



U.S. ENVIRONMENTAL PROTECTION AGENCY  
 Office of Pesticide Programs  
 Biopesticides and Pollution Prevention Division (7511P)  
 1200 Pennsylvania Ave., N.W.  
 Washington, D.C. 20460

EPA Reg. Number:

92144-4

Date of Issuance:

6/18/2020

NOTICE OF PESTICIDE:

Registration  
 Reregistration  
 (under FIFRA, as amended)

Term of Issuance:

Unconditional

Name of Pesticide Product:

Forticept EP#3

Name and Address of Registrant (include ZIP Code):

Lidan, Inc.  
 30 Wall Street, 8<sup>th</sup> Floor  
 New York, NY 10005

**Note:** Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Biopesticides and Pollution Prevention Division prior to use of the label in commerce. In any correspondence on this product, always refer to the above EPA Registration Number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA or the Act).

Registration is in no way to be construed as an endorsement or recommendation of this product by the U.S. Environmental Protection Agency (EPA). In order to protect health and the environment, the Administrator, on his or her motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under the Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is unconditionally registered in accordance with FIFRA section 3(c)(5) provided that you:

1. Submit and/or cite all data required for registration or registration review of your product when the EPA requires all registrants of similar products to submit such data.
2. Submit Storage Stability and Corrosion Characteristics (Guidelines 830.6317 and 830.6320) data as these data requirements are not satisfied. A one-year study is required to satisfy these data requirements. You have 18 months from the date of this registration to provide these data to the EPA.

Signature of Approving Official:

Andrew Bryceland, Team Leader  
 Biochemical Pesticides Branch  
 Biopesticides and Pollution Prevention Division (7511P)  
 Office of Pesticide Programs

Date:

6/18/2020

3. Make the following labeling change before you release this product for shipment:  
Revise the EPA Registration Number to read, "EPA Reg. No. 92144-4".
4. Submit one (1) copy of the final printed labeling for the record before you release this product for shipment.

Should you wish to add/retain a reference to your company's website on your label, then please be aware that the website becomes labeling under FIFRA and is subject to review by the EPA. If the website is false or misleading, the product will be considered to be misbranded and sale or distribution of the product is unlawful under FIFRA section 12(a)(1)(E). 40 CFR § 156.10(a)(5) lists examples of statements the EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the EPA find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA-approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance Assurance.

Your release for shipment of this product constitutes acceptance of these terms. If these terms are not complied with, this registration will be subject to cancellation in accordance with FIFRA section 6. A stamped copy of the labeling is enclosed for your records. Please also note that the record for this product currently contains the following acceptable Confidential Statement of Formula (CSF):

- Basic CSF dated 4/16/19

If you have any questions, please contact Chris Pfeifer of my team by phone at 703-308-0031 or via email at [pfeifer.chris@epa.gov](mailto:pfeifer.chris@epa.gov).

Sincerely,



Andrew Bryceland, Team Leader  
Biochemical Pesticides Branch  
Biopesticides and Pollution  
Prevention Division (7511P)  
Office of Pesticide Programs

Enclosure

Note to reviewer: language in brackets [] is optional

**ACCEPTED**

06/18/2020

Under the Federal Insecticide, Fungicide  
and Rodenticide Act as amended, for the  
pesticide registered under  
EPA Reg. No. 92144-4

**MASTER LABEL**

# Forticept™ EP #3

**Alternate Brand Names:**

<b>Sublabel A: Agricultural Crops</b>
<b>Sublabel B: Turf &amp; Professional Landscape Use</b>
<b>Sublabel C: Home &amp; Garden Use</b>

EPA Registration No.: (file symbol 92144-U)

## Sublabel A: Agricultural Crops

### Forticept™ EP #3

A botanical based product to protect against certain fungal and bacterial diseases.

Active ingredient: Thyme oil ..... 1.00 %  
Other ingredients: ..... 99.00 %  
Total ..... 100.00 %

**KEEP OUT OF REACH OF CHILDREN**

### CAUTION

FIRST AID	
<b>IF SWALLOWED:</b>	Call 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.
<b>IF ON SKIN OR CLOTHING:</b>	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.
<b>IF INHALED:</b>	Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.
<b>IF IN EYES:</b>	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.
Have the product container or label with you when calling a poison control center or doctor, or if going for treatment.	

LOT #: \_\_\_\_\_

Net Contents: 1 pint, 1 quart, 1 gallon, 2.5 gallon, 5 gallon, 55 gallon drum, 275 gallon tote  
EPA Registration No. 92144-U  
EPA Est. No. 93544-GA-1, 67441-IL-1, 082521-GA-1, 92957-MI-1, 70299-NV-2, 70299-NV-1

Lidan, Inc., 30 Wall Street, 8<sup>th</sup> Floor, New York, NY 10005-2205

## **PRECAUTIONARY STATEMENTS**

### **HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

**CAUTION:** Avoid contact with skin, eyes, or clothing. Wear goggles or safety glasses. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.

#### **PERSONAL PROTECTIVE EQUIPMENT (PPE)**

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Shoes plus socks
- Waterproof gloves
- Protective eyewear

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

#### **USER SAFETY RECOMMENDATIONS**

- User should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- User should remove PPE immediately after handling this product. As soon as possible, wash thoroughly and change into clean clothing.
- Wash the outside of gloves before removing.

#### **ENVIRONMENTAL HAZARDS**

For terrestrial uses: Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwater or rinsate.

(Use the following additional statement for containers that hold 5 gallons or more: Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.)

#### **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 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 exemptions pertaining to the statements on this label about personal protective equipment (PPE) and the restricted-entry interval (REI). 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 0 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

- Waterproof gloves
- Shoes plus socks
- Protective eyewear

### GENERAL INFORMATION

Forticept™ EP #3 is formulated with thyme oil, a botanical extract. Forticept™ EP #3's proprietary formulation stabilizes the thyme oil, reducing its volatility, improving contact time with plant surfaces, and improving efficacy against target fungal and bacterial pathogens. The product is for bacterial and fungal disease control on ornamental plants, turf, and edible crops. Forticept™ EP #3 applied to actively growing plants (see DIRECTIONS FOR USE) will reduce or control incidence of bacterial and fungal disease and improve plant health. Plant health benefits often result in greater yields and improved crop quality at harvest, especially when crops are stressed by pathogens or environmental conditions. Use Forticept™ EP #3 as a curative application when disease is evident but preventative application is recommended when conditions favor development of bacterial or fungal disease. Apply prior to disease infestation to protect the growing leaf tissue. See specific information for diseases controlled and use rates on ornamental plants, turf, and edible crops.

### MODE OF ACTION

Thyme oil extracted from *Thymus* spp. plant material is a powerful antifungal and antibacterial agent. The extract, when applied to growing crops, controls fungal and bacterial disease organisms by membrane disruption. Forticept™ EP #3 is an improved efficacy formulation using a proprietary stabilization technology to reduce the volatility of the botanical active, increasing contact time with target disease organisms to reduce or control both bacterial and fungal diseases.

The control of diseases is not systemic, but provides some translaminar protection. Repeat foliar applications at 7 - 14-day intervals to maintain disease control and to protect new plant growth.

Use Forticept™ EP #3 as a preventative or curative treatment.

### MIXING AND APPLICATION INSTRUCTIONS

#### – SHAKE WELL PRIOR TO USE –

Forticept™ EP #3 is an emulsifiable concentrate containing oil extracted from *Thymus* spp. Use 100-mesh nozzle screens or larger.

See **CHEMIGATION** section for chemigation use directions.

See **PRE-PLANT DIP** section for pre-plant dip use directions.

See **SEED TREATMENT** section for seed treatment use directions.

See **SOIL TREATMENT** section for soil application use directions.

Use higher water volumes with larger sized crops and extensive foliage to secure thorough coverage.

**Forticept™ EP #3 alone:** Add ½ of the required amount of water to the mix tank. With the agitator running, add the Forticept™ EP #3 to the mix tank. Continue agitation while adding the remainder of the water. Begin application of the solution after the Forticept™ EP #3 has completely dispersed into the mix water. Maintain agitation until all the mixture has been applied.

**Forticept™ EP #3 + tank-mixtures:** Add ½ - ¾ of the required amount of water to the mix tank. Start the agitation before adding any tank mix partners. In general, tank-mix partners should be added in this order: wettable powders, dry flowable formulations, liquid flowable formulations, and emulsifiable formulations such as Forticept™ EP #3. Always allow each tank-mix partner to become completely dispersed before adding the next component. Maintain continuous agitation until all components have been dispersed and throughout the application process. After all components are completely dispersed add the remainder of the water. Forticept™ EP #3 cannot be mixed with another product with a prohibition against mixing. Use of the tank mix must be in accordance with the more

restrictive label limitations and precautions. **Do not pre-mix Forticept™ EP #3 with any other tank mix component prior to adding to the spray tank.**

**Compatibility:** Do not combine Forticept™ EP #3 in the spray tank with pesticides, adjuvants, or fertilizers if there has been no previous experience or use of the combination to show it is physically compatible, effective, and non-injurious under your use conditions.

Forticept™ EP #3 is compatible with many commonly used pesticides, fertilizers, adjuvants, and surfactants, but has not been evaluated with all potential combinations. To ensure compatibility of the tank mix combinations, evaluate prior to use as follows: Using a suitable container, add the proportional amounts of product to water. Add wettable powders first, then water dispersible granules, then liquid flowables, and lastly, emulsifiable concentrates. Mix thoroughly and let stand for at least five minutes. If the combination stays mixed or can be remixed, it is physically compatible. Test the mix on a small portion of the crop to be treated to ensure that a phytotoxic response will not occur as a result of the application.

### CHEMIGATION USE DIRECTIONS

**Apply Forticept™ EP #3 at 1 gallon per acre according to the instructions below unless specified differently in the SELECTED CROPS section.**

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#### CHEMIGATION

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##### General Requirements -

- 1) Apply this product only through a drip system or sprinkler including center pivot, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set, hand move, flood (basin), furrow, border or drip (trickle) irrigation systems. Do not apply this product through any other type of irrigation system.
- 2) Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.
- 3) If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.
- 4) 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.
- 5) 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 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, 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 Requirements for Sprinkler Chemigation -**

- 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 filled with a system interlock.
- 7) Do not apply when wind speed favors drift beyond the area intended for treatment.

#### **Specific Requirements for Flood (Basin), Furrow and Border Chemigation -**

- 1) 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 backflow if water flow stops.
- 2) The 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 backflow.
  - 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 prevent fluid from being withdrawn from the supply tank 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.

#### **Specific Requirements for Drip (Trickle) Chemigation -**

- 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.

**Application Instructions for All Types of Chemigation -**

- 1) Remove scale, pesticide residues, and other foreign matter from the chemical supply tank and entire injector system. Flush with clean water. Failure to provide a clean tank, void of scale or residues may cause product to lose effectiveness or strength.
- 2) Determine the treatment rates as indicated in the directions for use and make proper dilutions. Product can be applied continuously or at any time during the water application.
- 3) Prepare a solution in the chemical tank by filling the tank with the required water and then adding product as required.

**PRE-PLANT DIP USE DIRECTIONS**

Forticept™ EP #3 can be applied as a pre-plant dip for improved plant health and suppression of certain soil-borne diseases. Apply Forticept™ EP #3 at (96-192 ounces) (3-6 quarts) product per 10 gallons of water as a pre-plant dip immediately prior to transplanting, unless specified differently in the SELECTED CROPS section.

**SOIL TREATMENT USE DIRECTIONS**

Forticept™ EP #3 can be applied by soil drench, in-furrow spray, or soil injection to improve plant health and to protect against certain soil-borne diseases.

In general, Forticept™ EP #3 can be applied by the following methods, unless specified differently in the SELECTED CROPS section:

**Soil Drench Applications:**

Apply Forticept™ EP #3 at a concentration of 12 gallons per 100 gallons of water, and at a sufficient rate to thoroughly soak the growing media and root zone. Make an initial application of Forticept™ EP #3 during or shortly after transplant to reduce transplant shock, suppress soil-borne diseases and improve root growth. Multiple drench applications can be made on a 10 -14 day interval.

**Shanked-In and Injected Applications:**

Forticept™ EP #3 can be shanked-in or injected into the soil alone, or with most types of liquid nutrients.

**In-Furrow Applications:**

At planting, apply Forticept™ EP #3 as an in-furrow spray at the rate of 1 gallon per acre or 8.8 fluid ounces per 1000 feet of row according to the chart below. Apply Forticept™ EP #3 in 5 - 15 gallons of water so as the spray is directed into the seed furrow just before the seeds are covered.

Rate	In-Furrow Application Rates Product per Acre (fl. oz.)					
	30" Rows	32" Rows	34" Rows	36" Rows	38" Rows	40" Rows
26.4 fl. oz. per 1000 ft. row	153.2	144.0	135.2	128.0	121.2	114.8

30" = 17,424 row ft./acre, 32" = 16,315 row ft./acre, 34" = 15,374 row ft./acre, 36" = 14,520 row ft./acre, 38" = 13,754 row ft./acre, 40" = 13,068 row ft./acre.

**APPLICATION RATES FOR SELECTED CROPS**

Forticept™ EP #3 used as specified will improve plant health and reduce or control incidence of the bacterial and fungal diseases listed below.

Forticept™ EP #3 is exempt from tolerances and may be applied as directed to any food or non-food crop up to and including the day of harvest at a rate not exceeding 720 fl. oz. (7.2 oz. active ingredient) per acre per application.

The use rate for Forticept™ EP #3 applied alone, tank mixed, or as an alternate spray is 3 gallons per 29-159 gallons of water (0.625%-3.3% v/v dilution of Forticept™ EP #3) applied at a spray volume of 15 - 100 gallons per acre. Use higher water volumes with larger sized crops and extensive foliage in order to secure thorough coverage. See specific application instructions pertaining to each crop for additional details.

For greenhouse application on the crops and diseases listed, the use rate for Forticept™ EP #3 applied alone, tank mixed, or as an alternate spray is 3 gallons in 29-119 gallons of water (0.833%-3.3% v/v dilution of Forticept™ EP #3) sprayed until just before point of runoff. Repeat at 7-14-day intervals as needed. See specific application instructions for each crop for additional details.

Crop	Target Disease	Application Method	Product Use Rate per Application	Application Instructions
<b>Artichoke</b>	Powdery Mildew ( <i>Erysiphe cichoracearum</i> ) <i>(Leveillula taurica)</i>  Ramularia Leaf Spot ( <i>Ramularia cynarae</i> )	Foliar (Ground)	3 gallons per 29-159 gallons of water (0.625%-3.3% v/v dilution)	Apply at a spray volume sufficient to ensure thorough coverage to the point of runoff - generally 15-25 gallons per acre.  Apply this product preventatively or when the first disease symptoms are visible and reapply every 7 - 14-days.
		Chemigation	3 gallons per 29-159 gallons of water (0.625%-3.3% v/v dilution)	For chemigation applications for improved plant growth and suppression of soil-borne diseases, apply this product through drip irrigation immediately after transplant and at 14-day intervals or begin 14 days after transplant when soil drench applications are used.
<b>Asparagus</b>	Botrytis Blight ( <i>Botrytis cinerea</i> )  Rust ( <i>Puccinia asparagi</i> )	Foliar (Ground)	3 gallons per 29-159 gallons of water (0.625%-3.3% v/v dilution)	Apply at a spray volume sufficient to ensure thorough coverage to the point of runoff - generally 15-25 gallons per acre.  Apply this product preventatively or when the first disease symptoms are visible and reapply every 7 - 14-days.

Crop	Target Disease	Application Method	Product Use Rate per Application	Application Instructions
<p><b>Bushberries and Caneberries</b></p> <p>Blueberry Blackberry (all varieties) Cranberry Currant Elderberry Gooseberry Huckleberry Juneberry Ligonberry Loganberry Raspberry (red and black) Salal and other berry crops</p>	<p>Mummy Berry (<i>Monilinia vaccinii-corymbosi</i>),</p> <p>Alternaria Fruit Rot (<i>Alternaria</i> spp.)</p> <p>Anthracnose Fruit Rot (<i>Colletotrichum acutatum</i>)</p> <p>Bacterial Canker (<i>Pseudomonas syringae</i>)</p> <p>Botrytis Blight (<i>Botrytis cinerea</i>)</p> <p>Leaf Rust (<i>Pucciniastrum vaccinii</i>)</p> <p>Leaf Spot and Blotch (<i>Mycosphaerella</i> spp.) (<i>Septoria</i> spp.)</p> <p>Phomopsis Leaf Spot, Twig Blight, and Fruit Rot (<i>Phomopsis</i> spp.)</p> <p>Powdery Mildew (<i>Microsphaera alni</i>)</p> <p>Spur Blight (<i>Didymella</i> spp.) (<i>Phoma</i> spp.)</p>	<p>Foliar (Ground)</p>	<p>3 gallons per 29-159 gallons of water (0.625%-3.3% v/v dilution)</p>	<p>Apply at a spray volume sufficient to ensure thorough coverage to the point of runoff - generally 15-25 gallons per acre.</p> <p>Apply this product preventatively or when the first disease symptoms are visible and reapply every 7 - 14-days.</p> <p>Mummy Berry – Initiate application at bud break stage of development. Apply this product preventatively and repeat on a 7 - 10-day interval or as needed. For best performance, tank mix this product with other registered fungicides for Mummy Berry control.</p> <p>Botrytis Blight – Apply this product preventatively when the first disease symptoms are visible and reapply every 7 - 14-days.</p> <p>Bacterial Canker – Apply this product prior to Fall rains and repeat applications during dormancy before Spring growth. This product can be tank mixed with another registered fungicide for improved control of bacterial canker.</p> <p>Anthracnose Fruit Rot and Alternaria Fruit Rot on blueberries – Initiate application at green tip and continue applications on a 7 - 10- day.</p>

Crop	Target Disease	Application Method	Product Use Rate per Application	Application Instructions
<p><b>Bulb Vegetables</b></p> <p>Onion (Bulb and Green) Garlic Leek Shallot and other bulb vegetable crops</p>	<p>Botrytis Leaf Blight (<i>Botrytis squamosa</i>)</p> <p>Botrytis Neck Rot (<i>Botrytis</i> spp.)</p> <p>Downy Mildew (<i>Peronospora</i> spp.)</p> <p>Onion Downy Mildew (<i>Peronospora destructor</i>)</p> <p>Onion Purple Blotch (<i>Alternaria porri</i>)</p> <p>Powdery Mildew (<i>Erysiphe</i> spp.)</p> <p>Rust (<i>Puccinia porri</i>)</p> <p>Stemphyllium Leaf Blight (<i>Stemphyllium vesicarium</i>)</p>	Foliar	3 gallons per 29-159 gallons of water (0.625%-3.3% v/v dilution)	<p>Apply at a spray volume sufficient to ensure thorough coverage to the point of runoff - generally 15-25 gallons per acre.</p> <p>Apply this product preventatively or when the first disease symptoms are visible and reapply every 7 - 14-days.</p>
	<p><i>Fusarium</i> spp. <i>Pythium</i> spp. <i>Rhizoctonia</i> spp.</p>	Soil Drench	12 gallons per 100 gallons of water (3.84% v/v dilution)	<p>For soil drench applications, apply this product at a concentration of 12 gallons per 100 gallons of water, and at a sufficient rate to thoroughly soak the growing media and root zone. Make an initial application of this product during or shortly after transplant to reduce transplant shock, suppress soil-borne diseases and improve root growth. Multiple drench applications can be made on a 10 - 14 day interval.</p>

		In-Furrow	3 gallons per acre or 26.4 fluid ounces per 1000 feet of row.	For in-furrow applications, at planting apply this product as an in-furrow spray at the rate of 1 gallon per acre or 26.4 fluid ounces per 1000 feet of row according to the chart in the SOIL TREATMENT USE DIRECTIONS section. Apply this product in 5 - 15 gallons of water so as the spray is directed into the seed furrow just before the seeds are covered.
		Chemigation	3 gallons per 29-159 gallons of water (0.625%-3.3% v/v dilution)	For chemigation applications, apply this product through irrigation at the rate of 1-4 quarts per acre immediately after transplant and at 14-day intervals or begin 14 days after transplant when plant dip or soil drench applications are used.
		Plant Dip	3-6 quarts (96-192 oz.) per 10 gallons water (2.4-4.8% v/v dilution)	For plant dip applications for improved plant growth and suppression of soil-borne diseases, apply this product as a pre-plant dip immediately prior to transplanting.

Crop	Target Disease	Application Method	Product Use Rate per Application	Application Instructions
<b>Cereal Grains</b> Barley Buckwheat Grain Amaranth Milo Oat Millets Rice Rye Sorghum Triticale Wheat and other cereal grain crops	Powdery Mildew ( <i>Erysiphe graminis</i> ) Bacterial Blight and Streak ( <i>Xanthomonas</i> spp.) Brown Rot, Leaf Spots & Smuts ( <i>Ceratobasidium</i> spp.) ( <i>Cercospora</i> spp.) ( <i>Cochliobolus</i> spp.) ( <i>Drechslera</i> spp.)	Foliar (Ground)	3 gallons per 29-159 gallons of water (0.625%-3.3% v/v dilution)	For ground applications to optimize disease control and to maximize yields, apply this product in 15 - 40 gallons of water per acre. It is important to apply this product at the flag leaf stage to maximize yield. Apply this product preventatively or when the first disease symptoms appear. Repeat applications in 7 - 14-day intervals depending upon crop growth and disease pressure. When the plants are under high disease pressure, tank mix this product with another fungicide for more effective control.

	<p>Rice Blast (<i>Pyricularia grisea</i>)</p> <p>Rust (<i>Puccinia</i> spp.)</p> <p>Septoria Leaf Spot (<i>Septoria</i> spp.)</p> <p>Sheath Spot and Blight (<i>Rhizoctonia oryzae</i>) (<i>Thanatephorus cucumeris</i>)</p> <p>Stem Rot (<i>Sclerotium oryzae</i>)</p> <p>Smut (<i>Tilletia barclayana</i>)</p>	Foliar (Aerial)	3 gallons per 5-15 gallons of water (6.25-16.67% v/v dilution)	<p>For aerial applications, apply this product in a minimum of 5 gallons water per acre.</p> <p>It is important to apply this product at the flag leaf stage to maximize yield. Apply this product preventatively or when the first disease symptoms appear. Repeat applications in 7 - 14-day intervals depending upon crop growth and disease pressure.</p> <p>When the plants are under high disease pressure, tank mix this product with another registered fungicide for more effective control.</p>
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Crop	Target Disease	Application Method	Product Use Rate per Application	Application Instructions
<b>Citrus Crops</b>  Orange Grapefruit Lemon Tangelo Tangerine Pummelo and other citrus crops	Bacterial Canker ( <i>Xanthomonas</i> spp.)	Foliar (Ground)	3 gallons per 29-159 gallons of water (0.625%-3.3% v/v dilution)	For ground applications, apply this product preventatively in 50-150 gallons of water per acre.
	Alternaria Brown Spot ( <i>Alternaria alternata</i> )			For improved performance, use this product in a tank mix or rotational program with other registered fungicides.
	Bacterial Blast ( <i>Pseudomonas syringae</i> )			Repeat applications at 7 - 14-day intervals.  Avoid excessive amounts of water that result in the runoff of spray material.
	Black Spot ( <i>Guignardia citricarpa</i> ) ( <i>Phyllosticta citricarpa</i> )	Foliar (Aerial)	3 gallons per 5-15 gallons of water (6.25-16.67% v/v dilution)	For aerial applications, apply this product in a minimum of 5 gallons water per acre.
	Greasy Spot ( <i>Mycosphaerella citri</i> )			For improved performance, use this product in a tank mix or rotational program with other registered fungicides.

	<p>Melanose (<i>Diaporthe citri</i>)</p> <p>Postbloom Fruit Drop (<i>Colletotrichum acutatum</i>)</p> <p>Scab (<i>Elsinoe australis</i>) (<i>Elsinoe fawcetti</i>)</p>			Repeat applications at 7 - 14-day intervals.
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Crop	Target Disease	Application Method	Product Use Rate per Application	Application Instructions
<b>Cole Crops (Brassic)</b>  Broccoli Broccoli Rabe Brussels Sprouts Cabbage Chinese Broccoli Chinese Cabbage (Bok Choy) Chinese Cabbage (Napa) Chinese Mustard Cabbage(Gai Choy) Cauliflower Cavalo Collards Kale Kohlrabi Mizuna Mustard Greens Mustard Spinach Rape Greens Turnip and other cole crops	Powdery Mildew ( <i>Erysiphe cruciferarum</i> ) ( <i>Erysiphe polygoni</i> )	Foliar (Ground)	3 gallons per 29-159 gallons of water (0.625%-3.3% v/v dilution)	Apply at a spray volume sufficient to ensure thorough coverage to the point of runoff - generally 15-25 gallons per acre.
	Alternaria Leaf Spot ( <i>Alternaria</i> spp.)  Downy Mildew ( <i>Peronospora parasitica</i> ) Pin Rot Complex ( <i>Alternaria/Xanthomonas</i> )  Xanthomonas Leaf Spot ( <i>Xanthomonas campestris</i> )	Foliar (Aerial)	3 gallons per 5-15 gallons of water (6.25-16.67% v/v dilution)	For aerial applications, apply this product in a minimum of 5 gallons water per acre.  For improved performance, use this product in a tank mix or rotational program with other registered fungicides.  Repeat applications at 7 - 14-day intervals.

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Crop	Target Disease	Application Method	Product Use Rate per Application	Application Instructions
<b>Corn</b> Sweet Corn Field Corn Popcorn Silage Corn Seed Corn and other corn crops (includes crops grown for seed)	Anthracnose Leaf Blight ( <i>Colletotrichum graminicola</i> )	Foliar (Ground)	3 gallons per 29-159 gallons of water (0.625%-3.3% v/v dilution)	For ground applications to optimize disease control and to maximize yields, apply this product preventatively in 15 - 40 gallons of water per acre prior to disease development using sufficient volume for thorough coverage.  Consult your local Extension Specialist or Crop Consultant regarding the optimum timing of fungicide applications.
	Eye Spot ( <i>Aureobasidium zeae</i> )  Gray leafspot ( <i>Cercospora zeae-maydis</i> )  Rusts ( <i>Puccinia</i> spp.)  Northern Leaf Blight ( <i>Exserohilum turcicum</i> )  Northern Leaf Spot ( <i>Cochliobolus carbonum</i> )  Southern Leaf Blight ( <i>Cochliobolus heterostrophus</i> )	Foliar (Aerial)	3 gallons per 5-15 gallons of water (6.25-16.67% v/v dilution)	For aerial applications, apply this product in a minimum of 5 gallons water per acre.  For improved performance, use this product in a tank mix or rotational program with other registered fungicides.  Repeat applications at 7 - 14-day intervals.

Crop	Target Disease	Application Method	Product Use Rate per Application	Application Instructions
<b>Cotton</b>	Alternaria Leaf Spot, Boll Rot ( <i>Alternaria</i> spp.)  Anthracnose, Boll Rot	Foliar (Ground)	3 gallons per 29-159 gallons of water (0.625%-3.3% v/v dilution)	For ground applications for foliar and Boll Rot disease control, apply this product preventatively in 15 gallons of water per acre prior to disease development using sufficient volume for thorough coverage.



<p>(<i>Glomeria</i> spp.)</p> <p>Ascochyta Blight, Boll Rot (<i>Ascochyta</i> spp.)</p> <p>Cercospora Blight and Leaf Spot (<i>Cercospora</i> spp.)</p> <p>Diplodia Boll Rot (<i>Diplodia</i> spp.)</p> <p>Hard Lock, Boll Rot (<i>Fusarium</i> spp.)</p> <p>Leaf Spot (<i>Corynespora cassicola</i>)</p> <p>Phoma Blight, Boll Rot (<i>Phoma</i> spp.)</p> <p>Rust (<i>Puccinia</i> spp.) (<i>Phykopsora</i> spp.)</p> <p>Stemphyllium Leaf Spot (<i>Stemphyllium</i> spp.)</p>	<p>Foliar (Aerial)</p>	<p>3 gallons per 5-15 gallons of water (6.25-16.67% v/v dilution)</p>	<p>Repeat applications at 7 - 14-day intervals.</p> <p>For aerial applications, apply this product in a minimum of 5 gallons water per acre.</p> <p>For improved performance, use this product in a tank mix or rotational program with other registered fungicides.</p> <p>Repeat applications at 7 - 14-day intervals.</p>
<p><i>Fusarium</i> spp.</p> <p><i>Phytophthora</i> spp.</p> <p><i>Pythium</i> spp.</p> <p><i>Rhizoctonia</i> spp.</p> <p><i>Verticillium</i> spp.</p>	<p>In-Furrow</p>	<p>3 gallons per acre or 26.4 fluid ounces per 1000 feet of row.</p>	<p>For in-furrow applications, at planting apply this product as an in-furrow spray at the rate of 3 gallons per acre or 26.4 fluid ounces per 1000 feet of row according to the chart in the SOIL TREATMENT USE DIRECTIONS section. Apply this product in 5 - 15 gallons of water so as the spray is directed into the seed furrow just before the seeds are covered.</p>

Crop	Target Disease	Application Method	Product Use Rate per Application	Application Instructions
<p><b>Cucurbits</b></p> <p><b>Includes all types and hybrids of:</b>            Chayote            Chinese waxgourd            Cucumber            Citron melon            Gherkin            Pumpkin            Watermelon</p> <p><b>Edible Gourd:</b>            Chinese okra            Cucuzza            Hyotan</p> <p><b>Mormordica spp.:</b>            Balsam apple            Balsam pear            Bitter melon            Chinese cucumber</p> <p><b>Muskmelon:</b>            Cantaloupe            Casaba            Crenshaw melon            Golden pershaw melon            Honeydew melon            Honey balls            Mango melon            Persian melon</p> <p>Pineapple melon            Santa Claus melon            Snake melon</p> <p><b>Summer Squash:</b>            Crookneck squash            Scallop squash</p>	<p>Powdery Mildew (<i>Erysiphe cichoracearum</i>)            (<i>Sphaerotheca fuliginea</i>)</p> <p>Anthracnose (<i>Colletotrichum lagenarium</i>)</p>	<p>Foliar (Ground)</p>	<p>3 gallons per 29-159 gallons of water (0.625%-3.3% v/v dilution)</p>	<p>Apply at a spray volume sufficient to ensure thorough coverage to the point of runoff - generally 15-25 gallons per acre.</p> <p>Apply this product preventatively or when the first disease symptoms are visible and reapply every 7 - 14-days.</p>
	<p>Alternaria Blight (<i>Alternaria cucumerina</i>)</p> <p>Cercospora Leaf Spot (<i>Cercospora citrulina</i>)</p> <p>Damping-off (<i>Fusarium</i> spp.)            (<i>Pythium</i> spp.)            (<i>Phytophthora</i> sp.)            (<i>Rhizoctonia solani</i>)</p> <p>Downy Mildew (<i>Pseudoperonospora cubensis</i>)</p> <p>Gummy Stem Blight (<i>Didymella bryoniae</i>)</p> <p>Phytophthora Blight (<i>Phytophthora capsici</i>)</p>	<p>Foliar (Aerial)</p>	<p>3 gallons per 5-15 gallons of water (6.25-16.67% v/v dilution)</p>	<p>For aerial applications, apply this product in a minimum of 5 gallons water per acre.</p> <p>For improved performance, use this product in a tank mix or rotational program with other registered fungicides.</p> <p>Repeat applications at 7 - 14-day intervals.</p>
	<p><i>Fusarium</i> spp.</p> <p><i>Phytophthora</i> spp.</p> <p><i>Pythium</i> spp.</p> <p><i>Rhizoctonia</i> spp.</p> <p><i>Verticillium</i> spp.</p>	<p>Soil Drench</p>	<p>12 gallons per 100 gallons of water (3.84% v/v dilution)</p>	<p>For soil drench applications, apply this product at a concentration of 12 gallons per 100 gallons of water, and at a sufficient rate to thoroughly soak the growing media and root zone. Make an initial application of this product during or shortly after transplant to reduce transplant shock, suppress soil-borne diseases and improve root growth. Multiple drench</p>

Straightneck squash Vegetable marrow Zucchini  <b>Winter Squash:</b> Acorn squash Butternut squash Calabaza Hubbard squash Spaghetti squash and other cucurbit crops				applications can be made on a 10 - 14 day interval.
	In-Furrow	3 gallons per acre or 26.4 fluid ounces per 1000 feet of row.		For in-furrow applications, at planting apply this product as an in-furrow spray at the rate of 3 gallons per acre or 26.4 fluid ounces per 1000 feet of row according to the chart in the SOIL TREATMENT USE DIRECTIONS section. Apply this product in 5 - 15 gallons of water so as the spray is directed into the seed furrow just before the seeds are covered.
	Plant Dip	3-6 quarts (96-192 oz.) per 10 gallons water (2.4-4.8% v/v dilution)		For plant dip applications for improved plant growth and suppression of soil-borne diseases, apply this product as a pre-plant dip immediately prior to transplanting.
	Chemigation	3 gallons per 29-159 gallons of water (0.625%-3.3% v/v dilution)		For chemigation applications for improved plant growth and suppression of soil-borne diseases, apply this product through drip irrigation immediately after transplant and at 14-day intervals or begin 14 days after transplant when soil drench applications are used.

Crop	Target Disease	Application Method	Product Use Rate per Application	Application Instructions
<b>Fruiting Vegetables</b>  Tomato Pepper Eggplant Ground Cherry Okra Tomatillo and other fruiting vegetable crops	Bacterial Blight ( <i>Xanthomonas</i> spp.)  Bacterial Spot ( <i>Xanthomonas</i> spp.)  Bacterial Speck ( <i>Pseudomonas syringae</i> )  Black Mold	Foliar (Ground)	3 gallons per 29-159 gallons of water (0.625%-3.3% v/v dilution)	For ground applications, apply this product preventatively in 25 - 100 gallons of water per acre. Increase water volume as plant size increases.  Repeat applications at 7 - 10-day intervals.  Tank mix this product with other registered fungicides for improved disease control under heavy pressure.

<p><i>(Alternaria alternata)</i></p> <p>Damping-off <i>(Fusarium spp.)</i> <i>(Pythium spp.)</i> <i>(Rhizoctonia solani)</i></p> <p>Early Blight <i>(Alternaria solani)</i></p> <p>Gray Mold <i>(Botrytis cinerea)</i></p> <p>Late Blight <i>(Phytophthora infestans)</i></p> <p>Phytophthora Blight <i>(Phytophthora capsici)</i></p> <p>Powdery Mildew <i>(Erysiphe spp.)</i> <i>(Leveillula taurica)</i> <i>(Oidopsis taurica)</i> <i>(Sphaerotheca spp.)</i></p> <p>Target Spot <i>(Corynespora cassicola)</i></p>			Phytophthora Blight - Apply this product in combination with labeled rates of a copper fungicide or with another fungicide labeled for Phytophthora Blight control.
	Foliar (Aerial)	3 gallons per 5-15 gallons of water (6.25-16.67% v/v dilution)	<p>For aerial applications, apply this product in a minimum of 10 gallons of water per acre.</p> <p>Repeat applications at 7 - 10-day intervals.</p> <p>Tank mix this product with other registered fungicides for improved disease control under heavy pressure.</p> <p>Phytophthora Blight - Apply this product in combination with labeled rates of a copper fungicide.</p>
<p><i>Fusarium spp.</i></p> <p><i>Phytophthora spp.</i></p> <p><i>Pythium spp.</i></p> <p><i>Rhizoctonia spp.</i></p> <p><i>Verticillium spp.</i></p>	Soil Drench	12 gallons per 100 gallons of water (3.84% v/v dilution)	For soil drench applications, apply this product at a concentration of 12 gallons per 100 gallons of water, and at a sufficient rate to thoroughly soak the growing media and root zone. Make an initial application of this product during or shortly after transplant to reduce transplant shock, suppress soil-borne diseases and improve root growth. Multiple drench applications can be made on a 10 - 14 day interval.
	In-Furrow	3 gallons per acre or 26.4 fluid ounces per 1000 feet of row.	For in-furrow applications, at planting apply this product as an in-furrow spray at the rate of 3 gallons per acre or 26.4 fluid ounces per 1000 feet of row according to the chart in the SOIL TREATMENT USE DIRECTIONS section. Apply this product in 5 - 15 gallons of water so as the spray is

				directed into the seed furrow just before the seeds are covered.
		Plant Dip	3-6 quarts (96-192 oz.) per 10 gallons water (2.4-4.8% v/v dilution)	For plant dip applications for improved plant growth and suppression of soil-borne diseases, apply this product as a pre-plant dip immediately prior to transplanting.
		Chemigation	3 gallons per 29-159 gallons of water (0.625%-3.3% v/v dilution)	For chemigation applications for improved plant growth and suppression of soil-borne diseases, apply this product through drip irrigation immediately after transplant and at 14-day intervals or begin 14 days after transplant when soil drench applications are used.

Crop	Target Disease	Application Method	Product Use Rate per Application	Application Instructions
Grape	Powdery Mildew ( <i>Uncinula necator</i> ) Angular Leaf Spot ( <i>Mycosphaerella angulata</i> ) Anthracnose ( <i>Elsinoe ampelina</i> ) Botrytis Bunch Rot ( <i>Botrytis cinerea</i> ) Black Rot ( <i>Guignardia bidwellii</i> ) Downy Mildew ( <i>Plasmopara viticola</i> ) Eutypa ( <i>Eutypa lata</i> ) Leaf Blight ( <i>Pseudocercospora vitis</i> )	Foliar	3 gallons per 29-159 gallons of water (0.625%-3.3% v/v dilution)	Apply at a spray volume sufficient to ensure thorough coverage to the point of runoff - generally 15-25 gallons per acre.  Apply this product preventatively or when the first disease symptoms are visible and reapply every 7 - 14-days.

	<p>Phomopsis Fruit Rot (<i>Phomopsis viticola</i>)</p> <p>Ripe Rot (<i>Colletotrichum gloeosporioides</i>)</p> <p>Sour Rot (<i>Alternaria tenuis</i>) (<i>Aspergillus spp.</i>) (<i>Botrytis cinerea</i>) (<i>Cladosporium herbarum</i>) (<i>Penicillium spp.</i>) (<i>Rhizopus arrhizus</i>)</p>			
	<p><i>Phytophthora</i> spp.  <i>Verticillium</i> spp.</p>	Plant Dip	2-6 quarts (96-192 oz.) per 10 gallons water (2.4-4.8% v/v dilution)	For plant dip applications for improved plant growth and suppression of soil-borne diseases, apply this product as a pre-plant dip immediately prior to transplanting.

Crop	Target Disease	Application Method	Product Use Rate per Application	Application Instructions
Grass Seed	Powdery Mildew ( <i>Erysiphe graminis</i> ) ( <i>Oidium</i> spp.) ( <i>Podospaera</i> spp.) ( <i>Sphaerotheca</i> spp.)  Rust ( <i>Puccinia</i> spp.)	Foliar (Ground)	3 gallons per 29-159 gallons of water (0.625%-3.3% v/v dilution)	Apply at a spray volume sufficient to ensure thorough coverage to the point of runoff - generally 15-25 gallons per acre.  Apply this product preventatively or when the first disease symptoms are visible and reapply every 7 - 14-days.
		Foliar (Aerial)	3 gallons per 5-15 gallons of water (6.25-16.67% v/v dilution)	For aerial applications, apply this product in a minimum of 5 gallons water per acre.  For improved performance, use this product in a tank mix or rotational program with other registered fungicides.  Repeat applications at 7 - 14-day intervals.

Crop	Target Disease	Application Method	Product Use Rate per Application	Application Instructions
Hops	Downy Mildew ( <i>Pseudoperonospora humuli</i> )  Powdery Mildew ( <i>Sphaerotheca macularis</i> )	Foliar	3 gallons per 29-159 gallons of water (0.625%-3.3% v/v dilution)	<p>Apply this product preventatively when disease symptoms are first visible or when environmental conditions are conducive to rapid disease development. Continue sprays at 7-day intervals or as needed.</p> <p>Minimum spray volumes for hop growth stages are as follows:</p> <p>Emergence to Training: Apply this product using a minimum spray volume of 20 gallons per acre. Coverage will vary with the size of the vines and the type of spray equipment. Apply adequate spray volume to achieve complete spray coverage.</p> <p>Training to Wire-Touch: Apply this product using a minimum spray volume of 50 gallons per acre. Coverage will vary with the size of the vines and the type of spray equipment. Apply adequate spray volume to achieve complete spray coverage.</p> <p>Wire-Touch through Harvest: Apply this product using a minimum of 100 gallons of water per acre. Higher water volumes may be necessary to achieve thorough coverage after side arms develop. Apply adequate spray volume to achieve complete spray coverage. Use the higher rates when moderate to high disease pressure is present or expected.</p>

Crop	Target Disease	Application Method	Product Use Rate per Application	Application Instructions
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<b>Leafy Vegetable Crops</b> Arugula Beet Celery Chervil Cilantro Corn Salad Cress Dandelion Dock Edible Chrysanthemum Endive Fennel Garden Peas Head Lettuce Leaf Lettuce Parsley Purslane Radicchio Rhubarb Spinach Swiss Chard Watercress and other leafy vegetable crops	Downy Mildew <i>(Bremia lactuca)</i> <i>(Peronospora spp.)</i>	Foliar (Ground)	3 gallons per 29-159 gallons of water (0.625%-3.3% v/v dilution)	Apply at a spray volume sufficient to ensure thorough coverage to the point of runoff - generally 15-25 gallons per acre.
	Bacterial Blight/Rot <i>(Xanthomonas spp.)</i> Cercospora leafspot <i>(Cercospora spp.)</i> Late Blight <i>(Septoria apiicola)</i> Pink Rot <i>(Sclerotinia sclerotiorum)</i> Powdery Mildew <i>(Erysiphe cichoracearum)</i> Sclerotinia Head and Leaf Drop <i>(Sclerotinia minor)</i> <i>(Sclerotinia sclerotiorum)</i> White Rust <i>(Albugo occidentalis)</i>	Foliar (Aerial)	3 gallons per 5-15 gallons of water (6.25-16.67% v/v dilution)	Apply this product preventatively or when the first disease symptoms are visible and reapply every 7 - 14-days.  For aerial applications, apply this product in a minimum of 5 gallons water per acre.  For improved performance, use this product in a tank mix or rotational program with other registered fungicides.  Repeat applications at 7 - 14-day intervals.

Crop	Target Disease	Application Method	Product Use Rate per Application	Application Instructions
<b>Legumes/Vegetables</b> (not including soybeans and peanuts)  Chick Peas Dry Beans Garbanzo Beans Green Beans Lentils Lima Beans Peas	Bacterial Blight <i>(Xanthomonas campestris)</i>  Gray Mold <i>(Botrytis cinerea)</i>  Pythium (aerial blight phase) <i>(Pythium spp.)</i>  Powdery Mildew	Foliar	3 gallons per 29-159 gallons of water (0.625%-3.3% v/v dilution)	Apply at a spray volume sufficient to ensure thorough coverage to the point of runoff - generally 15-25 gallons per acre.  Apply this product preventatively or when the first disease symptoms are visible and reapply every 7 - 14-days.



Shell Beans Snap Beans Split Peas and other legume crops (including those grown for seed or oil production)	( <i>Erysiphe</i> spp.)  Rust ( <i>Puccinia</i> spp.) ( <i>Uromyces appendiculatus</i> )  White Mold ( <i>Sclerotinia sclerotiorum</i> )			
	<i>Fusarium</i> spp. <i>Phytophthora</i> spp. <i>Pythium</i> spp. <i>Rhizoctonia</i> spp.	In-Furrow	3 gallons per acre or 26.4 fluid ounces per 1000 feet of row.	For in-furrow applications, at planting apply this product as an in-furrow spray at the rate of 3 gallons per acre or 26.4 fluid ounces per 1000 feet of row according to the chart in the SOIL TREATMENT USE DIRECTIONS section. Apply this product in 5 - 15 gallons of water so as the spray is directed into the seed furrow just before the seeds are covered.

Crop	Target Disease	Application Method	Product Use Rate per Application	Application Instructions
<b>Mint and Other Herbs/Spices</b>  Angelica Balm Basil Borage Burnet Chamomile Catnip Chervil Chive Clary Coriander Costmary Cilantro Curry Dillweed Horehound Hyssop Lavender Lemongrass Lovage Marjoram	Downy Mildew ( <i>Peronospora</i> spp.)	Foliar (Ground)	3 gallons per 29-159 gallons of water (0.625%-3.3% v/v dilution)	Apply at a spray volume sufficient to ensure thorough coverage to the point of runoff - generally 15-25 gallons per acre.
	Powdery Mildew ( <i>Erysiphe</i> spp.)  Rust ( <i>Puccinia menthae</i> )	Foliar (Aerial)	3 gallons per 5-15 gallons of water (6.25- 16.67% v/v dilution)	Apply this product preventatively or when the first disease symptoms are visible and reapply every 7 - 14-days.  For aerial applications, apply this product in a minimum of 5 gallons water per acre.  For improved performance, use this product in a tank mix or rotational program with other registered fungicides.  Repeat applications at 7 - 14-day intervals.

Nasturtium Parsley (dried) Peppermint Rosemary Sage Savory (summer and winter) Sweet Bay Tansy Tarragon Thyme Wintergreen Woodruff Wormwood and other herbs/spices				
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Crop	Target Disease	Application Method	Product Use Rate per Application	Application Instructions
<b>Oil Seed Crops</b> (not including cotton, peanut, or soybean)  Canola Castor Flax Industrial Hemp Rapeseed Safflower Sesame Sunflower And other oilseed crops	Bacterial Pustule ( <i>Xanthomonas</i> spp.)  Bacterial Speck ( <i>Pseudomonas syringae</i> pv. <i>glycinea</i> )	Foliar (Ground)	3 gallons per 29-159 gallons of water (0.625%-3.3% v/v dilution)	Apply at a spray volume sufficient to ensure thorough coverage to the point of runoff - generally 15-50 gallons per acre.  Apply this product preventatively or when the first disease symptoms are visible and reapply every 7 - 14-days.
	Brown Spot ( <i>Septoria glycines</i> )  Cercospora Leaf Spot ( <i>Cercospora</i> spp.)  Downy Mildew ( <i>Peronospora mansherica</i> )  Pod and Stem Blight ( <i>Diaporthe phaseolorum</i> var. <i>sojae</i> ) ( <i>Phomopsis longicola</i> )  White Mold/Sclerotinia Stem Rot	Foliar (Aerial)	3 gallons per 5-15 gallons of water (6.25-16.67% v/v dilution)	For aerial applications, apply this product in a minimum of 5 gallons water per acre.  For improved performance, use this product in a tank mix or rotational program with other registered fungicides.  Repeat applications at 7 - 14-day intervals.

	( <i>Sclerotinia sclerotiorum</i> )			
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Crop	Target Disease	Application Method	Product Use Rate per Application	Application Instructions
Olive	Olive Knot ( <i>Pseudomonas savastanoi</i> )	Foliar	3 gallons per 29-159 gallons of water (0.625%-3.3% v/v dilution)	For ground applications, apply this product preventatively in 50-150 gallons of water per acre.  For improved performance, use this product in a tank mix or rotational program with other registered fungicides.  Repeat applications at 7 - 14-day intervals.  Avoid excessive amounts of water that result in the runoff of spray material.

Crop	Target Disease	Application Method	Product Use Rate per Application	Application Instructions
Peanut	Aspergillus Crown Rot ( <i>Aspergillus niger</i> )  Damping-off ( <i>Aspergillus flavus</i> ) ( <i>Fusarium</i> spp.) ( <i>Pythium</i> spp.) ( <i>Rhizoctonia</i> spp.)  Early Leaf Spot ( <i>Cercospora arachidicola</i> )  Late Leaf Spot	Foliar	3 gallons per 29-159 gallons of water (0.625%-3.3% v/v dilution)	Apply at a spray volume sufficient to ensure thorough coverage to the point of runoff - generally 15-25 gallons per acre.  Apply this product preventatively or when the first disease symptoms are visible and reapply every 7 - 14-days.

	<p><i>(Cerosporidium personatum)</i></p> <p>Rhizoctonia Foliar Blight, Peg, and Root Rot <i>(Rhizoctonia solani)</i></p> <p>White Mold <i>(Sclerotium rolfsii)</i></p>			
	<p>Aspergillus Crown Rot <i>(Aspergillus niger)</i></p> <p><i>Fusarium</i> spp.</p> <p><i>Phytophthora</i> spp.</p> <p><i>Pythium</i> spp.</p> <p><i>Rhizoctonia</i> spp.</p> <p><i>Verticillium</i> spp.</p> <p>White Mold <i>(Sclerotium rolfsii)</i></p>	Soil Drench	12 gallons per 100 gallons of water (3.84% v/v dilution)	For soil drench applications, apply this product at a concentration of 12 gallons per 100 gallons of water, and at a sufficient rate to thoroughly soak the growing media and root zone. Make an initial application of this product during or shortly after transplant to reduce transplant shock, suppress soil-borne diseases and improve root growth. Multiple drench applications can be made on a 10 - 14 day interval.
		In-Furrow	3 gallons per acre or 26.4 fluid ounces per 1000 feet of row.	For in-furrow applications, at planting apply this product as an in-furrow spray at the rate of 3 gallons per acre or 26.4 fluid ounces per 1000 feet of row according to the chart in the SOIL TREATMENT USE DIRECTIONS section. Apply this product in 5 - 15 gallons of water so as the spray is directed into the seed furrow just before the seeds are covered.
<b>Crop</b>	<b>Target Disease</b>	<b>Application Method</b>	<b>Product Use Rate per Application</b>	<b>Application Instructions</b>
<p><b>Pome Fruits</b></p> <p>Apple Crabapple Loquat Oriental Pear Pear Quince Mayhaw and other pome fruit crops</p>	<p>Powdery Mildew <i>(Podosphaera leucotricha)</i></p> <p>Alternaria Blotch <i>(Alternaria mali)</i></p> <p>Apple Scab <i>(Venturia inaequalis)</i></p> <p>Bitter Rot</p>	Foliar	3 gallons per 29-159 gallons of water (0.625%-3.3% v/v dilution)	<p>For ground applications, apply this product preventatively in 50-100 gallons of water per acre.</p> <p>For improved performance, use this product in a tank mix or rotational program with other registered fungicides.</p> <p>Repeat applications at 7 - 14-day intervals.</p>

	<p>(<i>Colletotrichum</i> spp.)</p> <p>Black Rot/Frogeye Leaf Spot (<i>Botryosphaeria obtusa</i>)</p> <p>Bot Rot (<i>Botryosphaeria dothidea</i>)</p> <p>Brooks Spot (<i>Mycosphaerella pomi</i>)</p> <p>Bull's Eye Rot (<i>Neofabraea</i> spp.)</p> <p>Cedar-Apple Rust (<i>Gymnosporangium juniperi-virginianae</i>)</p> <p>Fire Blight (<i>Erwinia amylovora</i>)</p> <p>Flyspeck (<i>Zygophiala jamaicensis</i>)</p> <p>Scab (<i>Venturia</i> spp.)</p> <p>Sooty Blotch (<i>Geastrum polystigmati</i>) (<i>Leptodontium elatius</i>) (<i>Peltaster fructicola</i>)</p> <p>White Rot (<i>Botryosphaeria dothidea</i>)</p>			Avoid excessive amounts of water that result in the runoff of spray material.
	<p><i>Phytophthora</i> spp.</p> <p><i>Pythium</i> spp.</p>	Plant Dip (bare root)	3-6 quarts (96-192 oz.) per 10 gallons water (2.4-4.8% v/v dilution)	For plant dip applications for improved plant growth and suppression of soil-borne diseases, apply this product as a pre-plant dip immediately prior to transplanting.

Crop	Target Disease	Application	Application
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		Method	Product Use Rate per Application	Instructions
<b>Root, Tuber and Corm Crops</b>  Potato Beet Carrot Cassava Ginger Ginseng Horseradish Radish Sweet Potato Turnip and other root crops (including those for seed production)	Bacterial Leaf Blight <i>(Xanthomonas campestris)</i>	Foliar	3 gallons per 29-159 gallons of water (0.625%-3.3% v/v dilution)	Apply at a spray volume sufficient to ensure thorough coverage to the point of runoff - generally 15-25 gallons per acre.  Apply this product preventatively or when the first disease symptoms are visible and reapply every 7 - 14-days.
	Black Root Rot / Black Crown Rot <i>(Alternaria spp.)</i>  Downy Mildew <i>(Peronospora spp.)</i>  Early Blight <i>(Alternaria solani)</i>  Gray Mold <i>(Botrytis spp.)</i>  Late Blight <i>(Phytophthora infestans)</i>  Powdery Mildew <i>(Erysiphe spp.)</i>  White Mold <i>(Sclerotinia sclerotiorum)</i>			
	Clubroot <i>(Plasmodiophora brassicae)</i>  Common Scab <i>(Streptomyces scabies)</i>  <i>Fusarium spp.</i>  <i>Phytophthora spp.</i>	Soil Drench	12 gallons per 100 gallons of water (3.84% v/v dilution)	For soil drench applications, apply this product at a concentration of 12 gallons per 100 gallons of water, and at a sufficient rate to thoroughly soak the growing media and root zone. Make an initial application of this product during or shortly after transplant to reduce transplant shock, suppress soil-borne diseases and improve root growth. Multiple drench applications can be made on a 10 - 14 day interval.

	<i>Pythium</i> spp. <i>Rhizoctonia</i> spp. <i>Verticillium</i> spp.	In-Furrow	3 gallons per acre or 26.4 fluid ounces per 1000 feet of row.	For in-furrow applications, at planting apply this product as an in-furrow spray at the rate of 3 gallons per acre or 26.4 fluid ounces per 1000 feet of row according to the chart in the SOIL TREATMENT USE DIRECTIONS section. Apply this product in 5 - 15 gallons of water so as the spray is directed into the seed furrow just before the seeds are covered.
		Seed Piece Dip	3-6 quarts (96-192 oz.) per 10 gallons water (2.4-4.8% v/v dilution)	For seed piece dip applications for improved plant growth and suppression of soil-borne diseases, apply this product as a pre-plant dip to transplants or seed pieces immediately prior to transplanting.
		Chemigation	3 gallons per 29-159 gallons of water (0.625%-3.3% v/v dilution)	For chemigation applications for improved plant growth and suppression of soil-borne diseases, apply this product through drip irrigation immediately after transplant and at 14-day intervals or begin 14 days after transplant when soil drench applications are used.

Crop	Target Disease	Application Method	Product Use Rate per Application	Application Instructions
Soybean	Aerial Web Blight ( <i>Rhizoctonia solani</i> ) Alternaria Leafspot ( <i>Alternaria</i> spp.) Anthracnose ( <i>Colletotrichum truncatum</i> )	Foliar (Ground)	3 gallons per 29-159 gallons of water (0.625%-3.3% v/v dilution)	Apply at a spray volume sufficient to ensure thorough coverage to the point of runoff - generally 15-25 gallons per acre.  Apply this product preventatively or when the first disease symptoms are visible and reapply every 7 - 14-days.
	Asian Soybean Rust ( <i>Phakopsora pachyrhizi</i> ) Brown Spot ( <i>Septoria glycines</i> )	Foliar (Aerial)	3 gallons per 5-15 gallons of water (6.25-16.67% v/v dilution)	For aerial applications, apply this product in a minimum of 5 gallons water per acre.  For improved performance, use this product in a tank mix or rotational program with other registered fungicides.

	<p>Cercospora Blight (<i>Cercospora kikuchii</i>)</p> <p>Frog-eyed Leaf Spot (<i>Cercospora sojina</i>)</p> <p>Pod and Stem Blight (<i>Diaporthe</i> spp.)</p> <p>Septoria Brown Spot (<i>Septoria glycines</i>)</p> <p>White Mold (<i>Sclerotinia sclerotiorum</i>)</p>			Repeat applications at 7 - 14-day intervals.
	<p><i>Fusarium</i> spp.</p> <p><i>Phytophthora</i> spp.</p> <p><i>Pythium</i> spp.</p> <p><i>Rhizoctonia</i> spp.</p>	In-Furrow	3 gallons per acre or 26.4 fluid ounces per 1000 feet of row.	For in-furrow applications, at planting apply this product as an in-furrow spray at the rate of 3 gallons per acre or 26.4 fluid ounces per 1000 feet of row according to the chart in the SOIL TREATMENT USE DIRECTIONS section. Apply this product in 5 - 15 gallons of water so as the spray is directed into the seed furrow just before the seeds are covered.

Crop	Target Disease	Application Method	Product Use Rate per Application	Application Instructions
<p><b>Stone Fruits</b></p> <p>Apricot Cherry (sweet and tart) Nectarine Peach Plum Plumcot Prune and other stone fruit crops</p>	<p>Alternaria Spot/Fruit Rot (<i>Alternaria alternata</i>)</p> <p>Anthracnose (<i>Colletotrichum</i> spp.)</p> <p>Bacterial Canker (<i>Pseudomonas</i> spp.)</p>	Foliar	3 gallons per 29-159 gallons of water (0.625%-3.3% v/v dilution)	<p>For ground applications, apply this product preventatively in 50-150 gallons of water per acre.</p> <p>For improved performance, use this product in a tank mix or rotational program with other registered fungicides.</p> <p>Repeat applications at 7 - 14-day intervals.</p> <p>Avoid excessive amounts of water that result in the runoff of spray material.</p>



	Bacterial Spot ( <i>Xanthomonas pruni</i> )			
	Brown Rot Blossom Blight ( <i>Monilinia laxa</i> )			
	Brown Rot Fruit Rot ( <i>Monilinia fruticola</i> )			
	Cercospora Leaf Spot ( <i>Cercospora</i> spp.)			
	Cherry Leaf Spot ( <i>Blumeriella jaapii</i> )			
	Gray Mold ( <i>Botrytis cinerea</i> )			
	Powdery Mildew ( <i>Podosphaera</i> spp.) ( <i>Sphaerotheca pannosa</i> )			
	Rust ( <i>Tranzschelia discolor</i> )			
	Rusty Spot ( <i>Podosphaera leucotricha</i> )			
	Scab ( <i>Cladosporium carpophilum</i> )			
	Shot Hole ( <i>Wilsonomyces carpophilus</i> )			

	<i>Fusarium</i> spp. <i>Phytophthora</i> spp. <i>Pythium</i> spp. <i>Rhizoctonia</i> spp. <i>Verticillium</i> spp.	Plant Dip (bare root)	3-6 quarts (96-192 oz.) per 10 gallons water (2.4-4.8% v/v dilution)	For plant dip applications for improved plant growth and suppression of soil-borne diseases, apply this product as a pre-plant dip immediately prior to transplanting.
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Crop	Target Disease	Application Method	Product Use Rate per Application	Application Instructions
Strawberry	Anthracnose ( <i>Collectotrichum</i> spp.) Suppression only  Botrytis ( <i>Botrytis cinerea</i> )  Leaf Spot ( <i>Mycosphaerella fragariae</i> )  Phomopsis Leaf Blight ( <i>Phomopsis obscurans</i> )  Powdery Mildew ( <i>Sphaerotheca macularis</i> )	Foliar	3 gallons per 29-159 gallons of water (0.625%-3.3% v/v dilution)	Apply at a spray volume sufficient to ensure thorough coverage to the point of runoff - generally 15-25 gallons per acre.  Apply this product preventatively or when the first disease symptoms are visible and reapply every 7 - 14-days.
	Black Root Rot ( <i>Rhizoctonia</i> spp.) ( <i>Pythium</i> spp.) ( <i>Fusarium</i> spp.) ( <i>Cylindrocarpon</i> spp.)	Plant Dip	3-6 quarts (96-192 oz.) per 10 gallons water (2.4-4.8% v/v dilution)	For plant dip applications for improved plant growth and suppression of soil-borne diseases, apply this product as a pre-plant dip immediately prior to transplanting.
	Colletotrichum Crown Rot ( <i>Colletotrichum</i> spp.)  Phytophthora Root Rot and Crown Rot	Soil Drench	12 gallons per 100 gallons of water (3.84% v/v dilution)	For soil drench applications, apply this product at a concentration of 12 gallons per 100 gallons of water, and at a sufficient rate to thoroughly soak the growing media and root zone. Make an initial application of this product during or shortly after transplant to reduce transplant shock,

	<i>(Phytophthora spp.)</i> Verticillium Wilt <i>(Verticillium spp.)</i>			suppress soil-borne diseases and improve root growth. Multiple drench applications can be made on a 10 - 14 day interval.
	<i>Fusarium spp.</i> <i>Pythium spp.</i> <i>Phytophthora spp.</i> <i>Rhizoctonia spp.</i> <i>Verticillium spp.</i>	Chemigation	3 gallons per 29-159 gallons of water (0.625%-3.3% v/v dilution)	For chemigation applications for improved plant growth and suppression of soil-borne diseases, apply this product through drip irrigation immediately after transplant and at 14-day intervals or begin 14 days after transplant when soil drench applications are used.

Crop	Target Disease	Application Method	Product Use Rate per Application	Application Instructions
<b>Sugar Beets</b> (includes crop for seed production)	Powdery Mildew <i>(Erysiphe betae)</i> <i>(Erysiphe polygoni)</i>  Leaf Spot <i>(Cercospora beticola)</i>  Ramularia <i>(Ramularia spp.)</i>  Rust <i>(Uromyces betae)</i>	Foliar	3 gallons per 29-159 gallons of water (0.625%-3.3% v/v dilution)	Apply at a spray volume sufficient to ensure thorough coverage to the point of runoff - generally 15-25 gallons per acre.  Apply this product preventatively or when the first disease symptoms are visible and reapply every 7 - 14-days.

Crop	Target Disease	Application Method	Product Use Rate per Application	Application Instructions
<b>Sugarcane</b>	Brown Rust <i>(Puccinia melanocephala)</i>  Orange Rust <i>(Puccinia kuehnii)</i>	Foliar (Ground)	3 gallons per 29-159 gallons of water (0.625%-3.3% v/v dilution)	Apply at a spray volume sufficient to ensure thorough coverage to the point of runoff - generally 15-25 gallons per acre.  Apply this product preventatively or when the first disease symptoms are visible and reapply every 7 - 14-days.

		Foliar (Aerial)	3 gallons per 5-15 gallons of water (6.25- 16.67% v/v dilution)	For aerial applications, apply this product in a minimum of 5 gallons water per acre.  For improved performance, use this product in a tank mix or rotational program with other registered fungicides.  Repeat applications at 7 - 14-day intervals.
	<i>Fusarium</i> spp. <i>Phytophthora</i> spp. <i>Pythium</i> spp. <i>Rhizoctonia</i> spp.	In-Furrow	3 gallons per acre or 26.4 fluid ounces per 1000 feet of row.	For in-furrow applications, at planting apply this product as an in-furrow spray at the rate of 3 gallons per acre or 26.4 fluid ounces per 1000 feet of row according to the chart in the SOIL TREATMENT USE DIRECTIONS section. Apply this product in 5 - 15 gallons of water so as the spray is directed into the seed furrow just before the seeds are covered.

Crop	Target Disease	Application Method	Product Use Rate per Application	Application Instructions
<b>Tobacco</b>	Blue Mold ( <i>Peronospora tabacina</i> )	Foliar	3 gallons per 29-159 gallons of water (0.625%-3.3% v/v dilution)	Apply at a spray volume sufficient to ensure thorough coverage to the point of runoff - generally 15-40 gallons per acre.  Apply this product preventatively or when the first disease symptoms are visible and reapply every 7 - 14-days.
	<i>Fusarium</i> spp. <i>Phytophthora</i> spp. <i>Pythium</i> spp. <i>Rhizoctonia</i> spp. <i>Verticillium</i> spp.	Plant Dip	3-6 quarts (96- 192 oz.) per 10 gallons water (2.4- 4.8% v/v dilution)	For plant dip applications for improved plant growth and suppression of soil- borne diseases, apply this product as a pre-plant dip immediately prior to transplanting.

Crop	Target Disease	Application Method	Product Use Rate per Application	Application Instructions
<p><b>Tree Nut Crops</b></p> <p>Walnut (Black and English) Almond Beech nut Brazil nut Butternut Cashew Chestnut Chinquapin Filbert Hickory nut Macadamia nut Pecan</p>	<p>Walnut Blight (<i>Xanthomonas campestris</i>)</p> <p>Alternaria Late Blight Alternaria Leaf Spot (<i>Alternaria</i> spp.)</p> <p>Anthracnose (<i>Collectotrichum</i> spp.) (<i>Gnomonia leptostyla</i>)</p>	Foliar (Ground)	3 gallons per 29-159 gallons of water (0.625%-3.3% v/v dilution)	<p>For ground applications, apply this product preventatively in 50-150 gallons of water per acre.</p> <p>For improved performance, use this product in a tank mix or rotational program with other registered fungicides.</p> <p>Repeat applications at 7 - 14-day intervals.</p> <p>Avoid excessive amounts of water that result in the runoff of spray material.</p>
<p>Pistachio and other tree nut crops</p>	<p>Bacterial Canker (<i>Erwinia nigrifluens</i>) (<i>Pseudomonas syringae</i>)</p> <p>Botryosphaeria Blight (<i>Botryosphaeria dothidea</i>)</p> <p>Brown Rot (<i>Monilinia</i> spp.)</p> <p>Eastern Filbert Blight (<i>Anisogramma anomala</i>)</p> <p>Green Fruit Rot (<i>Botrytis cinerea</i>)</p> <p>Leaf Rust (<i>Tranzschelia discolor</i>)</p> <p>Scab (<i>Cladosporium carpophilum</i>) (<i>Sphaceloma perseae</i>)</p> <p>Shot Hole</p>	Foliar (Aerial)	3 gallons per 5-15 gallons of water (6.25-16.67% v/v dilution)	<p>For aerial applications, apply this product in a minimum of 5 gallons water per acre.</p> <p>For improved performance, use this product in a tank mix or rotational program with other registered fungicides.</p> <p>Repeat applications at 7 - 14-day intervals.</p>

	<i>(Wilsonomyces carpophilus)</i>			
	<i>Fusarium</i> spp. <i>Phytophthora</i> spp. <i>Pythium</i> spp. <i>Rhizoctonia</i> spp. <i>Verticillium</i> spp.	Plant Dip (bare root)	3-6 quarts (96-192 oz.) per 10 gallons water (2.4-4.8% v/v dilution)	For plant dip applications for improved plant growth and suppression of soil-borne diseases, apply this product as a pre-plant dip immediately prior to transplanting.

Crop	Target Disease	Application Method	Product Use Rate per Application	Application Instructions
<b>Tropical Fruits</b> Avocado Banana Kiwi Mango Papaya Plantain Pineapple Pomegranate and other tropical fruit crops	Anthracnose <i>(Colletotrichum gloeosporioides)</i>	Foliar (Ground)	3 gallons per 29-159 gallons of water (0.625%-3.3% v/v dilution)	Apply at a spray volume sufficient to ensure thorough coverage to the point of runoff - generally 15-150 gallons per acre.
	Bacterial Blight <i>(Pseudomonas syringae)</i> <i>(Pseudomonas viridiflava)</i> Bacterial Canker <i>(Xanthomonas campestris)</i> Botrytis Fruit Rot <i>(Botrytis cinerea)</i> Scab <i>(Elsinoe mangiferae)</i> Sigatoka <i>(Mycosphaerella fijiensis)</i>	Foliar (Aerial)	3 gallons per 5-15 gallons of water (6.25-16.67% v/v dilution)	For aerial applications, apply this product in a minimum of 5 gallons water per acre.  For improved performance, use this product in a tank mix or rotational program with other registered fungicides.  Repeat applications at 7 - 14-day intervals.

	<i>Fusarium</i> spp. <i>Phytophthora</i> spp. <i>Pythium</i> spp. <i>Rhizoctonia</i> spp. <i>Verticillium</i> spp.	Plant Dip	3-6 quarts (96-192 oz.) per 10 gallons water (2.4-4.8% v/v dilution)	For plant dip applications for improved plant growth and suppression of soil-borne diseases, apply this product as a pre-plant dip immediately prior to transplanting.
Forticept™ EP #3 Disease Control Concentrate has a <b>pre-harvest interval (PHI)</b> of <b>0 days</b> . Do not enter or allow worker entry into treated areas during the <b>restricted-entry interval (REI)</b> of <b>0 hours</b> .				

### INTEGRATED PEST MANAGEMENT (IPM)

Many conventional fungicides have been tested in an IPM regime with Forticept™ EP #3 Disease Control Concentrate with very satisfactory results. One of the major objectives of IPM has been to reduce the probability of disease resistance development to a particular active ingredient.

The alternate use of (1-2 sprays) followed by a conventional, registered fungicide (1-2 sprays) has been successfully used in many crops. In addition, the use of tank mixes with a conventional fungicide has also been successful.

Follow label instructions of the particular registered product: Do not exceed amounts or treatment intervals on the label.

### STORAGE AND DISPOSAL

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

**Pesticide Storage:** Store in a cool, dry place. Avoid freezing.

**Pesticide Disposal:** To avoid wastes, use all material in this container by application according to label directions. If wastes cannot be avoided, offer remaining product to a waste disposal facility or pesticide disposal program (often such programs are run by state or local governments or by industry).

**Container Handling (under 5 gallons):** Non-refillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available, or puncture and dispose of in a sanitary landfill or by incineration. Do not burn unless allowed by state and local ordinances.

**Container Handling (over 5 gallons):** Non-refillable container. Do not reuse or refill this container Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling if available, or puncture and dispose of in a sanitary landfill or by incineration. Do not burn unless allowed by state and local ordinances.



Lidan, Inc. is a member of the Ag Container Recycling Council.

Visit <http://www.acrecycle.org/contact.html> for information on how to arrange pick-up of this empty pesticide container.

**IMPORTANT: READ BEFORE USE**

Read the entire Directions for Use, Conditions, Disclaimer of Warranties and Limitations of Liability before using this product. If terms are not acceptable, return the unopened product container at once. By using this product, user or buyer accepts the following Conditions, Disclaimer of Warranties and Limitations of Liability.

**CONDITIONS:** The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Ineffectiveness, plant injury, other property damage, as well as other unintended consequences may result because of factors beyond the control of Lidan, Inc. Those factors include, but are not limited to, weather conditions, presence of other materials or the manner of use or application. All such risks shall be assumed by the user or buyer.

**DISCLAIMER OF WARRANTIES:** To the extent consistent with applicable law, Lidan, Inc. makes no other warranties, express or implied, of merchantability or of fitness for a particular purpose or otherwise, that extend beyond the statements made on this label. To the extent consistent with applicable law, Lidan, Inc. disclaims any liability whatsoever for special, incidental, or consequential damages resulting from the use or handling of this product.

**LIMITATIONS OF LIABILITY:** To the extent consistent with applicable law, the exclusive remedy of the user or buyer for any and all losses, injuries or damages resulting from the use or handling of this product, whether in contract, warranty, tort, negligence, strict liability or otherwise, shall not exceed the purchase price paid, or at Lidan Inc's election, the replacement of product.

Label date:

Made in the U.S.A.

Forticept™ is a trademark of Lidan, Inc.  
Lidan, Inc.'s name and logo are registered trademarks of Lidan, Inc.  
© **Lidan, Inc.**  
30 Wall Street, 8<sup>th</sup> Floor  
New York, NY 10005-2205  
1-212-709-8133



## Sublabel B: Turf & Professional Landscape Use

### Forticept™ EP #3

A botanical based product to protect against certain fungal and bacterial diseases.

Active ingredient: Thyme oil ..... 1 %  
Other ingredients: ..... 99 %  
Total ..... 100 %

**KEEP OUT OF REACH OF CHILDREN**

### CAUTION

FIRST AID	
<b>IF SWALLOWED:</b>	Call 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.
<b>IF ON SKIN OR CLOTHING:</b>	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.
<b>IF INHALED:</b>	Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.
<b>IF IN EYES:</b>	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.
Have the product container or label with you when calling a poison control center or doctor, or if going for treatment.	

LOT #: \_\_\_\_\_

Net Contents: 1 pint, 1 quart, 1 gallon, 2.5 gallon, 5 gallon, 55 gallon drum, 275 gallon tote  
EPA Registration No. 92144-U  
EPA Est. No. 93544-GA-1, 67441-IL-1, 082521-GA-1, 92957-MI-1, 70299-NV-2 , 70299-NV-1

Lidan, Inc., 30 Wall Street, 8<sup>th</sup> Floor, New York, NY 10005-2205

## **PRECAUTIONARY STATEMENTS**

### **HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

**CAUTION:** Avoid contact with skin, eyes, or clothing. Wear goggles or safety glasses. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.

#### **PERSONAL PROTECTIVE EQUIPMENT (PPE)**

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Shoes plus socks
- Waterproof gloves
- Protective eyewear

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

#### **USER SAFETY RECOMMENDATIONS**

- User should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- User should remove PPE immediately after handling this product. As soon as possible, wash thoroughly and change into clean clothing.
- Wash the outside of gloves before removing.

#### **ENVIRONMENTAL HAZARDS**

For terrestrial uses: Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwater or rinsate.

(Use the following additional statement for containers that hold 5 gallons or more: Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.)

#### **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 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 exemptions pertaining to the statements on this label about personal protective equipment (PPE) and the restricted-entry interval (REI). 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 0 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

- Waterproof gloves
- Shoes plus socks
- Protective eyewear

### GENERAL INFORMATION

Forticept™ EP #3 is formulated with thyme oil, a botanical extract. Forticept™ EP #3's proprietary formulation stabilizes the thyme oil, reducing its volatility, improving contact time with plant surfaces, and improving efficacy against target fungal and bacterial pathogens. The product is for bacterial and fungal disease control on ornamental plants, turf, and edible crops. Forticept™ EP #3 applied to actively growing plants (see DIRECTIONS FOR USE) will reduce or control incidence of bacterial and fungal disease and improve plant health. Plant health benefits often result in greater yields and improved crop quality at harvest, especially when crops are stressed by pathogens or environmental conditions. Use Forticept™ EP #3 as a curative application when disease is evident but preventative application is recommended when conditions favor development of bacterial or fungal disease. Apply prior to disease infestation to protect the growing leaf tissue. See specific information for diseases controlled and use rates on ornamental plants, turf, and edible crops.

### MODE OF ACTION

Thyme oil extracted from *Thymus* spp. plant material is a powerful antifungal and antibacterial agent. The extract, when applied to growing crops, controls fungal and bacterial disease organisms by membrane disruption. Forticept™ EP #3 is an improved efficacy formulation using a proprietary stabilization technology to reduce the volatility of the the botanical active, increasing contact time with target disease organisms to reduce or control both bacterial and fungal diseases.

The control of diseases is not systemic, but provides some translaminar protection. Repeat foliar applications at 7 - 14-day intervals to maintain disease control and to protect new plant growth.

Use Forticept™ EP #3 as a preventative or curative treatment.

Crop	Target Disease	Application Method	Product Use Rate per Application	Application Instructions
<b>Ornamentals</b> <b>Herbaceous Ornamentals</b> Flowering Plants Foliage Plants Bedding Plants  <b>Woody Ornamentals</b> Broadleaves, Shrubs and Trees Conifers, Shrubs and Trees	Anthracnose ( <i>Colletotrichum</i> spp.)  Bacteria ( <i>Erwinia</i> spp.) ( <i>Pseudomonas</i> spp.) ( <i>Xanthomonas</i> spp.)  Black Spot of Rose ( <i>Diplocarpon</i> <i>rosae</i> )  Blossom Blight ( <i>Monilinia</i> spp.)	Foliar	3 gallons per 29-159 gallons of water (0.625%-3.3% v/v dilution)	Apply at a spray volume sufficient to ensure thorough coverage to the point of runoff - generally 15-150 gallons per acre.  Apply this product preventatively or when the first disease symptoms are visible and reapply every 7 - 14-days.  Begin applications preventatively (before disease symptoms become visible) at the 4 to 6-leaf stage and treat at 7-14-day intervals as needed prior to sale or harvest. Spray until just before point of runoff.

	<p>Downy Mildew (<i>Peronospora</i> spp.) (<i>Plasmopara viburni</i>)</p> <p>Gray Mold (<i>Botrytis cinerea</i>)</p> <p>Leaf Spot (<i>Alternaria</i> spp.) (<i>Cercospora</i> spp.) (<i>Entomosporium</i> spp.) (<i>Myrothecium</i> spp.) (<i>Septoria</i> spp.)</p> <p>Powdery Mildew (<i>Erysiphe</i> spp.) (<i>Oidium</i> spp.) (<i>Podosphaera</i> spp.) (<i>Sphaerotheca</i> spp.)</p> <p>Rust (<i>Puccinia</i> spp.)</p> <p>Scab (<i>Venturia</i> spp.)</p>			<p>This product may be used to control certain diseases of container, bench, flat, plug, bed, or field-grown ornamentals in <b>greenhouses, shade-houses, outdoor nurseries, retail nurseries</b>, and other <b>landscape areas</b>.</p>
	<p><i>Fusarium</i> spp.</p> <p><i>Phytophthora</i> spp.</p> <p><i>Pythium</i> spp.</p> <p><i>Rhizoctonia</i> spp.</p> <p><i>Verticillium</i> spp.</p>	Soil Drench	12 gallons per 100 gallons of water (3.84% v/v dilution)	For soil drench applications, apply this product at a concentration of 12 gallons per 100 gallons of water, and at a sufficient rate to thoroughly soak the growing media and root zone. Make an initial application of this product during or shortly after transplant to reduce transplant shock, suppress soil-borne diseases and improve root growth. Multiple drench applications can be made on a 10 - 14 day interval.
		Plant Dip	3-6 quarts (96-192 oz.) per 10 gallons water (2.4-4.8% v/v dilution)	For plant dip applications for improved plant growth and suppression of soil-borne diseases, apply this product as a pre-plant dip immediately prior to transplanting.
		Chemigation	3 gallons per 29-159 gallons	For chemigation applications for improved plant growth and

			of water (0.625%-3.3% v/v dilution)	suppression of soil-borne diseases, apply this product through drip irrigation immediately after transplant and at 14-day intervals or begin 14 days after transplant when soil drench applications are used.
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Crop	Target Disease	Application Method	Product Use Rate per Application (per 1,000 sq. ft.)	Product Use Rate per Application (per Acre)	Application Instructions
<b>Turfgrass</b>  Bluegrass Bentgrass Bermudagrass Dichondra Fescue Orchardgrass <i>Poa annua</i> Ryegrass St. Augustine Zoysia mixtures and other grasses  <b>Ornamental Grasses</b>	Anthracnose ( <i>Colletotrichum graminicola</i> )  Bentgrass/Bermudagrass Dead Spot ( <i>Ophiosphaerella EP #3stis</i> )  Bermudagrass Decline ( <i>Gaeumannomyces graminis</i> var. <i>graminis</i> )  Brown patch ( <i>Rhizoctonia solani</i> )  Copper Spot ( <i>Gloeocercospora sorghi</i> )  Dichondra Rust ( <i>Puccinia dichondorae</i> )  Dollar Spot ( <i>Lanzia</i> spp.) ( <i>Moellerodiscus</i> spp. formerly <i>Sclerotinia homeocarpa</i> )  Fusarium Patch ( <i>Fusarium nivale</i> )  Gray Leaf Spot ( <i>Pyricularia grisea</i> )  Melting Out Leaf Spot ( <i>Bipolaris</i> spp.) ( <i>Drechslera</i> spp.)  Necrotic Ring Spot	Foliar	3 gallons per 29-159 gallons of water (0.625%-3.3% v/v dilution), applied at a rate of 1 gallon of spray solution per 1,000 square feet of turf, sod, or ornamental turf.	3 gallons per 29-159 gallons of water (0.625%-3.3% v/v dilution).  Apply at a spray volume sufficient to ensure thorough coverage to the point of runoff - generally 15-50 gallons per acre.	Apply this product preventatively or when the first disease symptoms are visible and reapply every 7 - 14-days.

<p><i>(Leptosphaeria korrae)</i></p> <p>Pink Patch <i>(Limonomyces roseipellis)</i></p> <p>Powdery Mildew <i>(Erysiphe graminis)</i></p> <p>Pythium Blight Pythium Root Rot <i>(Pythium aphanidermatum)</i> <i>(Pythium spp.)</i></p> <p>Red Thread <i>(Laetisaria fuciformis)</i></p> <p>Rust <i>(Puccinia spp.)</i></p> <p>Rhizoctonia Large Patch <i>(Rhizoctonia solani)</i></p> <p>Snowmold, Gray <i>(Typhula spp.)</i></p> <p>Snowmold, Pink <i>(Microdochium nivale)</i></p> <p>Southern Blight <i>(Sclerotium rolfsii)</i></p> <p>Spring Dead Spot <i>(Leptosphaeria korrae)</i> <i>(Leptosphaeria narmari)</i> <i>(Ophiosphaerella herpotricha)</i> <i>(Gaeumannomyces graminis)</i></p> <p>Stripe Smut <i>(Ustilago striiformis)</i> <i>(Urocystis EP #3pyri)</i></p> <p>Summer Bentgrass Decline</p> <p>Summer Patch Poa Patch <i>(Magnaporthe poae)</i></p> <p>Take-All Patch <i>(Gaeumannomyces graminis)</i></p>				
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	Yellow Patch ( <i>Rhizoctonia cerealis</i> )				
	Yellow Tuft/Downy Mildew ( <i>Sclerophthora macrospora</i> )				
	Zoysia Patch ( <i>Rhizoctonia solani</i> )				

**STORAGE AND DISPOSAL**

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

**Pesticide Storage:** Store in a cool, dry place. Avoid freezing.

**Pesticide Disposal:** To avoid wastes, use all material in this container by application according to label directions. If wastes cannot be avoided, offer remaining product to a waste disposal facility or pesticide disposal program (often such programs are run by state or local governments or by industry).

**Container Handling (under 5 gallons):** Non-refillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available, or puncture and dispose of in a sanitary landfill or by incineration. Do not burn unless allowed by state and local ordinances.

**Container Handling (over 5 gallons):** Non-refillable container. Do not reuse or refill this container Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling if available, or puncture and dispose of in a sanitary landfill or by incineration. Do not burn unless allowed by state and local ordinances.



Lidan, Inc. is a member of the Ag Container Recycling Council. Visit <http://www.acrecycle.org/contact.html> for information on how to arrange pick-up of this empty pesticide container.

**IMPORTANT: READ BEFORE USE**

Read the entire Directions for Use, Conditions, Disclaimer of Warranties and Limitations of Liability before using this product. If terms are not acceptable, return the unopened product container at once. By using this product, user or buyer accepts the following Conditions, Disclaimer of Warranties and Limitations of Liability.

**CONDITIONS:** The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product.

Ineffectiveness, plant injury, other property damage, as well as other unintended consequences may result because of factors beyond the control of Lidan, Inc. Those factors include, but are not limited to, weather conditions, presence of other materials or the manner of use or application. All such risks shall be assumed by the user or buyer.

**DISCLAIMER OF WARRANTIES:** To the extent consistent with applicable law, Lidan, Inc. makes no other warranties, express or implied, of merchantability or of fitness for a particular purpose or otherwise, that extend beyond the statements made on this label. To the extent consistent with applicable law, Lidan, Inc. disclaims any liability whatsoever for special, incidental, or consequential damages resulting from the use or handling of this product.

**LIMITATIONS OF LIABILITY:** To the extent consistent with applicable law, the exclusive remedy of the user or buyer for any and all losses, injuries or damages resulting from the use or handling of this product, whether in contract, warranty, tort, negligence, strict liability or otherwise, shall not exceed the purchase price paid, or at Lidan Inc's election, the replacement of product.



## Sublabel C: Home & Garden Use

### Forticept™ EP #3

**Alternate Brand Names:** Forticept™ Agro Disease Control Concentrate, Forticept™ Agro Bactericide/Fungicide Concentrate, Forticept™ Agro EC, Forticept™ Agro Botanical Disease Control Concentrate, Forticept™ HG, Forticept™ Home & Garden Disease Control Concentrate

A botanical based product to protect against certain fungal and bacterial diseases.

Active ingredient: Thyme oil .....2.5 %  
Other ingredients: .....97.5 %  
Total .....100 %

**KEEP OUT OF REACH OF CHILDREN**

### CAUTION

<b>FIRST AID</b>	
<b>IF SWALLOWED:</b>	Call 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.
<b>IF ON SKIN OR CLOTHING:</b>	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.
<b>IF INHALED:</b>	Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.
<b>IF IN EYES:</b>	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.
Have the product container or label with you when calling a poison control center or doctor, or if going for treatment.	

EPA Registration No. 92144-U

EPA Est. No. 93544-GA-1, 67441-IL-1, 082521-GA-1, 92957-MI-1, 70299-NV-2 , 70299-NV-1

Net Contents: 1 pint, 1 quart, 1 gallon

Lidan, Inc., 30 Wall Street, 8<sup>th</sup> Floor, New York, NY 10005-2205

## **PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

**CAUTION:** Avoid contact with skin, eyes, or clothing. Wear goggles or safety glasses. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.

### **PERSONAL PROTECTIVE EQUIPMENT (PPE)**

Applicators and other handlers should wear:

- Long-sleeved shirt and long pants
- Shoes plus socks
- Waterproof gloves
- Protective eyewear

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

## **ENVIRONMENTAL HAZARDS**

For terrestrial uses: Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwater or rinsate.

### **GENERAL INFORMATION**

Forticept™ EP #3 is formulated with thyme oil, a botanical extract. Forticept™ EP #3's proprietary formulation stabilizes the thyme oil, reducing its volatility, improving contact time with plant surfaces, and improving efficacy against target fungal and bacterial pathogens. The product is for bacterial and fungal disease control. It may be used on roses, vegetables, fruits, nuts, flowers, houseplants, foliage, trees, shrubs, lawns, turf, sod and ornamental turf [located in residential landscapes] [located in residential interiorscapes] [located in residential greenhouses]. Forticept™ EP #3 applied to actively growing plants (see DIRECTIONS FOR USE) will reduce or control incidence of bacterial and fungal disease and improve plant health. Plant health benefits often result in greater yields and improved crop quality at harvest, especially when crops are stressed by pathogens or environmental conditions. Use Forticept™ EP #3 as a curative application when disease is evident but preventative application is recommended when conditions favor development of bacterial or fungal disease. Apply prior to disease infestation to protect the growing leaf tissue. See specific information for diseases controlled and use rates on ornamental plants, turf, and edible crops.

[Forticept EP #3 [This product] can be applied up to and on the day of harvest.]

[Forticept EP #3 can be used on the day of harvest and on all fruits and vegetables used in canning or freezing.]

### **MODE OF ACTION**

The oil extracted from *Thymus* spp. plant material is a powerful antifungal and antibacterial agent. The extract, when applied to growing crops, controls fungal and bacterial disease organisms by membrane disruption. Forticept™ EP #3 is an improved efficacy formulation using a proprietary, patented stabilization technology to reduce the volatility of the the botanical active, increasing contact time with target disease organisms to reduce or control both bacterial and fungal diseases.

### **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 State or Tribal agency responsible for pesticide regulation.

### **WHEN TO USE**

- For best results, treat prior to foliar disease development or at the first sign of foliar disease infection.
- Repeat at 7-day intervals or as needed.
- [Under conditions of high disease pressure,] [When environmental conditions favor rapid disease development (high humidity, excessive rain, extreme moisture condition, etc.), spray more often] [Alternate: shorten the spray interval].

**BEFORE YOU USE**

**Read and follow these directions when using:**

- Do not allow spray to drift from application site.
- [[For Pressurized Hand-Held Sprayer and Spray Trigger Bottle Use Only] - Do not allow spray mixture to stand overnight or for prolonged periods.]

**[FOR BEST RESULTS]**

- [Shake Well Before Use.]
- [Spray to ensure thorough coverage.]
- [Repeat at 7-day intervals or as needed.]
- [Under conditions of high disease pressure,] [When environmental conditions favor rapid disease development (high humidity, excessive rain, extreme moisture condition, etc.), spray more often] [Alternate: shorten the spray interval].

[Specific Application Instructions in four groups as appropriate for the type of sprayer]

**[Pressurized Hand-Held Sprayer and Spray Trigger Bottle] [Forticept EP #3 can be applied in commonly used pressurized hand-held sprayers and spray trigger bottles.] [Forticept EP #3 can be used with adjustable hose-end sprayer applicator.]**

**HOW TO USE [Alternate statement: APPLICATION INSTRUCTIONS]**

Shake Well Before Use

Keep spray solution agitated during application.

[If using an adjustable hose-end sprayer applicator, fill reservoir and set output to 12 oz [24 tbs] per gallon of water.]

**HOW MUCH TO USE**

**[For] Fruits, Vegetables, Nuts [(e. g. Apples/Pears, Broccoli, Carrot, Cherries, Cucurbits, Grapes, Leafy Vegetables, Onions/Garlic, Pepper, Tomato, and Walnuts)]:**

Use 12 oz. [24 Tablespoons][1.5 cup] Forticept EP#3 per gallon of water. For quart-sized spray bottles, use 3 oz Forticept EP #3 and fill bottle to total spray volume [32 oz total].

Spray plants to run-off, covering both top and bottom surface of foliage to ensure thorough coverage.

**[For] [Annual and Perennial] Ornamental Plants, Flowers, Flowering Plants, Bedding Plants, Tropical Foliage, Foliage, Trees and Shrubs:**

Use 12 oz. [24 Tablespoons][ 1.5 cup] Forticept EP#3 per gallon of water. For quart-sized spray bottles, use 3 oz Forticept EP #3 and fill bottle to total spray volume.

Spray plants to run-off, covering both top and bottom surface of foliage to ensure thorough coverage.

**[For] Lawns [, Turf, Sod and Ornamental Turf]:**

Use 12 oz. [24 Tablespoons][ 1.5 cup] Forticept EP#3 per gallon of water. For quart-sized spray bottles, use 3 oz Forticept EP #3 and fill bottle to total spray volume.

Apply at a rate of 1 gallon of spray solution per 1,000 square feet of lawn [or Turf, Sod and Ornamental Turf].

**[HOME and GARDEN] [VEGETABLE[S], FRUIT[S] AND NUT[S] PLANTS:]**

**[Artichoke, Asparagus]**

**Berries** (Blueberry, Blackberry, Raspberry, Loganberry, Huckleberry, Cranberry, Gooseberry, Elderberry, Currant, and other berries)

**Brassica Leafy Vegetables** (Broccoli, Cabbage, Cauliflower, Brussels Sprouts, Collards, Kale, Mustard Greens, Kohlrabi and other brassica leafy vegetables)

**Bulb Vegetables** (Onion, Garlic, Shallots and other bulb vegetables)

**Citrus Fruit** (Orange, Grapefruit, Lemon, Tangerine, Tangelo, Pummelo and other citrus fruit)

**Cucurbit Vegetables** (Cucumber, Cantaloupe, Melon, Muskmelon, Squash, Watermelon and other cucurbit vegetables)

**Fruiting Vegetables** (Pepper, Tomato, Eggplant and other fruiting vegetables)

**Grape, Herbs and Spices, Hop**

**Leafy Vegetables** (Lettuce, Celery, Spinach, Parsley, Radicchio and other leafy vegetables)

**Legume Vegetables** (Beans, Green Beans, Snap Beans, Shell Beans, Dry Beans, Garbanzo Beans, Lima Beans, Peas, Chick Peas, Split Peas, Lentils and other legume vegetables)

**Mango, Mint, Olive, Papaya, Peanuts**

**Pome Fruit** (Apple, Crabapple, Pear, Quince, Mayhaw and other pome fruit)

**Root and Tuber Vegetables** (Carrot, Potato, Sweet Potato, Beets, Ginger, Horseradish, Radish, Ginseng, Turnip and other root and tuber vegetables)

**Stone Fruit** (Apricot, Cherry, Nectarine, Peach, Plum, Prune and other stone fruit)

**Strawberry, Sweet Corn, Tobacco, Watercress**

**Tree Nuts** (Almond, Pistachio, Pecan, Walnut, Filberts, Chestnut, Cashew, Beechnut, Butternut and other tree nuts)]

**[RESIDENTIAL] GREENHOUSE PLANTS:]**

**[Brassica Leafy Vegetables** (Broccoli, Cabbage, Cauliflower, Brussels Sprouts, Collards, Kale, Mustard Greens, Kohlrabi and other brassica leafy vegetables)  
**Bulb Vegetables** (Onion, Garlic, Shallots and other bulb vegetables)  
**Cucurbit Vegetables** (Cucumber, Cantaloupe, Melon, Muskmelon, Squash, Watermelon and other cucurbit vegetables)  
**Fruiting Vegetables** (Pepper, Tomato, Eggplant and other fruiting vegetables)  
**Herbs and Spices**  
**Leafy Vegetables** (Lettuce, Celery, Spinach, Parsley, Radicchio and other leafy vegetables)  
**Root and Tuber Vegetables** (Carrot, Potato, Sweet Potato, Beets, Ginger, Horseradish, Radish, Ginseng, Turnip and other root and tuber vegetables)  
**Strawberry]**

**[ORNAMENTALS, TREES, FOLIAGE, SHRUBS, FLOWERS, FLOWERING PLANTS, BEDDING PLANTS, TROPICAL PLANTS:]**

**[Roses]**

[Other Ornamentals, Trees, Shrubs, Foliage, Flowers, Flowering Plants, Tropical Plants, including any or all of the plants listed as evaluated for phytotoxicity as shown below:]

**[PLANTS EVALUATED FOR PHYTOTOXICITY]**

**[Annual and Perennial Flowering Plants:]**

[Alyssum	Asters	Azalea	Begonia	Calla Lily	
Chrysanthemum		Cyclamen	Dianthus	Dwarf Bee-Balm	
Easter Lily	Garden Phlox	Geraniums	Gerbera	Golden Star	
Hydrangea	Impatiens	Kalanchoe	Linaria	Lisianthus	Lobelia
Marigolds	Orchids	Pansies	Petunia	Poinsettia	Portulaca
Ranunculus	Roses	Salvia spp.	Snapdragons	Stock	
Verbena spp.	Vinca	Violas	Zinnias]		

**[Tropical Foliage:]**

[Aglaonema	Dieffenbachia	Dracaena spp.	English Ivy
Hibiscus	Leatherleaf Fern	Spathiphyllum]	

**[Trees and Shrubs:]**

[Azalea	Boxwood	Crape Myrtle	Dogwood
Gumpo	Azalea	Indian Hawthorn	Japanese Maple
Ligustrum japonicum	Lilac	Rhododendron	Loropetalum
Photinia			Rosaceae spp.
Spirea]			Soft Touch Holly

**[ORNAMENTALS, TREES, FOLIAGE, SHRUBS, FLOWERS, FLOWERING PLANTS, BEDDING PLANTS, TROPICAL PLANTS:]**

[Optional Statement: Some pesticides can cause phytotoxic effects, ranging from slight burning or browning of leaves to distorted leaves, fruit, flowers or stems. Damage symptoms may vary with the type of plant that has been treated. It is impossible to test all plants for phytotoxicity. To assure that the plants to be treated are

not sensitive to the treatment, apply a small amount of the highest application rate of the product to a few leaves or the above ground portion of a plant and check within 3 days for signs of phytotoxicity. Use product according to label directions.]

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**DISEASES CONTROLLED [OR SUPPRESSED][OR PREVENTED][BY FORTICEPT EP#1] [ON VEGETABLES, FRUITS, NUTS, ORNAMENTAL PLANTS, TREES, SHRUBS, FOLIAGE, FLOWERS, FLOWERING PLANTS, TROPICAL PLANTS] [Alternate: [ON PLANTS] [SITES] ]**

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Anthraxnose [(*Colletotrichum* spp.)]  
Bacteria [(*Erwinia* spp., *Pseudomonas* spp., *Xanthomonas* spp.)]  
Bacterial Leaf Blight [(*Xanthomonas campestris*)]  
Bacterial Speck [(*Pseudomonas syringae* pv. *tomato*)] Bacterial Spot [(*Xanthomonas* spp.)] - suppression  
Bean Rust [(*Uromyces appendiculatus*)] - suppression  
Black Mold [(*Alternaria alternata*)]  
Black Rot/Black Crown Rot [(*Alternaria* spp.)]  
Black Spot [of Rose] [(*Diplocarpon rosea*)]  
Botrytis [(*Botrytis* spp.)]  
Botrytis Leaf Blight [(*Botrytis squamosa*)]  
Botrytis Neck Rot [(*Botrytis* spp.)]  
Downy Mildew [(*Bremia lactucae*, *Peronospora* spp., and *Plasmopara viticola*)] - suppression  
Early Blight [(*Alternaria solani*)] – suppression  
Fire Blight [(*Erwinia amylovora*)] – suppression  
Gray Mold [(*Botrytis cinerea*)]  
Greasy Spot [(*Mycosphaerella citri*)] - suppression  
Late Blight [(*Phytophthora infestans*)] – suppression  
Leaf Spots [(*Alternaria* spp., *Cercospora* spp., *Entomosporium* spp., *Helminthosporium* spp., *Myrothecium* spp., *Septoria* spp.)]  
Onion Downy Mildew [(*Peronospora destructor*)] Onion Purple Blotch [(*Alternaria porri*)] *Phytophthora* spp.  
Pin Rot [(*Alternaria/Xanthomonas* complex)] - suppression  
Powdery Mildew [(*Uncinula necator*, *Erysiphe* spp., *Sphaerotheca* spp., *Oidiopsis taurica*, *Leveillula taurica*, *Podosphaera leucotricha*, *Oidium* spp., *Podosphaera* spp.)]  
Rust [(*Puccinia* spp.)]  
Scab [(*Venturia* spp.)] - suppression  
Sclerotinia Head and Leaf Drop [(*Sclerotinia* spp.)]  
Sour Rot  
Target Spot [(*Corynespora cassiicola*)]  
Walnut Blight [(*Xanthomonas campestris*)]  
White Mold [(*Sclerotinia sclerotiorum*)] – suppression

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[FORTICEPT EP #3] [MAY BE USED ON LAWNS, TURF, SOD AND ORNAMENTAL TURF] [ALTERNATE STATEMENT: WHERE TO USE][ALTERNATE STATEMENT: USE SITE]

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LAWNS [,TURF] [, SOD] [AND ORNAMENTAL TURF]:

Bluegrass, Bentgrass, Bermudagrass, Dichondra, Fescue, Orchardgrass, Annual Bluegrass (*Poaannua*), St. Augustine, Ryegrass, Zoysia, Mixtures and other grasses or ornamental turf.

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DISEASES CONTROLLED [OR SUPPRESSED] [OR PREVENTED] [BY FORTICEPT EP #3] [ON LAWNS] [, SOD] [,TURF] [AND ORNAMENTAL TURF]

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**Lawn [and Turf], Sod] Diseases:**

Brown Patch [(*Rhizoctonia solani*)]

Dollar Spot [(*Lanzia* spp., *Moellerodiscus* spp., formerly *Sclerotinia homeocarpa*)]

Powdery Mildew [(*Erysiphe graminis*)]

Rust [(*Puccinia* spp.)]

Anthraxnose [(*Colletotrichum graminicola*)]

Red Thread [(*Laetisaria fuciformis*)]

Fairy Ring [(Various *Basidiomycetes*)]

Gray Snow Mold, Typhula Blight [(*Typhula* spp.)]

Pink Snow Mold, Fusarium Patch [(*Microdochium nivale*)]

Pythium Blight [(*Pythium aphanidermatum*)] [(*Pythium* spp.)]]

**STORAGE AND DISPOSAL**

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

**PESTICIDE STORAGE:** Store in original container only. [Alternate: in an area inaccessible to children] [or Alternate: out of reach of children]. Keep container closed when not in use. Store at room temperature.

**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 for disposal instructions. Never place unused product down any indoor or outdoor drain.

**IMPORTANT: READ BEFORE USE**

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**CONDITIONS:** The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Ineffectiveness, plant injury, other property damage, as well as other unintended consequences may result because of factors beyond the control of Lidan, Inc. Those factors include, but are not limited to, weather

conditions, presence of other materials or the manner of use or application. All such risks shall be assumed by the user or buyer.

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30 Wall Street, 8<sup>th</sup> Floor  
New York, NY 10005-2205  
1-212-709-8133

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