requirements 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.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 24 hours.

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:

- Coveralls
- Chemical resistant gloves made of any waterproof material
- Shoes and socks
- Protective eyewear

Special Eye Irritation Provisions: Chlorothalonil in this product is a severe eye irritant. Although the restricted entry interval expires after 24 hours, for the next 6 days entry is permitted only when the following safety measures are provided:

- (1) At least one container designed specifically for flushing eyes must be available in operating condition at the WPS required decontamination site intended for workers entering the treated area.
- (2) Workers must be informed, in a manner they can understand:
  - that residues in the treated area may be highly irritating to their eyes
  - that they should take precautions, such as refraining from rubbing their eyes to keep the residues out of their eyes
  - that if they do get residues in their eyes, they should immediately flush their eyes using the
    eveflush
  - container that is located at the decontamination site, or using other readily available clean water
  - how to operate the eyeflush container

#### 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.

Application to lawn grasses, golf courses, industrial (office park) and municipal lawns are not within the scope of the Worker Protection Standard.

Do not enter treated areas until sprays have dried.

ELIXIR™ fungicide is a water dispersible granule (WDG) labeled for use as a spray for the control of many important plant diseases.

#### APPLICATION INSTRUCTIONS

AS A SPRAY (Ground or Aerial Equipment) - Apply ELIXIR fungicide at the rate shown; use sufficient water to provide thorough coverage. Use 20 to 100 gallons per acre for ground equipment, and no less than 2 gallons per acre for aircraft. Add ELIXIR fungicide slowly to water in the spray tank with agitation, or premix thoroughly in separate holding tank for concentrate or aircraft sprayers. Continuous agitation is required to keep the product in suspension. A spreader-sticker spray adjuvant may be used with this product if needed; contact your local product distributor or United Phosphorus, Inc. representative for specific recommendations. If tank mixed, follow the more restrictive labeling of any tank mix partner. Do

not tank mix with any product that contains a prohibition on tank mixing.

#### **RESTRICTIONS**

#### **Foliar Applications**

## Where EBDC Products Used Allow the Same Maximum Poundage of Active Ingredient Per Acre Per Season

If more than one product containing an EBDC active ingredient (mancozeb or metiram) is used on a crop during the same growing season and the EBDC products used allow the same maximum poundage of active ingredient per acre per season, then the total poundage of all such EBDC products used must not exceed any one of the specified individual EBDC product maximum seasonal poundage of active ingredient allowed per acre.

## Where EBDC Products Used Allow Different Maximum Poundage of Active Ingredient Per Acre Per Season

If more than one product containing an EBDC active ingredient is used on a crop during the same growing season and the EBDC products used allow different maximum poundage of active ingredient per acre per season, then the total poundage of all such EBDC products used must not exceed the lowest specified individual EBDC product maximum seasonal poundage of active ingredient allowed per acre.

#### **CHEMIGATION**

Apply ELIXIR fungicide only through sprinkler systems including center pivot, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set or hand move irrigation systems. Do not apply ELIXIR fungicide through any other type of irrigation system.

Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.

If you have questions about calibration, 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 the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

#### **Specific Instructions for 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, backflow 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 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 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.

#### **Specific Instructions for Sprinkler Irrigation Systems:**

- 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 backflow.
- 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. Do not apply when wind speed favors drift beyond the area intended for treatment.
- 8. Good agitation is required in the injection tank.
- 9. In moving systems, apply specified dosage of ELIXIR fungicide as a continuous injection. In non-moving systems inject ELIXIR fungicide for 15 to 30 minutes at end of cycle. Use the least amount of water possible consistent with uniform coverage.
- 10. Mix the amount of ELIXIR fungicide needed for acreage to be treated into the quantity of water determined during prior calibration. For moving systems inject into the system continuously for one complete revolution of the field. For non-moving systems inject into system for the time established during calibration.
- 11. Stop injection equipment after treatment is completed and continue to operate irrigation equipment until all ELIXIR fungicide is flushed from system.

#### SPRAY DRIFT MANAGEMENT

A variety of factors including weather conditions (e.g. wind direction, wind speed, temperature, relative humidity) and method of application (e.g. ground, aerial, airblast, chemigation) can influence pesticide drift. The applicator must evaluate all factors and make appropriate adjustments when applying this product.

#### Wind Speed

Do not apply at wind speeds greater than 15 mph.

#### Temperature Inversions

If applying at wind speeds less than 3 mph, the applicator must determine if a) conditions of temperature inversion exist, or b) stable atmospheric conditions exist at or below nozzle height. Do not make applications into areas of temperature inversions or stable atmospheric conditions.

#### Other State and Local Requirements

Applicators must follow all state and local pesticide drift requirements regarding application of mancozeb. Where states have more stringent regulations, they must be observed.

#### Equipment

All aerial and ground application equipment must be properly maintained and calibrated using appropriate carriers or surrogates.

Additional requirements for aerial applications:

- 1. The boom length must not exceed 75% of the wingspan or 90% of the rotor blade diameter.
- 2. Release spray at the lowest height consistent with efficacy and flight safety. Do not release spray at a height greater than 10 feet above the crop canopy unless a greater height is required for aircraft safety.
- 3. When applications are made with a crosswind, the swath must be displaced downwind. The applicator must compensate for this displacement at the up and downwind edge of the application area by adjusting the path of the aircraft upwind.

Additional requirements for ground boom application:

1. Do not apply with a nozzle height greater than 4 feet above the crop canopy.

#### **USE DIRECTIONS**

CROP	DISEASES CONTROLLED	RATE LBS/ACRE	TIMING/INTERVALS (Also refer to Directions for Use)	RESTRICTIONS & COMMENTS
Almonds	Anthracnose, Blossom Blight ( <i>Monilinia spp.</i> ), Shothole ( <i>Stigmina spp.</i> ), Rust, Scab	6.4-7:7 lbs/A	Apply by ground or air. Begin application at dormant to popcorn stage, full bloom or petal fall. Reapply every 7 to 10 days if bloom is staggered and weather is rainy. Apply in sufficient water and with proper calibration to obtain uniform coverage of tree canopy. Do not use less than 10 gallons of spray volume per acre if aerially applied.	Do not apply more than 23.0 lbs of product per acre per season. Do not make last application later than 150 days before harvest (150 day PHI) Do not graze livestock in treated area. Minimum retreatment interval is 7 days. Do not apply this product with a U-boom device.
Asparagus	Cercospora Leaf Spot, Rust, Purple Spot	2.0-2.4 lbs/A	Apply by ground. Start applications when rust first appears and repeat at 14 to 28 day intervals. Use 25-50 gallons of water per acre. Four applications are usually sufficient.	Apply only on asparagus ferns after spears have been harvested. Do not apply more than 9.6 lbs of product per acre per season. Do not apply within 190 days (120 days in CA and AZ) of harvest. (190 day PHI; 120 day PHI in CA and AZ)
Broccoli	Alternaria Leaf Spot, Downy Mildew	1.6 – 2.5 lbs/A	Apply by ground, air, or chemigation. Begin applications prior to disease development and when conditions are favorable for disease development. Apply at 7 to 10-day intervals, if needed. Use higher rates when conditions favor disease.	Do not apply more than 15.4 lbs of product per acre per season.  Minimum retreatment interval is 7 days.  Minimum preharvest interval is 7 days (7 day PHI).

CROP	DISEASES CONTROLLED	RATE LBS/ACRE	TIMING/INTERVALS (Also refer to Directions for Use)	RESTRICTIONS & COMMENTS
Cabbage	Alternaria Leaf Spot, Downy Mildew	1.6 – 2.5 lbs/A	Begin applications prior to disease development and when conditions are favorable for disease development. Apply at 7 to 10-day intervals, if needed. Use higher rates when conditions favor disease.	Do not apply more than 15.4 lbs of product per acre per season. Minimum retreatment interval is 7 days. Minimum preharvest interval is 7 days (7 day PHI).
Corn sweet corn for fresh use and sweet corn for seed production, including hybrid seed	Common Rust, Helmintho- sporium Leaf Blight, Gray Leaf Spot	1.5-1.8 lbs/A	Apply by ground, air, or chemigation. Use sufficient water for thorough coverage. Start applications when disease first appears and repeat at 7 day intervals.	East of the Mississippi River, Arkansas and Louisiana: Do not apply more than 27.0 lbs of product per acre per season. West of the Mississippi River except Arkansas and Louisiana: Do not apply more than 9.0 lbs of product per acre per season. Do not apply to sweet corn in home gardens. Do not allow livestock to graze in treated fields. Do not ensile treated corn or use as livestock forage. Minimum preharvest interval is 14 days (14 day PHI).
Cranberry	Fruit Rot, Lophodermium Leaf/Twig Blight	3.0-7.2 lbs/A	Apply by ground, air, or chemigation. When applying by chemigation, use 300 gallons of water per acre through solid set systems only. Start applications at mid-bloom and repeat at 10 day intervals.	Do not apply more than 21.6 lbs of product per acre per season. Minimum preharvest interval is 50 days (50 day PHI).

CROP	DISEASES CONTROLLED	RATE LBS/ACRE	TIMING/INTERVALS (Also refer to Directions for Use)	RESTRICTIONS & COMMENTS
Cucurbit crop group  Cucumber, Muskmelon, Pumpkin, Squash (summer), Squash (winter), Watermelon  Additional Cucurbit crops: Chayote, Chinese waxgourd, Citron melon, Gherkin, Gourds edible (Momordica spp.)	Alternaria Leaf Spot, Anthracnose, Cercospora Leaf Spot, Downy Mildew, Gummy Stem Blight, Scab	2.0-3.6 lbs/A	Start applications when the plants are in the two-leaf stage and repeat at 7 to 10 day intervals.  Use sufficient water and direct spray to provide thorough coverage of both upper and lower leaf surfaces.  For aerial applications, the minimum spray volume is 2 gallons per acre.  Some cantaloupe varieties (i.e. Harvest Queen, Gold Star, Super Star, Sweet and Early, and Saticoy) are sensitive to ELIXIR fungicide. Consult your State  Cooperative Extension  Service Specialist prior to use.	Do not apply more than 30.7 lbs of product per acre per year. Do not apply more than 8 applications per year. Minimum preharvest interval is 5 days (5 day PHI)
Ginseng	Alternaria Blight, Gray Mold	2.0-2.4 lbs/A	Start applications when disease first threatens and repeat every 7 to 10 days as needed. In Wisconsin, apply with ground equipment and a minimum of 80 gallons of water per acre.	Do not apply more than 28.8 lbs of product per acre per year. Do not apply more than 12 applications per year. Minimum preharvest interval is 30 days (30 day PHI).
Mango	Anthracnose, Phytophthora Fruit Rot, Black Spot ( <i>Cercospora</i> )	2.0-3.0 lbs/A	Start applications at flowering and continue at 14 to 21 day intervals.  Direct spray to crown and blossom area.  Use 20 to 100 gallons water per acre.	Do not apply more than 44.8 lbs. of product per acre per year. Do not apply more than 14 applications per year. Minimum preharvest interval is 21 days (21 day PHI).

CROP	DISEASES CONTROLLED	RATE LBS/ACRE	TIMING/INTERVALS (Also refer to Directions for Use)	RESTRICTIONS & COMMENTS
Onion (Dry Bulb), Garlic, Shallots (Furrow Drench)	Botrytis Leaf Blight, Downy Mildew, Neck Rot, Purple Blotch	3.0-3.6 Ibs/A	Apply by air, ground, or chemigation. Follow a protective spray schedule starting when diseases are first reported in the area and repeat at 7 day intervals throughout the season.	Do not apply more than 36.0 lbs of product per acre per crop. Do not apply to exposed bulbs. Minimum preharvest interval is 7 days (7 day PHI).
	Smut	3.0-3.6 lbs/A	Apply 3 to 3.6 lbs per acre as a furrow drench at time of planting onion seeds. Use 75 to 125 gallons of water per acre.	Do not apply more than 3.6 lbs of product per acre (29,000 linear feet of furrow) with an 18- inch row spacing.
Papaya	Anthracnose (Colletotricum), Phytophthora Fruit Rot, Black Spot (Cercospora), Alternaria	2.0-3.0 lbs/A	Begin at flowering, treat central column crown, blossom area and developing fruit. Repeat at 14 to 21 day intervals. Use a minimum 50 gallons of water per acre.	Do not apply more than 42.0 lbs of product per acre per crop. Minimum preharvest interval 0 days (0 day PHI)
Peanut	Ascochyta Web Blotch, Cercospora Leaf Spot, Rust, Late Leaf Spot, Pepper Spot	1.0-2.4 lbs/A	Apply by ground, air, or chemigation. Start application when disease first appears or is reported in area. Repeat sprays at 14 day intervals.	Do not apply more than 19.2 lbs of product per acre per crop. Do not feed treated vines, hay, or threshings to livestock. Do not allow livestock to graze in treated areas. Minimum preharvest interval is 14 days (14 day PHI).

CROP	DISEASES CONTROLLED	RATE LBS/ACRE	TIMING/INTERVALS (Also refer to Directions for Use)	RESTRICTIONS & COMMENTS
Pepper	Anthracnose, Cercospora Leaf Spot (Frogeye Spot), Phytophthora Blight, Ripe Rot, Botrytis Leaf Mold	West of the Mississip- pi River 1.6-2.5 Ibs/A	Begin applications prior to disease development and when conditions are favorable for disease development. Apply at 7 to 10 day intervals, if needed.  Use higher rates when conditions favor disease.	Do not apply more than 15.4 lbs of product per acre per season. Minimum retreatment interval is 7 days. Minimum preharvest interval is 7 days (7 day PHI).
		East of the Mississip- pi River 1.6–3.8 Ibs/A	Begin applications prior to disease development and when conditions are favorable for disease development. Apply at 7 to 10 day intervals, if needed. Use higher rates when conditions favor disease.	Do not apply more than 23.0 lbs of product per acre per season.  Minimum retreatment interval is 7 days.  Minimum preharvest interval is 7 days (7 day PHI).
Potato	Early Blight, Late Blight, Black Dot  Disease Suppression: Botrytis	1.2-2.4 lbs/A	Apply by ground, air, or chemigation. Begin applications when plants are 4 to 6 inches high by applying 1.2 lb of product per acre. As the vines increase in size, apply 1.5 to 2.4 lbs of product per acre at intervals of 5 to 10 days; or 1.2 lb of product per acre at 5 day intervals. Use the highest rate and shortest interval when plants are rapidly growing.	Do not apply more than 18.0 lbs of product per acre per crop. Vine kill should occur 14 days before harvest. It is recommended that this product be used in an Integrated Pest Management Program. Minimum preharvest interval is 14 days except CT, DE, FL, MA, ME, MI, NY, OH, PA, RI, VT and WI (14 day PHI). Minimum preharvest interval is 7 days in CT, DE, FL, MA, ME, MI, NH, NY, OH, PA, RI, VT, and WI (7 day PHI).

CROP	DISEASES CONTROLLED	RATE LBS/ACRE	TIMING/INTERVALS (Also refer to Directions for Use)	RESTRICTIONS & COMMENTS
Tomato	Anthracnose, Early Blight, Gray Leaf Spot, Late Blight, Leaf Mold, Septoria Leaf Spot	(West of the Mississippi River) 0.75-1.2 lbs/A	Start application when seedlings emerge or transplants are set. Apply at 7 day intervals throughout the season.	West: Do not apply more than 10.2 lbs of product per acre per crop. East: Do not apply more than 26.9 lbs of product per acre per
		(East of the Mississippi River) 0.75-1.8 Ibs/A		crop.  Minimum preharvest interval is 5 days (5 day PHI).  FOR BACTERIAL
	Bacterial Speck and Spot	(West of the Mississippi River) 1.5-2.4 Ibs/A	Start application when seedlings emerge or transplants are set. Apply at 7 to 10 day intervals throughout the season.	SPECK AND SPOT: Use a full rate of a fixed copper fungicide (such as Cuprofix® Ultra Disperss®) in a tank mix combination with a ½ to full rate of
		(East of the Mississippi River) 1.5-3.6 Ibs/A		ELIXIR fungicide. Follow the application interval specified on the copper fungicide label.

# FLOWERS, FOLIAGE PLANTS, AND ORNAMENTALS NOT INTENDED FOR USE ON FRUIT TREES BY HOMEOWNERS. TREATED PLANTS, FRUITS, NUTS OR SYRUP FROM MAPLE TREES MUST NOT BE USED FOR FOOD OR FEED PURPOSES.

Apply in the field, nursery or greenhouse as a thorough coverage spray, using 1.0 to 2.4 lbs. ELIXIR fungicide per acre (1  $\frac{1}{2}$  to 3  $\frac{3}{3}$  tsp. per gal.). Do not use in residential greenhouses.

Plant sensitivities to ELIXIR fungicide have been found to be acceptable in specific genera and species listed on this label, however, phytotoxicity may occur. Due to the large number of species and varieties of ornamentals and nursery plants, it is impossible to test each one for sensitivity to ELIXIR fungicide. Neither the manufacturer nor seller has determined whether or not ELIXIR fungicide can be safely used on ornamental or nursery plants not listed on this label. The user is responsible for determining if ELIXIR fungicide can be used safely prior to commercial use. In a small area, apply the specified rates to the plants in question, i.e. bedding plants, foliage, etc., and observe for 7 to 10 days for symptoms of phytotoxicity prior to commercial use. Use ELIXIR fungicide in commercial greenhouses and nurseries for control of fungal diseases of flowers, foliage and ornamentals. Do not make more than 20 applications per year.

<u>Aerial application</u>: For aerial applications made to field-planted ornamentals, apply 1.0 to 2.4 lbs. per acre; use a minimum rate of 5 gals of spray per acre during aerial applications.

Application of dilute sprays: Apply as a thorough coverage spray using 1.0 to 2.4 lbs. per acre or 1.0 to 2.4 lbs. per 100 gals of water. Begin application at first sign of disease and repeat at 7 to 10 day intervals or as needed; use shorter interval during periods of frequent rains or when severe disease conditions persist. ELIXIR fungicide may be used alone or in combination with other fungicides as maintenance spray. Use higher rate and shorter intervals during periods of excessive wetness and rapid growth.

ELIXIR fungicide is labeled for use on certain flower, foliage and ornamental plants listed in the table below for control of the following diseases and pathogens

Aglaonema Alternaria

Almond, ornamental Botrytis, Cladosporium, Coryneum, Gloeosporium, Monilínia

Andromeda Exobasidium, Rhytisma, Venturia

Ash Cercospora, Cylindrosporium, Gloeosporium, Puccinia, Rhizoctonia, Sphaeropsis

Aster Alternaria, Ascochyta, Botrytis, Colletotrichum, Fusarium, Phomopsis, Phyllosticta,

Puccinia, Ramularia, Rhizoctonia, Septoria, Uromyces

Azalea Alternaria, Botrytis, Cladosporium, Colletotrichum, Cylindrocladium, Ovulinia

Baby's Breath Botrytis, Rhizoctonia

Begonia Botrytis, Cercospora, Gloeosporium, Rhizoctonia

Bougainvillea Colletotrichum

Buckeye Cercospora, Glomerella, Guignardia, Monchaetia, Phyllosticta, Septoria, Taphrina Camellia Botrytis, Cercospora, Elsinoe, Exobasidium, Glomerella, Pestalotia, Phomopsis,

Phyllosticta

Carnation Alternaria, Botrytis, Cladosporium, Colletotrichum, Fusarium, Helminthosporium,

Septoria, Stemphylium, Uromyces

Cherry, ornamental Alternaria, Cercospora, Cladosporium, Coccomyces, Coryneum, Fusicladium, Monilinia,

Phomopsis, Phyllosticta, Taphrina

Christmas cactus Alternaria, Cercospora, Colletotrichum, Fusarium, Phomopsis

Chrysanthemum Alternaria, Ascochyta, Bipolaris, Botrytis, Cercospora, Cylindrosporium,

Helminthosporium, Phyllosticta, Septoria, Stemphylium

Crabapple Gymnosporangium, Marssonina, Phyllosticta, Septoria, Venturia

Croton Gloeosporium

Daisy Botrytis, Cercospora, Whetzelinia

Dogwood Ascochyta, Botrytis, Cercospora, Colletotrichum, Elsinoe, Phyllosticta, Septoria

Douglas Fir Phaeocryptopus

Dracaena Alternaria, Cercospora, Colletotrichum, Fusarium, Phyllosticta

Euonymus Cercospora, Colletotrichum, Gloeosporium, Marssonina, Ramularia, Septoria,

Whetzelinia

Fatsia Alternaria, Cercospora, Colletotrichum, Phyllosticta

Ficus Alternaria, Ascochyta, Cephalosporium, Cercospora, Cladosporium, Colletotrichum,

Fusarium, Gloeosporium, Glomerella, Mycosphaerella, Phomopsis, Stemphylium

Firethorn Fusarium, Fusicladium, Rhizoctonia

Geranium Alternaria, Ascochyta, Bipolaris, Botrytis, Cercospora, Cylindrosporium,

Helminthosporium, Puccinia, Ramularia, Rhizoctonia, Septoria, Uromyces, Venturia Alternaria, Botrytis, Cladosporium, Curvularia, Rhizoctonia, Septoria, Stemphylium

Gladiolus\* Alternaria, Botrytis, Cladosporium, Curvularia, Rhizoctonia, Septoria, Stemphyl Hawthorn Cercospora, Cylindrosporium, Gloeosporium, Gymnosporangium, Monilinia,

Maranharulla Dhallastista Castaria Vanturia

Mycosphaerella, Phyllosticta, Septoria, Venturia

Holly Phyllosticta

Hollyhock Alternaria, Ascochyta, Cercospora, Colletotrichum, Puccinia, Septoria

Hydrangea (foliage only) Ascochyta, Botrytis, Cercospora, Colletotrichum, Phyllosticta, Rhizoctonia, Septoria

Impatiens Cercospora, Phyllosticta, Rhizoctonia, Septoria

Iris Ascochyta, Botrytis, Cladosporium, Fusarium, Kabatiella, Phyllosticta, Puccinia,

Rhizoctonia

Viburnum

Walnut

Jade plant	Gloeosporium, Phomopsis
Laurel, Cherry	Alternaria, Cercospora, Coccomyces, Monilinia, Phyllosticta, Septoria
Lilac	Botrytis, Cercospora, Cladosporium, Cylindrocladium, Gloeosporium
Lily	Botrytis, Cercospora, Cladosporium, Colletotrichum, Fusarium, Puccinia, Ramularia, Rhizoctonia
Magnolia	Alternaria, Cercospora, Cladosporium, Colletotrichum, Glomerella, Rhizoctonia
Mahonia	Cercospora, Cylindrocladium, Gloeosporium, Leptosphaeria, Phomopsis, Phyllosticta, Puccinia
Maple	Alternaria, Cercospora, Ciborinia, Fusarium, Marssonina, Monochaetia, Phomopsis, Phyllosticta, Rhizoctonia, Rhytisma, Septoria, Sphaeropsis, Taphrina, Venturia
Narcissus	Botrytis, Sclerotinia
Oak (red group only)	Cephalosporium, Cercospora, Cladosporium, Cronartium, Elsinoe, Fusarium, Gloeosporium, Gnomonia, Marssonina, Phyllosticta, Septoria, Taphrina, Venturia
Palm, Areca	Alternaria, Cercospora, Colletotrichum, Phomopsis, Phyllosticta, Septoria
Pansy	Alternaria, Botrytis, Cercospora, Colletotrichum, Peronospora, Phyllosticta, Ramularia, Rhizoctonia
Peach, ornamental	Cercospora, Cladosporium, Coryneum, Fusarium, Glomerella, Monilinia, Mycosphaerella, Phomopsis, Phyllosticta, Taphrina
Peperomia	Colletotrichum, Gloeosporium, Rhizoctonia
Petunia	Cercospora, Puccinia, Rhizoctonia, Stemphylium
Philodendron	Gloeosporium, Colletotrichum
Phlox	Ascochyta, Botrytis, Cercospora, Colletotrichum, Phyllosticta, Puccinia, Ramularia, Septoria, Stemphylium, Volutella
Photinia	Cercospora, Gloeosporium, Gymnosporangium, Lophodermium, Pestalotia, Phyllosticta, Septoria
Pine	Alternaria, Botrytis, Cronartium, Fusarium, Lophodermium, Monochaetia, Rhizoctonia, Septoria, Sirococcus
Pine, Norfolk Island	Botrytis, Colletotrichum, Cronartium, Cylindrocladium, Fusarium, Lophodermium, Pestalotia, Rhizoctonia, Septoria, Sirococcus
Plum, ornamental	Botrytis, Cercospora, Cladosporium, Coccomyces, Coryneum, Monilinia, Phyllosticta, Taphrina
Poinsettia**	Botrytis, Cercospora, Fusarium, Uromyces
Poplar	Cercospora, Ciborinia, Colletotrichum, Cylindrocladium, Fusarium, Marssonina, Melampsora, Mycosphaerella, Phyllosticta, Septoria, Stigmina, Taphrina, Venturia
Prayer plant	Alternaria, Drechslera, Glomerella, Puccinia
Privet	Cercospora, Glomerella, Phomopsis, Phyllosticta, Ramularia
Pyracantha	Botrytis, Cercospora, Diplodia, Phomopsis, Phyllosticta, Sphaeropsis
Quince, flowering	Cercospora, Fabraea, Gymnosporangium, Septobasidium
Rhododendron	Alternaria, Cercospora, Coryneum, Gloeosporium, Glomerella, Guignardia, Lophodermium, Mycosphaerella, Pestalotia, Phomopsis, Rhizoctonia, Septoria, Venturia
Rose <sup>1</sup>	Alternaria, Bipolaris, Botryosphaeria, Botrytis, Cercospora, Cladosporium, Cylindrocladium, Diplocarpon, Elsinoe, Gloeosporium, Helminthosporium, Leptosphaeria, Monochaetia, Mycosphaerella, Peronospora, Phyllosticta, Septoria
Spirea	Cylindrosporium
Spruce	Ascochyta, Botrytis, Cladosporium, Lophodermium, Rhizoctonia
Statice	Alternaria, Ascochyta, Botrytis, Cercospora, Colletotrichum, Rhizoctonia, Uromyces
Syngonium	Cephalosporium, Erwinia, Fusarium
Tulip	Botrytis
Vihurnum	Rotritic Carocenora Cladosporium Helminthosporium Monochaetia Phomoneis

Ramularia

Botrytis, Cercospora, Cladosporium, Helminthosporium, Monochaetia, Phomopsis,

Cercospora, Cladosporium, Cylindrocladium, Cylindrosporium, Gnomonia

<sup>&</sup>lt;sup>1</sup> Knock Out® and Double Delight roses may be sensitive resulting in damage to foliage under certain growing conditions.

15/19

Yucca

Cercospora, Cylindrosporium, Gloeosporium, Puccinia

Zebra plant

Alternaria, Cercospora, Colletotrichum

Zinnia

Alternaria, Botrytis, Cercospora, Rhizoctonia

\*Do not exceed 0.9 lb per 100 gallons per acre on flower spikes.

\*\*Do not exceed 1.8 lbs per 100 gallons per acre.

Do not use this product for the treatment of marigolds due to highly variable plant responses.

#### **GRASSES: SODFARMS (AGRICULTURAL CROP USE)**

For sodfarm applications, follow provisions within the Agricultural Use Requirements box. Harvesting of treated turf is prohibited until 120 hours following application.

- Do not apply more than 4 applications per year at the maximum rate per acre per application.
- Do not allow less than a 10-day interval between applications.

CROP	DISEASE/PEST	RATE	TIMING/INTERVAL	COMMENTS
Sod Farm	Algae	6.0 to 7.2 oz. in 3 to 5 gal/1000 sq. ft. (16.0 to 19.2 lbs in 130-	Begin when algae begins to appear. Repeat at 7-day intervals as long as	Do not use on grasses grown for seed.
		220 gals/acre)	condition persists.	Do not use on
	Copper Spot (Gloeocercospora sorghi), Fusarium Blight	4.0 to 9.6 oz. in 3 to 5 gal/1000 sq. ft.  (11.0 to 26.4 lbs in 130-	Begin application when disease appears.  Repeat at 7-day intervals as long as condition persists.	grasses intended for grazing, such as range or pasture grasses.  Do not graze treated areas of feed clippings to livestock.  When conditions are unusually favorable for disease, use 6.0 to 9.6 oz./1000 sq. ft. (16.0 to 26.4 lbs/Acre.
	(Fusarium spp.), Red Thread (Laetisaria fuciformis), Slime Molds (Mucilago, Physarum, Fuligo)	220 gal/acre)		
	Gray Leaf Spot ( <i>Pyricularia</i> grisea) Pythium Blight ( <i>Pythium spp</i> .)	8.0 to 9.6 oz. in 3 to 5 gal/1000 sq. ft.  (22.0 to 26.4 lbs in 130-220 gal/acre)		
	Dollar Spot (Sclerotina)	6.0 to 9.6 oz. in 3 to 5 gai/1000 sq. ft. (16.0 to 26.4 lb in 130-220 gals/acre)	·	
	Leaf Spot (Helmintho- sporium spp.) Rhizoctonia solani Brown Patch	3.0 to 4.8 oz. in 3 to 5 gals/1000 sq. ft.  (8.0 to 13.2 lbs in 130-220 gals/acre)		

Fusarium Snow Mold	6.0 to 9.6 oz. in 3 to 5 gal/1000 sq. ft.  (16.0 to 26.4 lbs in 130-220 gals/acre)	Apply at 2-6 week intervals during winter.	
Leaf Rust, Stem Rust, Stripe Rust	3.0 to 4.8 oz. in 3 to 5 gals/1000 sq. ft.  (8.0-13.2 lbs in 130-220 gals/acre.	Begin when disease threatens. Repeat at 7 to 10-day intervals as long as disease persists.	

#### **GRASSES: TURF USES (NON-AGRICULTURAL USE)**

For use on golf courses, industrial and commercial lawns, and other nonresidential lawns. Do not use on home lawns and turf sites associated with apartment buildings, daycare centers, playgrounds, playfields, recreational park athletic fields, athletic fields located on or next to schools (i.e. elementary, middle, and high schools), campgrounds, churches, and theme parks. Follow provisions within the Non-Agricultural Use Requirements Box.

Do not apply by chemigation.

Golf Courses: for cool season grasses; greens, tees and aprons – do not apply more than 5 applications per year at a maximum application rate of 26.4 lbs/A per application.

For cool season grasses; fairways – do not apply more than 4 applications per year at a maximum application rate of 26.4 lbs/A per application.

For warm season grasses; greens, tees and aprons – do not apply more than 4 applications per year at a maximum application rate of 26.4 lbs/A per application.

#### All Other Turf:

- do not apply more than 4 applications per year at a maximum application rate of 26.4 lbs/A per application
- do not allow less than a 10-day interval between applications

CROP	DISEASE/PEST	RATE	TIMING/INTERVAL	COMMENTS
Golf courses, industrial (office park), and	Algae	6.0 to 7.2 oz. in 3 to 5 gal/1000 sq. ft.  (16.0 to 19.2 lbs in 130-220 gals/acre)	Begin when algae begins to appear. Repeat at 7-day intervals as long as condition persists.	Do not use on grasses grown for seed.  Do not use on
municipal lawns	Copper Spot (Gloeocercos- pora sorghi), Fusarium Blight (Fusarium spp.), Red Thread (Laetisaria fuciformis), Slime Molds (Mucilago, Physarum, Fuligo)	4.0 to 9.6 oz. in 3 to 5 gal/1000 sq. ft. (11.0 to 26.4 lbs in 130-220 gal/acre)	Begin application when disease appears.  Repeat at 7-day intervals as long as condition persists.	grasses intended for grazing, such as range or pasture grasses.  Do not graze treated areas of feed clippings to livestock.  When conditions are unusually

CROP	DISEASE/PEST	RATE	TIMING/INTERVAL	COMMENTS
	Gray Leaf Spot ( <i>Pyricularia</i> grisea)	8.0 to 9.6 oz. in 3 to 5 gal/1000 sq. ft.  (22.0 to 26.4 lbs in 130-220 gal/acre)		favorable for disease, use 6.0 to 9.6 oz./1000 sq. ft. (16.0 to 26.4 lbs/Acre).
	Dollar Spot (Sclerotina)	6.0 to 9.6 oz. in 3 to 5 gal/1000 sq. ft.		
		(16.0 to 26.4 lb in 130- 220 gals/acre)		
	Leaf Spot (Helmintho- sporium spp.)	3.0 to 4.8 oz. in 3 to 5 gals/1000 sq. ft.		
	Rhizoctonia solani Brown Patch	(8.0 to 13.2 lbs in 130- 220 gals/acre)		
	Fusarium Snow Mold	6.0 to 9.6 oz. in 3 to 5 gal/1000 sq. ft.	Apply at 2-6 week intervals during winter.	
	1	(16:0 to 26.4 lbs in 130- 220 gals/acre)		
	Pythium Blight (Pythium spp.)	8.0 to 9.6 oz. in 3 to 5 gal/1000 sq. ft.	Repeat at 5-day intervals or more frequently if conditions are favorable for disease development.	
		(22.0 to 26.4 lbs in 130- 220 gals/acre)		
	Leaf Rust, Stem Rust, Stripe Rust	3.0 to 4.8 oz. in 3 to 5 gals/1000 sq. ft.	Begin when disease threatens. Repeat at 7 to 10-day intervals as	
	,	(8.0-13.2 lbs in 130-220 gals/acre.	long as disease persists.	

#### **CONIFERS INCLUDING CHRISTMAS TREES: Plantations and Nurseries**

USE SITE	DISEASES CONTROLLED	RATE LBS/ACRE	DIRECTONS
Conifers (including Christmas trees)	Ascochyta, Alternaria, Botrytis, Cephalosporium, Cladosporium, Cronartium, Fusarium, Lophodermium, Melampsora, Monochaetia, Phomopsis, Rhizoctonia, Septoria, Sirococcus, Sphaeropsis	By ground: 1 – 2.4 lbs per acre in 100 gallons water  By air: 1 – 2.4 lbs per acre in a minimum of 10 gallons spray per acre	Apply by ground or air at 7 to 10 day intervals in sufficient water and with proper calibration to obtain uniform and thorough coverage of the tree canopy.  Begin application at first sign of disease.  Use the shortest spray interval during periods of frequent rain, when severe disease conditions persist or during periods of rapid plant growth. This product may be used alone or in combination with other fungicides.  Do not allow livestock to graze in treated areas.  Do not apply Elixir within one week before or after application of oil or an oil-based pesticide.  Do not apply to forests.

#### STORAGE AND DISPOSAL

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

**STORAGE: Important-**Never allow ELIXIR to become wet during storage. This may lead to certain chemical changes which will reduce the effectiveness of ELIXIR as a fungicide and create vapors which may be flammable. Keep container closed when not in use. Store product in original container only, away from other pesticides, fertilizer, food or feed.

**PESTICIDE DISPOSAL:** Do not contaminate water, 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.

**CONTAINER HANDLING:** Nonrefillable container. Do not reuse or refill this container. Completely empty bag into application equipment. Then offer for recycling if available, or dispose of empty bag in a sanitary landfill or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

**ATTENTION:** This product contains chlorothalonil, mancozeb and ETU, chemicals known to the State of California to cause cancer in laboratory animals. ETU is also known to the State of California to cause birth defects or other reproductive harm in laboratory animals.

### IMPORTANT INFORMATION READ BEFORE USING PRODUCT

## CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

**NOTICE:** Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

The Directions for Use of this product reflect the opinion of experts based on field use and tests, and must be followed carefully. It is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of United Phosphorus, Inc. or Seller. Handling, storage, and use of the product by Buyer or User are beyond the control of United Phosphorus, Inc. and Seller. All such risks shall be assumed by Buyer and User, and Buyer and User agree to hold United Phosphorus, Inc. and Seller harmless for any claims relating to such factors.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, UNITED PHOSPHORUS, INC. AND SELLER MAKE NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ON THIS LABEL.

To the extent consistent with applicable law, United Phosphorus, Inc. or Seller shall not be liable for any incidental, consequential or special damages resulting from the use or handling of this product and THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF UNITED PHOSPHORUS, INC. AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF UNITED PHOSPHORUS, INC. OR SELLER, THE REPLACEMENT OF THE PRODUCT.

United Phosphorus, Inc. and Seller offer this product, and Buyer and User accept it, subject to the foregoing conditions of sale and limitations of warranty and of liability, which may not be modified except by written agreement signed by the duly authorized representative of United Phosphorus, Inc.

Elixir is a pending trademark of United Phosphorus, Inc.

Elixir Fungicide 8-2-13 Rev.

19/19

Cuprofix® Ultra Disperss® is a registered trademark of United Phosphorus, Inc.

Rev. 11/15/12