



OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

WASHINGTON, D.C. 20460

November 25, 2025

Karen Warkentien
karen@agrospheres.com
AgroSpheres, INC.

Subject: Non-PRIA (Pesticide Registration Improvement Act) Labeling Amendment - Spanish signal word "PELIGRO" is added, the precautionary statements now include "CORROSIVE" after the word "DANGER", and revised the application instructions to state that the application rate of the product per acre is 16-32 fl oz of product/A.
Product Name: Thyme Oil 26% LC
Admin Number: 99869-2
EPA Receipt Date: 10/28/2025
Action Case Number: 00672455

Dear Karen Warkentien:

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

This approval does not affect any terms or conditions that were previously imposed on this registration. You continue to be subject to existing terms or conditions on your registration and any deadlines connected with them.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one (1) copy of the final printed labeling before you release this product for shipment with the new labeling. In accordance with 40 CFR § 152.130(c), you may distribute or sell this product under the previously approved labeling for 18 months from the date of this letter. After 18 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR § 152.3.

The label submitted with the application has been stamped "Accepted Only Indicated Revisions Reviewed" and is enclosed for your records.

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 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 statements or claims substantially differing from statements or claims made in connection with obtaining a FIFRA section 3 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.

If you have questions, please contact Sydnie Vergara via email at vergara.sydnie@epa.gov.

Sincerely,

Gina Burnett, Senior Regulatory Advisor
Biochemical Pesticides Branch, BPPD
Office of Pesticide Programs

MASTER LABEL

Thyme Oil 26% LC

A Botanical Extract for Use as a Biofungicide on All Listed Crops and Diseases

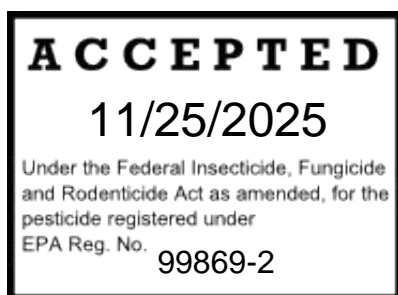
Alternate Brand Names: None

Sublabel A: Field, Greenhouse, Turf, and Landscape Crops [Complete Label—All Uses]

Sublabel B: Field and Greenhouse Crops Only

Sublabel C: Turf and Landscape Crops Only

EPA Reg No: 99869-2



SUBLABEL A: FIELD, GREENHOUSE, TURF, AND LANDSCAPE CROPS

GROUP BM 01 FUNGICIDE

Thyme Oil 26% LC

A Botanical Extract for Use as a Biofungicide on All Listed Crops and Diseases



[OMRI Seal-see last page for optional graphics]

Active Ingredient:

Thyme oil 26%

Other Ingredients: 74%

Total..... 100%

KEEP OUT OF REACH OF CHILDREN

DANGER – PELIGRO

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

FIRST AID

IF IN EYES:	Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.
IF ON SKIN OR CLOTHING:	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
Have the product container or label with you when calling a poison control center or doctor, or if going for treatment.	

Manufactured [By][For]



AgroSpheres, Inc.
1180 Seminole Trail, Suite 100
Charlottesville VA 22901

EPA Reg. No. 99869-2

EPA Est. No. _____

[Lot][Batch]: _____

Net Contents:

ESL _____

Ver. _____

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

DANGER: CORROSIVE. Causes irreversible eye injury. Harmful if absorbed through skin. Do not get in eyes or on clothing. Avoid contact with skin, eyes, or clothing. Wear eye protection (safety glasses, goggles, or face shield). Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

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

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

- Users should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Users should remove PPE immediately after handling this product. 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.

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 48 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
- Eye protection
- Waterproof gloves
- Shoes plus socks

NON-AGRICULTURAL USE REQUIREMENTS

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

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

PRODUCT INFORMATION

Thyme Oil 26% LC is a fungicide-bactericide for the control of various plant diseases on all agricultural crops (including those grown for seed), greenhouse crops (including those grown in shade houses, lath houses, and controlled environments), and/or turf and ornamentals. Thyme Oil 26% LC contains a botanical extract from the herb, thyme (*Thymus* spp.), that controls and/or suppresses listed fungal and bacterial disease organisms. Thyme oil is non-systemic and acts by membrane disruption. The oil disrupts the cell walls and cell membranes while inhibiting cell division and replication of the fungal disease organisms effectively stopping the spread of disease.

This product is formulated with AgroSpheres® proprietary adjuvant, AgroSpheres® Microbially-Derived Minicells, which microencapsulates the oil, improving product stability, longevity, and enhancing efficacy against target fungal and bacterial pathogens. AgroSpheres® adjuvant slows the release of the thyme oil by up to two weeks after which the oil and the AgroSpheres® naturally degrade in soil and air.

For best results, use this product as a preventative treatment before onset of disease to protect the growing leaf tissue. This product can also be used as a curative treatment after disease is already present. See specific information for diseases controlled and use rates on ornamental plants, shrubs, trees, turf, and edible crops.

MIXING INSTRUCTIONS

SHAKE WELL BEFORE USE

Use 100-mesh nozzle screens or larger. Use higher water volumes with larger sized crops and extensive foliage to secure thorough coverage. Prepare only the amount of spray mix that is required for the immediate operation. Do not allow the mixture to stand overnight in the spray tank.

See CHEMIGATION, PLANT DIP, SEED TREATMENT, and SOIL TREATMENT sections for specific application directions.

Stand-alone use: Fill the mix tank halfway full of water. Begin agitation, then add product to the mix tank, followed by the remainder of water. Continue mixing until product has completely dispersed into the mix water. Maintain agitation during application until all the mixture has been applied.

Tank-mixtures: Fill the mix tank half- to three-quarters full of water. Turn on agitation before adding any tank mix partners and maintain constant agitation throughout the mixing and application process. Recommended order of addition of tank-mix partners is as follows: wettable powders, dry flowable formulations, liquid flowable formulations, and emulsifiable formulations. Ensure complete dispersion of each tank-mix partner before adding the next component. After all desired components have been added and are completely dispersed, add the remainder of water. **Do not pre-mix with any other tank mix component prior to adding to the spray tank.**

Use tank mixes only in states where the tank mix product and application site are registered. Do not mix with another product that prohibits such mixing. Do not exceed any label dosage rates. Read and follow all label directions for tank mix partners for specific application rates, application timing, and precautions. Use of the tank mix must be in accordance with the more restrictive label limitations and precautions of all products used in the mixture.

Compatibility: This product is compatible with many commonly used pesticides, fertilizers, adjuvants, and surfactants, but has not been evaluated for all potential combinations. To ensure compatibility, conduct a "jar test." Using a suitable container, add the proportional amounts of product to water using the recommended addition order outlined above. 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. Do not combine this product 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.

APPLICATION DIRECTIONS AND USE RATES

This product, when used as directed, reduces and/or controls incidence of the bacterial and fungal diseases listed below. Thyme oil is exempt from the requirement of a tolerance on all food and feed crops and commodities and may be applied to any food or non-food crop up to and including the day of harvest (pre-harvest interval = 0 days).

Thorough and uniform coverage is essential for effective disease control. Apply adequate spray volume to achieve complete spray coverage. Use higher water volumes with larger sized crops and extensive foliage to ensure thorough coverage. See specific application instructions pertaining to each crop for additional details.

The higher rates in the rate range or shorter spray intervals may be required under conditions of heavy infection pressure, highly susceptible varieties, or when disease conducive environmental conditions exist. FAILURE TO FOLLOW THE DIRECTIONS AND PRECAUTIONS ON THIS LABEL MAY RESULT IN POOR DISEASE CONTROL, AND/OR CROP INJURY. Applications may be made at longer spray intervals under low to moderate disease pressure.

FOLIAR TREATMENT INSTRUCTIONS

This product can be applied foliarly by ground or air to protect against listed diseases. The following use rates are recommended unless specified differently in the **CROPS** section:

GROUND APPLICATION

Apply through most commonly-used ground equipment including tractor-mounted boom, airblast, high clearance, hose-end, backpack, and/or other pressurized sprayers; hose-end or hand-held sprayers; foggers or mist blowers; water wheel and other drench applicators; and shank or other soil injection method

- Application Rate: 16 to 32 fl oz of product/A
- Recommended Dilution: 50 to 160 gal of water.

FINISHED SPRAY: APPLY A MINIMUM OF 50 GAL/A OF FINISHED SPRAY FOR TREE AND VINE CROPS AND A MINIMUM OF 15 GAL/A OF FINISHED SPRAY FOR FIELD AND VEGETABLE CROPS. AERIAL APPLICATION

Apply by fixed- or rotary-winged aircraft or drone.

- Application Rate: 16 to 32 fl oz of product/A
- Recommended Dilution: 5 to 15 gal of water.
- Finished Spray: Apply a minimum of 15 gal/A of finished spray for tree and vine crops and 5 gal/A of finished spray for field and vegetable crops. Use standard precautions to minimize spray drift.

CHEMIGATION

This product can be applied 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.

- Application Rate: Apply 5 to 22 fl oz product/A according to the instructions in the **CHEMIGATION** section below.

PLANT DIP (SEED PIECE) INSTRUCTIONS

Apply 4 to 8 fl oz product per 10 gal of water as a pre-plant dip immediately prior to transplanting, unless specified differently in the **CROPS** section

SOIL TREATMENT INSTRUCTIONS

This product can be applied as a soil drench, in-furrow spray, or soil injection to protect against certain soil-borne diseases. The following use rates are recommended unless specified differently in the **CROPS** section:

SOIL DRENCH APPLICATIONS:

Dilute ½ gal of product in 100 gal of water (1 qt in 50 gal) and apply at a sufficient rate to thoroughly soak the growing media and root zone.

SHANKED-IN AND INJECTED APPLICATIONS:

This product can be shanked-in or injected into the soil either alone or with most types of liquid nutrient products.

IN-FURROW APPLICATIONS:

Apply as an in-furrow spray at planting at a rate of 14 fl oz product/A or 1 fl oz/1,000 row feet according to the chart below. Apply in minimal water (5 to 15 gal of water is recommended) and direct the spray into the seed furrow just before the seeds are covered.

Rate/1,000 row ft	In-Furrow Application Rates Product per Acre (fl oz)					
	30" Rows (17,424 row ft/A)	32" Rows (16,315 row ft/A)	34" Rows (15,374 row ft/A)	36" Rows (14,520 row ft/A)	38" Rows (13,754 row ft/A)	40" Rows (13,068 row ft/A)
1.0 fl oz	17.4 fl oz	16.3 fl oz	15.4 fl oz	14.5 fl oz	13.75 fl oz	13 fl oz

GREENHOUSE APPLICATION

For greenhouse application on the crops and diseases listed:

- Application Rate: 16 to 32 fl oz of product
- Dilution Rate: 60 to 160 gal of water
- Spray Directions: Spray until just before point of runoff. Repeat at 7- to 14-day intervals as needed. See specific application instructions for each crop for additional details.

ORNAMENTAL PLANTS, SHRUBS, TREES, GRASSES, AND TURF GRASSES

- Application Rate: 16 to 32 fl oz of product/A
- Dilution Rate: 60 to 160 gal of water
- Finished Spray: Apply at 15 to 50 gal/A of finished spray (1 gal/1,000 ft²).

ROTATIONAL CROPS

There are no restrictions concerning rotation of crops. Follow a crop rotation program that maintains or builds soil organic matter, works to control pests, manages and conserves nutrients, and protects against erosion.

INTEGRATED PEST MANAGEMENT (IPM)

This product can be used in an IPM program with other conventional fungicides as part of a resistance management strategy. Alternating use of this product followed by conventional fungicides or used in tank mixes aids in resistance management. Follow all label instructions for each registered product taking care not to exceed amounts or treatment intervals on the label.

This product may be used with disease forecasting or Extension advisory programs that recommend application timings based on environmental factors favorable to disease development. Consult with your agricultural advisor, University contact or Extension Service for IPM strategies established for your area.

FIELD AND GREENHOUSE FOOD AND FEED CROPS

Berry and Small Fruit (Crop Group 13-07)		
Bushberry (13-07B); Caneberry (13-07A); Low Growing Berry (13-07G); Small Fruit Vine Climbing (13-07D); cultivars, varieties, and/or hybrids of these.		
Disease	Application Method	Application Instructions
<u>Bushberry (13-07B)</u> Aronia berry; blueberry, highbush; blueberry, lowbush; buffalo currant; Chilean guava; cranberry, highbush; currant, black; currant, red; elderberry; European barberry; gooseberry; honeysuckle, edible; huckleberry; jostaberry; Juneberry (Saskatoon berry); lingonberry; native currant; salal; sea buckthorn; cultivars, varieties, and/or hybrids of these. <u>Caneberry (13-07A)</u> Blackberry; loganberry; raspberry, black and red; wild raspberry; cultivars, varieties, and/or hybrids of these.		
Alternaria Fruit Rot (<i>Alternaria</i> spp.) Anthracnose Fruit Rot (<i>Colletotrichum acutatum</i>) Bacterial Canker (<i>Pseudomonas syringae</i>) Botrytis Blight (<i>Botrytis cinerea</i>) Leaf Rust (<i>Pucciniastrum vaccinii</i>) Leaf Spot and Blotch (<i>Mycosphaerella</i> spp., <i>Septoria</i> spp.) Mummy Berry (<i>Monilinia vaccinii-corymbosi</i>) Phomopsis Leaf Spot, Twig Blight, and Fruit Rot (<i>Phomopsis</i> spp.)	Foliar	Apply to runoff. Apply preventatively or when the first disease symptoms are visible. Reapply every 7 to 14 days, as needed. <u>Anthracnose Fruit Rot and Alternaria Fruit Rot on Blueberries</u> : Apply at green tip and continue treatment every 7 to 10 days, as needed. <u>Bacterial Canker</u> : Apply prior to Fall rains and repeat applications during dormancy before Spring growth. For improved control, tank mix with another registered fungicide approved for this use. <u>Mummy Berry</u> : Apply at bud break. Apply preventatively. Reapply every 7 to 14 days, as needed. For improved control, tank mix with another registered fungicide approved for this use.
<u>Low Growing Berry (13-07G)</u> Bearberry; bilberry; blueberry, lowbush; cloudberry; cranberry; lingonberry; muntries; partridgeberry; strawberry; cultivars, varieties, and/or hybrids of these.		
Anthracnose (<i>Colletotrichum</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	Apply to runoff. Apply preventatively or when the first disease symptoms are visible. Reapply every 7 to 14 days, as needed.
Black Root Rot (<i>Rhizoctonia</i> spp., <i>Pythium</i> spp., <i>Fusarium</i> spp., <i>Cylindrocarpon</i> spp.) Colletotrichum Crown Rot (<i>Colletotrichum</i> spp.) Phytophthora Root Rot and Crown Rot (<i>Phytophthora</i> spp.) Verticillium Wilt (<i>Verticillium</i> spp.)	Plant Dip	Apply immediately prior to transplanting for improved plant growth and suppression of soil-borne diseases.
	Soil Drench	Thoroughly soak growing media and root zone. Apply during or shortly after transplant to reduce transplant shock, suppress soil-borne diseases, and improve root growth. Reapply every 10 to 14 days, as needed.
<i>Fusarium</i> spp. <i>Pythium</i> spp. <i>Phytophthora</i> spp. <i>Rhizoctonia</i> spp. <i>Verticillium</i> spp.	Chemigation	Apply through drip irrigation immediately after transplant and at 14-day intervals, as needed. Alternatively, apply 14 days after transplant when soil drench applications are used.

Berry and Small Fruit (Crop Group 13-07)		
Bushberry (13-07B); Caneberry (13-07A); Low Growing Berry (13-07G); Small Fruit Vine Climbing (13-07D); cultivars, varieties, and/or hybrids of these.		
Disease	Application Method	Application Instructions
Small Fruit Vine Climbing (13-07D)		
Amur river grape; gooseberry; grape; kiwifruit, fuzzy; kiwifruit, hardy; maypop; schisandra berry; cultivars, varieties, and/or hybrids of these.		
Angular Leaf Spot (<i>Mycosphaerella angulata</i>) Anthrachnose (<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>) Phomopsis Fruit Rot (<i>Phomopsis viticola</i>) Powdery Mildew (<i>Uncinula necator</i>) Ripe Rot (<i>Colletotrichum gloeosporioides</i>) Sour Rot (<i>Alternaria tenuis</i> , <i>Aspergillus</i> spp., <i>Botrytis cinerea</i> , <i>Cladosporium herbarum</i> , <i>Penicillium</i> spp., <i>Rhizopus arrhizus</i>)	Foliar	Apply to runoff. Apply preventatively or when the first disease symptoms are visible. Reapply every 7 to 14 days, as needed.
<i>Phytophthora</i> spp. <i>Verticillium</i> spp.	Plant Dip	Apply immediately prior to transplanting for improved plant growth and suppression of soil-borne diseases.

Brassica (Cole) Head and Stem Vegetables (Crop Group 5-16) Broccoli; Brussels sprouts; cabbage; cabbage, Chinese, napa; cauliflower; cultivars, varieties, and hybrids of these commodities.		
Disease	Application Method	Application Instructions
Alternaria Leaf Spot (<i>Alternaria</i> spp.) Downy Mildew (<i>Peronospora</i> spp.) Pin Rot Complex (<i>Alternaria/Xanthomonas</i>) Powdery Mildew (<i>Erysiphe</i> spp.) Xanthomonas Leaf Spot (<i>Xanthomonas campestris</i>)	Foliar	Apply in sufficient water to ensure thorough coverage to the point of runoff. Apply preventatively or when the first disease symptoms are visible. Reapply every 7 to 14 days, as needed. For improved performance, use in a tank mix or rotational program with other registered fungicides approved for this use.

Bulb Vegetables (Crop Group 3-07)		
Chive, fresh leaves; chive, Chinese, fresh leaves; daylily, bulb; elegans hosta; fritillaria, bulb; fritillaria, leaves; garlic, bulb; garlic, great-headed, bulb; garlic, serpent, bulb; kurrat; lady's leek; leek; leek, wild; lily, bulb; onion, Beltsville bunching; onion, bulb; onion, Chinese, bulb; onion, fresh; onion, green; onion, macrostem; onion, pearl; onion, potato, bulb; onion, tree, tops; onion, Welsh, tops; shallot, bulb; shallot, fresh leaves; cultivars, varieties, and/or hybrids of these.		
Disease	Application Method	Application Instructions
Botrytis Leaf Blight (<i>Botrytis squamosa</i>) Botrytis Neck Rot (<i>Botrytis</i> spp.) Downy Mildew (<i>Peronospora</i> spp.) Onion Purple Blotch (<i>Alternaria porri</i>) Powdery Mildew (<i>Erysiphe</i> spp.) Rust (<i>Puccinia porri</i>) Stemphyllium Leaf Blight (<i>Stemphyllium vesicarium</i>)	Foliar	Apply to the point of runoff. Apply preventatively or when the first disease symptoms are visible. Reapply every 7 to 14 days, as needed.
<i>Fusarium</i> spp. <i>Pythium</i> spp. <i>Rhizoctonia</i> spp.	Soil Drench	Thoroughly soak growing media and root zone. Apply during or shortly after transplant to reduce transplant shock, suppress soil-borne diseases, and improve root growth. Reapply every 10 to 14 days, as needed.
	In-Furrow	Direct spray into seed furrow just before covering seeds. See SOIL TREATMENT section for further information.
	Chemigation	Apply at 1-4 qt product/A immediately after transplant. Repeat at 14-day intervals, as needed. Alternatively, begin 14 days after transplant when plant dip or soil drench applications are used. See CHEMIGATION section for further information.
	Plant Dip	Apply immediately prior to transplanting for improved plant growth and suppression of soil-borne diseases.

Cereal Grains (Crop Group 15-22) including Forage, Hay, Stover and Straw (Crop Group 16-22) Amaranth, grain and purple; baby corn; barley; buckwheat (including tartary); canarygrass (annual); canihua; chia; corn (field and sweet); cram cram; fonio (black and white); grain sorghum; huauzontle grain; Inca wheat; Job's tears; millet (all); oat (all); popcorn; prince's feather; psyllium (including blond); quinoa; rice (all); rye; teff; teosinte; triticale; wheat (all); wild rice (including eastern); cultivars, varieties, and/or hybrids of these commodities; and forage, hay, stover and straw of these commodities.		
Disease	Application Method and Rates/Acre	Application Instructions
All listed crops EXCEPT Corn		
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.) Powdery Mildew (<i>Erysiphe graminis</i>) Rice Blast (<i>Pyricularia grisea</i>) Rust (<i>Puccinia</i> spp.) Septoria Leaf Spot (<i>Septoria</i> spp.) Sheath Spot and Blight (<i>Rhizoctonia oryzae</i> , <i>Thanatephorus cucumeris</i>)	Foliar	Apply at flag leaf stage to maximize yield. Apply preventatively or when the first disease symptoms appear. Reapply every 7 to 14 days, as needed, depending on crop growth and disease pressure. When plants are under high disease pressure, tank mix with another fungicide for more effective control. <u>Recommended spray volume by ground:</u> 15 to 40 gal of finished spray/A.
Corn ONLY		
Anthrachnose Leaf Blight (<i>Colletotrichum graminicola</i>) 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>Cochliobus carbonum</i>) Southern Leaf Blight (<i>Cochliobolus heterostrophus</i>)	Foliar	Consult your local Extension Specialist or Crop Consultant regarding the optimum timing of fungicide applications. For improved performance, tank mix or use in rotation with other registered fungicides approved for this use. Reapply every 7 to 14 days, as needed.

Citrus Fruits (Crop Group 10-10)		
Australian desert lime; Australian finger-lime; Australian round lime; Brown River finger lime; calamondin; citron; citrus hybrids; grapefruit; Japanese summer grapefruit; kumquat; lemon; lime; Mediterranean mandarin; mount white lime; New Guinea wild lime; orange, sour; orange, sweet; pummelo; Russell River lime; satsuma mandarin; sweet lime; tachibana orange; Tahiti lime; tangelo; tangerine (mandarin); tangor; trifoliate orange; uniq fruit; cultivars, varieties, and/or hybrids of these.		
Disease	Application Method	Application Instructions
Alternaria Brown Spot (<i>Alternaria alternata</i>) Bacterial Blast (<i>Pseudomonas syringae</i>) Bacterial Canker (<i>Xanthomonas</i> spp.) Black Spot (<i>Guignardia citricarpa</i> , <i>Phyllosticta citricarpa</i>) Greasy Spot (<i>Mycosphaerella citri</i>) Melanose (<i>Diaporthe citri</i>) Postbloom Fruit Drop (<i>Colletotrichum acutatum</i>) Scab (<i>Elsinoe australis</i> , <i>Elsinoe fawcetti</i>)	Foliar	Apply preventatively before disease is evident. For improved performance, tank mix or use in rotation with other registered fungicides approved for this use. Reapply every 7 to 14 days, as needed. Avoid excessive amounts of dilution water, which may cause runoff of spray material.

Cucurbit Vegetables (Crop Group 9)		
Chayote (fruit); Chinese waxgourd (Chinese preserving melon); citron melon; cucumber; gherkin; gourd, edible (includes hyotan, cucuzza, hechima, Chinese okra); Momordica spp. (includes balsam apple, balsam pear, bittermelon, Chinese cucumber); muskmelon (includes true cantaloupe, cantaloupe, casaba, crenshaw melon, golden pershaw melon, honeydew melon, honey balls, mango melon, Persian melon, pineapple melon, Santa Claus melon and snake melon); pumpkin; squash, summer (includes crookneck squash, scallop squash, straightneck squash, vegetable marrow, zucchini); squash, winter (includes butternut squash, calabaza, hubbard squash, acorn squash, spaghetti squash); watermelon; cultivars, varieties, and/or hybrids of these.		
Disease	Application Method	Application Instructions
<i>Alternaria</i> Blight (<i>Alternaria cucumerina</i>) Anthrachnose (<i>Colletotrichum lagenarium</i>) Cercospora Leaf Spot (<i>Cercospora citrulina</i>) Damping-off (<i>Fusarium</i> spp., <i>Pythium</i> spp., <i>Phytophthora</i> spp., <i>Rhizoctonia solani</i>) Downy Mildew (<i>Pseudoperonospora cubensis</i>) Gummy Stem Blight (<i>Didymella bryoniae</i>) Phytophthora Blight (<i>Phytophthora capsici</i>) Powdery Mildew (<i>Erysiphe cichoracearum</i> , <i>Sphaerotheca fuliginea</i>)	Foliar	Apply to the point of runoff. Apply preventatively or when the first disease symptoms are visible. Reapply every 7 to 14 days, as needed. For improved performance, tank mix or use in rotation with other registered fungicides approved for this use.
<i>Fusarium</i> spp. <i>Phytophthora</i> spp. <i>Pythium</i> spp. <i>Rhizoctonia</i> spp. <i>Verticillium</i> spp.	Soil Drench	Thoroughly soak growing media and root zone. Apply during or shortly after transplant to reduce transplant shock, suppress soil-borne diseases, and improve root growth. Reapply every 10 to 14 days, as needed.
	In-Furrow	Direct spray into seed furrow just before covering seeds. See SOIL TREATMENT section for further information.
	Plant Dip	Apply immediately prior to transplanting for improved plant growth and suppression of soil-borne diseases.
	Chemigation	Apply immediately after transplant. Repeat at 14-day intervals, as needed. Alternatively, begin 14 days after transplant when plant dip or soil drench applications are used. See CHEMIGATION section for further information.

Fruiting Vegetables (Crop Group 8-10)		
African eggplant; bush tomato; bell pepper; cocona; currant tomato; eggplant; garden huckleberry; goji berry; groundcherry; martynia; naranjilla; okra; pea eggplant; pepino; non-bell pepper; roselle; scarlet eggplant; sunberry; tomatillo; tomato; tree tomato; cultivars, varieties, and/or hybrids of these.		
Disease	Application Method	Application Instructions
Bacterial Blight (<i>Xanthomonas</i> spp.) Bacterial Spot (<i>Xanthomonas</i> spp.) Bacterial Speck (<i>Pseudomonas syringae</i>) Black Mold (<i>Alternaria alternata</i>) Damping-off (<i>Fusarium</i> spp., <i>Pythium</i> spp., <i>Rhizoctonia solani</i>) Early Blight (<i>Alternaria solani</i>) Gray Mold (<i>Botrytis cinerea</i>) Late Blight (<i>Phytophthora infestans</i>) Phytophthora Blight (<i>Phytophthora capsici</i>) Powdery Mildew (<i>Erysiphe</i> spp., <i>Leveillula taurica</i> , <i>Oidopsis taurica</i> , <i>Sphaerotheca</i> spp.) Target Spot (<i>Corynespora cassicola</i>)	Foliar	Apply preventatively. Increase water volume as plant size increases. Reapply every 7 to 14 days, as needed. Under heavy pressure, tank mix or use in rotation with other registered fungicides approved for this use for improved performance. <u>Phytophthora Blight</u> : Apply in combination with labeled rates of a copper fungicide or another fungicide labeled for <i>Phytophthora</i> Blight control. Reapply every 7 to 14 days, as needed.
<i>Fusarium</i> spp. <i>Phytophthora</i> spp. <i>Pythium</i> spp. <i>Rhizoctonia</i> spp. <i>Verticillium</i> spp.	Soil Drench	Thoroughly soak growing media and root zone. Apply during or shortly after transplant to reduce transplant shock, suppress soil-borne diseases, and improve root growth. Reapply every 10 to 14 days, as needed.
	In-Furrow	Direct spray into seed furrow at planting just before covering seeds. See SOIL TREATMENT section for further information.
	Plant Dip	Apply immediately prior to transplanting for improved plant growth and suppression of soil-borne diseases.
	Chemigation	Apply immediately after transplant. Repeat at 14-day intervals, as needed. Alternatively, begin 14 days after transplant when plant dip or soil drench applications are used. See CHEMIGATION section for further information.

Grass Forage, Fodder, and Hay (Crop Group 17) Forage, fodder, stover, and hay of any grass, <i>Gramineae/Poaceae</i> family (either green or cured) except sugarcane and those included in the cereal grains group, that will be fed to or grazed by livestock, all pasture and range grasses and grasses grown for hay or silage; includes grass grown for seed.		
Disease	Application Method	Application Instructions
Powdery Mildew (<i>Erysiphe graminis</i> , <i>Oidium</i> spp., <i>Podosphaera</i> spp., <i>Sphaerotheca</i> spp.) Rust (<i>Puccinia</i> spp.)	Foliar	Apply preventatively or when the first disease symptoms are visible. Reapply every 7 to 14 days, as needed. <u>By Ground:</u> Apply to runoff. <u>By Air:</u> For improved performance, tank mix or rotate with other fungicides approved for this use.

Hemp (No Crop Group)		
Cultivars, varieties, and/or hybrids of <i>Cannabis sativa</i> L. with total THC concentration of not more than 0.3 percent on a dry weight basis.		
Disease	Application Method	Application Instructions
Anthracnose (<i>Colletotrichum</i> spp.) Bacterial blight (<i>Pseudomonas cannabina</i>) Brown blight (<i>Alternaria alternata</i>) Brown leaf spot and stem canker (<i>Ascochyta</i> spp.) Gray mold (<i>Botrytis cinerea</i>) Hemp leaf spot (<i>Bipolaris</i> , <i>Cercospora</i> , <i>Curvularia</i> spp.) Powdery mildew (<i>Leveillula</i> , <i>Podosphaera</i> , <i>Sphaerotheca</i> spp.) Olive leaf spot (<i>Cercospora cannabis</i>) Stemphylium leaf and stem spot (<i>Stemphylium botryosum</i>) White leaf spot (<i>Phomopsis ganjae</i>) Xanthomonas leaf spot (<i>Xanthomonas campestris</i>) Yellow leaf spot (<i>Septoria</i> spp.)	Foliar	Apply at first appearance of leaves or just after transplant and repeat at 3-14 day intervals as needed, in sufficient water to obtain thorough coverage of foliage. Tank mix or rotate with other registered fungicides for improved control.
<i>Fusarium</i> spp. <i>Phytophthora</i> spp. <i>Pythium</i> spp. <i>Rhizoctonia</i> spp. <i>Verticillium</i> spp.	Plant Dip	Apply immediately prior to transplanting for improved plant growth and suppression of soil-borne diseases.

Herb Crop Group (Crop Group 25)		
Includes fresh leaves (25A) and dried leaves (25B) of all Crop Group 25 herbs including basil (<i>Ocimum</i> spp.); catnip; chive; cilantro/coriander; curry; edible flowers (multiple species including angelica, balm, borage, burnet, chervil, chicory, clary, costmary, horehound, hyssop, lavender, lovage, nasturtium, rosemary, sage, savory, thyme, wormwood); lemongrass; marjoram/oregano (<i>Origanum</i> spp.); mint (<i>Mentha</i> spp.); parsley (dried leaves); sweet bay; tansy; tarragon; tea (multiple varieties of white, green, yellow, oolong, black, and dark, including camomile/chamomile); woodruff; and cultivars, varieties, and/or hybrids of these commodities.		
Disease	Application Method	Application Instructions
Downy Mildew (<i>Peronospora</i> spp.) Powdery Mildew (<i>Erysiphe</i> spp.) Rust (<i>Puccinia</i> spp.)	Foliar	Apply preventatively or when the first disease symptoms are visible. Reapply every 7 to 14 days, as needed. <u>By Ground</u> : Apply to runoff. <u>By Air</u> : For improved performance, tank mix or rotate with other fungicides approved for this use.

Hops (No Crop Group)		
Cultivars, varieties, and/or hybrids of <i>Humulus</i> spp.		
Disease	Application Method	Application Instructions
Downy Mildew (<i>Pseudoperonospora humuli</i>) Powdery mildew (<i>Sphaerotheca macularis</i>)	Foliar	Apply preventatively when disease symptoms are first visible or when environmental conditions are conducive to rapid disease development. Repeat sprays at 7-day intervals or as needed. <i>Minimum spray volumes</i> for hop growth stages are as follows: <u>Emergence to Training</u> : 20 gal of finished spray/A. Coverage will vary with the size of the vines and the type of spray equipment. <u>Training to Wire-Touch</u> : 50 gal of finished spray/A. Coverage will vary with the size of the vines and the type of spray equipment. <u>Wire-Touch through Harvest</u> : 100 gal of finished spray/A. Higher water volumes may be necessary to achieve thorough coverage after side arms develop.
<i>Fusarium</i> spp. <i>Phytophthora</i> spp. <i>Pythium</i> spp. <i>Rhizoctonia</i> spp. <i>Verticillium</i> spp.	Plant Dip	Apply immediately prior to transplanting for improved plant growth and suppression of soil-borne diseases.

Leafy Vegetables (Crop Group 4-16)		
<p>Amaranth, Chinese; amaranth, leafy; arugula; aster, Indian; blackjack; broccoli, Chinese; broccoli raab; cabbage, Abyssinian; cabbage, Chinese, bok choy; cabbage, seakale; cat's whiskers; cham-chwi; cham-na-mul; chervil, fresh leaves; chipilin; chrysanthemum, garland; cilantro, fresh leaves; collards; corn salad; cosmos; cress, garden; cress, upland; dandelion, leaves; dang-gwi, leaves; dillweed; dock; dol-nam-mul; ebolo; endive; escarole; fameflower; feather cockscomb; Good King Henry; hanover salad; huauzontle; jute, leaves; kale; lettuce, bitter; lettuce, head; lettuce, leaf; maca, leaves; mizuna; mustard greens; orach; parsley, fresh leaves; plantain, buckhorn; primrose, English; purslane, garden; purslane, winter; radicchio; radish, leaves; rape greens; rocket, wild; shepherd's purse; spinach; spinach, Malabar; spinach, New Zealand; spinach, tanier; Swiss chard; turnip greens; violet, Chinese, leaves; watercress; cultivars, varieties, and hybrids of these commodities.</p>		
Disease	Application Method	Application Instructions
<p>Bacterial Blight/Rot (<i>Xanthomonas</i> spp.) Cercospora leafspot (<i>Cercospora</i> spp.) Downy Mildew (<i>Bremia lactuca</i>, <i>Peronospora</i> spp.) Late Blight (<i>Septoria apiicola</i>) Pink Rot (<i>Sclerotinia sclerotiorum</i>) Powdery Mildew (<i>Erysiphe</i> spp.) Sclerotinia Head and Leaf Drop (<i>Sclerotinia minor</i>, <i>Sclerotinia sclerotiorum</i>) White Rust (<i>Albugo occidentalis</i>)</p>	Foliar	<p>Apply preventatively or when the first disease symptoms are visible. Reapply every 7 to 14 days, as needed.</p> <p><u>By Ground:</u> Apply to runoff.</p> <p><u>By Air:</u> For improved performance, tank mix or rotate with other fungicides approved for this use.</p>

Legume Vegetables (Crop Group 6-22), Including Forage and Hay (Crop Group 7-22)		
Bean (all), including dry seed (6-22E), edible podded (6-22A), succulent (6-22A&C), and succulent shelled (6-22C); pea (all), including dry seed (6-22F), edible podded (6-22B), succulent (6-22B&D), and succulent shelled (6-22D); soybean, including seed, vegetable edible podded (edamame), and vegetable succulent shelled (edamame); including cultivars, varieties, and/or hybrids of these commodities; and any plant parts that will be used as animal feed (except soybeans).		
Disease	Application Method	Application Instructions
All listed crops EXCEPT Soybean		
Bacterial Blight (<i>Xanthomonas campestris</i>) Gray Mold (<i>Botrytis cinerea</i>) Powdery Mildew (<i>Erysiphe</i> spp.) Pythium (aerial blight phase) (<i>Pythium</i> spp.) Rice Blast (<i>Pyricularia grisea</i>) Rust (<i>Puccinia</i> spp., <i>Uromyces appendiculatus</i>) White Mold (<i>Sclerotinia sclerotiorum</i>)	Foliar	Apply at flag leaf stage to maximize yield. Apply preventatively or when the first disease symptoms appear. Reapply every 7 to 14 days, as needed depending on crop growth and disease pressure. When plants are under high disease pressure, tank mix with another fungicide for more effective control.
<i>Fusarium</i> spp. <i>Phytophthora</i> spp. <i>Pythium</i> spp. <i>Rhizoctonia</i> spp.	In-Furrow	Direct spray into seed furrow at planting just before covering seeds. See SOIL TREATMENT section for further information.
Soybean ONLY		
Aerial Web Blight (<i>Rhizoctonia solani</i>) Alternaria Leafspot (<i>Alternaria</i> spp.) Anthracnose (<i>Colletotrichum truncatum</i>) Asian Soybean Rust (<i>Phakopsora pachyrhizi</i>) Brown Spot (<i>Septoria glycines</i>) Cercospora Blight (<i>Cercospora kikuchii</i>) Frog-eyed Leaf Spot (<i>Cercospora sojina</i>) Pod and Stem Blight (<i>Diaporthe</i> spp.) Septoria Brown Spot (<i>Septoria glycines</i>) White Mold (<i>Sclerotinia sclerotiorum</i>)	Foliar	Apply this product preventatively or when the first disease symptoms are visible and reapply every 7-14 days. <u>By Ground:</u> Apply to runoff. <u>By Air:</u> For improved performance, tank mix or rotate with other fungicides approved for this use.
<i>Fusarium</i> spp. <i>Phytophthora</i> spp. <i>Pythium</i> spp. <i>Rhizoctonia</i> spp.	In-Furrow	Direct spray into seed furrow at planting just before covering seeds. See SOIL TREATMENT section for further information.

Nongrass Animal Feeds (Forage, Fodder, Straw, and Hay) (Crop Group 18) Alfalfa; bean, velvet; clover (<i>Trifolium</i> spp., <i>Melilotus</i> spp.); kudzu; lespedeza; lupin; sainfoin; trefoil; vetch; vetch, crown; vetch, milk.		
Disease	Application Method	Application Instructions
Powdery Mildew (<i>Erysiphe graminis</i> , <i>Oidium</i> spp., <i>Podosphaera</i> spp., <i>Sphaerotheca</i> spp.) Rust (<i>Puccinia</i> spp.)	Foliar	Apply preventatively or when the first disease symptoms are visible. Reapply every 7 to 14 days, as needed. <u>By Ground:</u> Apply to runoff. <u>By Air:</u> For improved performance, tank mix or rotate with other fungicides approved for this use.

Oilseeds (Crop Group 20)		
Borage; calendula; castor oil plant; Chinese tallowtree; cottonseed; crambe; cuphea; echium; euphorbia; evening primrose; flax seed; gold of pleasure; hare's ear mustard; jojoba; lesquerella; lunaria; meadowfoam; milkweed; mustard seed; niger seed; oil radish; poppy seed; rapeseed; rose hip; safflower; sesame; stokes aster; sunflower; sweet rocket; tallowwood; tea oil plant; vernonia; cultivars, varieties, and/or hybrids of these.		
Disease	Application Method	Application Instructions
All listed crops EXCEPT Cotton		
Bacterial Pustule (<i>Xanthomonas</i> spp.) Bacterial Speck (<i>Pseudomonas syringae</i> pv. <i>glycinea</i>) 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 (<i>Sclerotinia sclerotiorum</i>)	Foliar	Apply preventatively or when the first disease symptoms are visible. Reapply every 7 to 14 days, as needed. <u>By Ground:</u> Apply to runoff. <u>By Air:</u> For improved performance, tank mix or rotate with other fungicides approved for this use.
Cotton		
Alternaria Leaf Spot, Boll Rot (<i>Alternaria</i> spp.) Anthracnose, Boll Rot (<i>Glomeria</i> spp.) Ascochyta Blight, Boll Rot (<i>Ascochyta</i> spp.) Cercospora Blight and Leaf Spot (<i>Cercospora</i> spp.) Diplodia Boll Rot (<i>Diplodia</i> spp.) Hard Lock, Boll Rot (<i>Fusarium</i> spp.) Leaf Spot (<i>Corynespora cassicola</i>) Phoma Blight, Boll Rot (<i>Phoma</i> spp.) Rust (<i>Puccinia</i> spp., <i>Phykopsora</i> spp.) Stemphyllium Leaf Spot (<i>Stemphyllium</i> spp.)	Foliar	<u>By Ground:</u> For foliar and Boll Rot disease control, apply this product preventatively prior to disease development using sufficient volume for thorough coverage. Repeat applications at 7 to 14-day intervals. <u>By Air:</u> For improved performance, use this product in a tank mix or rotational program with other registered fungicides. Repeat applications at 7 to 14-day intervals.
<i>Fusarium</i> spp. <i>Phytophthora</i> spp. <i>Pythium</i> spp. <i>Rhizoctonia</i> spp. <i>Verticillium</i> spp.	In-Furrow	Direct spray into seed furrow at planting just before covering seeds. See SOIL TREATMENT section for further information.

Peanuts (No Crop Group)		
Cultivars, varieties, and/or hybrids of <i>Arachis hypogaea</i> .		
Disease	Application Method	Application Instructions
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 (<i>Cercosporidium personatum</i>) Rhizoctonia Foliar Blight, Peg, and Root Rot (<i>Rhizoctonia solani</i>) White Mold (<i>Sclerotium rolfsii</i>)	Foliar	Apply preventatively or when the first disease symptoms are visible. Reapply every 7 to 14 days, as needed. <u>By Ground</u> : Apply to runoff. <u>By Air</u> : For improved performance, tank mix or rotate with other fungicides approved for this use.
Aspergillus Crown Rot (<i>Aspergillus niger</i>) <i>Fusarium</i> spp. <i>Phytophthora</i> spp. <i>Pythium</i> spp. <i>Rhizoctonia</i> spp. <i>Verticillium</i> spp. White Mold (<i>Sclerotium rolfsii</i>)	Soil Drench	Thoroughly soak growing media and root zone. Apply during or shortly after transplant to reduce transplant shock, suppress soil-borne diseases, and improve root growth. Reapply every 10 to 14 days, as needed.
	In-Furrow	Direct spray into seed furrow at planting just before covering seeds. See SOIL TREATMENT section for further information.

Pome Fruits (Crop Group 11-10)		
Apple; azarole; crabapple; loquat; mayhaw; medlar; pear; pear, Asian; quince; quince, Chinese; quince, Japanese; tejocote; cultivars, varieties, and/or hybrids of these.		
Disease	Application Method	Application Instructions
Alternaria Blotch (<i>Alternaria mali</i>) Apple Scab (<i>Venturia inaequalis</i>) Bitter Rot (<i>Colletotrichum</i> spp.) Black Rot/Frogeye Leaf Spot (<i>Botryosphaeria obtusa</i>) Bot Rot (<i>Botryosphaeria dothidea</i>) Brooks Spot (<i>Mycosphaerella pomi</i>) Bull's Eye Rot (<i>Neofabraea</i> spp.) Cedar-Apple Rust (<i>Gymnosporangium juniperi-virginianae</i>) Fire Blight (<i>Erwinia amylovora</i>) Flyspeck (<i>Zygophiala jamaicensis</i>) Powdery Mildew (<i>Podosphaera leucotricha</i>) Scab (<i>Venturia</i> spp.) Sooty Blotch (<i>Geastrum polystigmati</i> , <i>Leptodontium elatius</i> , <i>Peltaster fructicola</i>) White Rot (<i>Botryosphaeria dothidea</i>)	Foliar	Apply preventatively. Reapply every 7 to 14 days, as needed. For improved performance, use this product in a tank mix or rotational program with other fungicides approved for this use. Avoid excessive amounts of water that result in the runoff of spray material.
Phytophthora spp. Pythium spp.	Plant Dip (bare root)	For improved plant growth and suppression of soil-borne diseases, apply immediately prior to transplanting.

Root and Tuber Vegetables (Crop Group 1), Including Leaves† (Human Food or Animal Feed) (Crop Group 2) Arracacha; arrowroot; artichoke, Chinese; artichoke, Jerusalem; beet, garden†; beet, sugar†; burdock, edible†; canna, edible; carrot†; cassava, bitter and sweet (manioc, yuca)†; celeriac (celery root)†; chayote (root); chervil, turnip-rooted†; chicory†; chufa; dasheen (taro)†; ginger; ginseng; horseradish; leren; parsley, turnip-rooted; parsnip†; potato; radish†; radish, oriental (daikon)†; rutabaga†; salsify (oyster plant); salsify, black†; salsify, Spanish; skirret; sweet potato†; tanier (cocoyam)†; turmeric; turnip†; yam bean (jicama, manioc pea); yam, true† † Leaves of these crops.		
Disease	Application Method	Application Instructions
All Listed Crops		
Bacterial Leaf Blight (<i>Xanthomonas campestris</i>) Black Root Rot / Black Crown Rot (<i>Alternaria</i> spp.) Downy Mildew (<i>Peronospora</i> spp.) Early Blight (<i>Alternaria solani</i>) Gray Mold (<i>Botrytis</i> spp.) Late Blight (<i>Phytophthora infestans</i>) Powdery Mildew (<i>Erysiphe</i> spp.) White Mold (<i>Sclerotinia sclerotiorum</i>)	Foliar	Apply to runoff. Apply preventatively or when the first disease symptoms are visible. Reapply every 7-14 days.
Clubroot (<i>Plasmodiophora brassicae</i>) Common Scab (<i>Streptomyces scabies</i>) <i>Fusarium</i> spp. <i>Phytophthora</i> spp.	Soil Drench	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. Reapply every 10 to 14 days, as needed.
<i>Pythium</i> spp. <i>Rhizoctonia</i> spp. <i>Verticillium</i> spp.	In-Furrow	Direct spray into seed furrow just before covering seeds. See SOIL TREATMENT section for additional information.
	Chemigation	Apply at 1-4 qt product/A immediately after transplant. Repeat at 14-day intervals. Alternatively, begin 14 days after transplant when plant dip or soil drench applications are used.
	Seed Piece Dip	Apply as a pre-plant dip to transplants or seed pieces immediately prior to transplanting.
Artichokes ONLY		
Leaf Spot (<i>Cercospora beticola</i>) Powdery Mildew (<i>Erysiphe cichoracearum</i> , <i>Leveillula taurica</i>) Ramularia (<i>Ramularia</i> spp.) Rust (<i>Uromyces betae</i>)	Foliar	Apply to the point of runoff. Apply preventatively or when the first disease symptoms are visible. Reapply every 7-14 days.
	Chemigation	For improved plant growth and suppression of soil-borne diseases, apply through drip irrigation immediately after transplant and at 14-day intervals or begin 14 days after transplant when soil drench applications are used. See CHEMIGATION section for further information.
Sugar Beet ONLY		
Leaf Spot (<i>Cercospora beticola</i>) Powdery Mildew (<i>Erysiphe betae</i> , <i>Erysiphe polygoni</i>) Ramularia (<i>Ramularia</i> spp.) Rust (<i>Uromyces betae</i>)	Foliar	Apply to the point of runoff. Apply preventatively or when the first disease symptoms are visible. Reapply every 7-14 days.

Spices (Crop Group 26)		
Includes all spices in Crop Group 26 including bark, fruit, root, seed, and/or stem of the following: angelica; chervil; cinnamon; clove; coriander; cumin; dill; fennel; fenugreek; lovage; mustard; nasturtium; nutmeg; pepper; peppercorn; poppy seed; rue; saffron crocus; sassafras; saw palmetto; sesame; tamarind; and cultivars, varieties, and/or hybrids of these commodities.		
Disease	Application Method	Application Instructions
Downy Mildew (<i>Peronospora</i> spp.) Powdery Mildew (<i>Erysiphe</i> spp.) Rust (<i>Puccinia</i> spp.)	Foliar	Apply preventatively or when the first disease symptoms are visible. Reapply every 7 to 14 days, as needed. <u>By Ground</u> : Apply to runoff. <u>By Air</u> : For improved performance, tank mix or rotate with other fungicides approved for this use.

Stalk, Stem, and Leaf Petiole (Crop Group 22)		
Agave; aloe vera; asparagus; bamboo, shoots; cardoon; celery; celery, Chinese; celtuce; fennel, Florence, fresh leaves and stalk; fern, edible, fiddlehead; fuki; kale, sea; kohlrabi; palm hearts; prickly pear, pads; prickly pear, Texas, pads; rhubarb; udo; zuiki; cultivars, varieties, and hybrids of these commodities.		
Disease	Application Method	Application Instructions
Botrytis Blight (<i>Botrytis cinerea</i>) Rust (<i>Puccinia aspargi</i>)	Foliar	Apply to runoff. Apply preventatively or when the first disease symptoms are visible. Reapply every 7-14 days.

Stone Fruit (Crop Group 12-12)		
Apricot; apricot, Japanese; capulin; cherry, black; cherry, Nanking; cherry, sweet; cherry, tart; Jujube, Chinese; nectarine; peach; plum; plum, American; plum, beach; plum, Canada; plum, cherry; plum, Chickasaw; plum, Damson; plum, Japanese; plum, Klamath; plum, prune; plumcot; sloe; cultivars, varieties, and/or hybrids of these.		
Disease	Application Method	Application Instructions
Alternaria Spot/Fruit Rot (<i>Alternaria alternata</i>) Anthracnose (<i>Colletotrichum</i> spp.) Bacterial Canker (<i>Pseudomonas</i> spp.) 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>)	Foliar	Apply preventatively. Reapply every 7 to 14 days, as needed. For improved performance, use this product in a tank mix or rotational program with other fungicides approved for this use. Avoid excessive amounts of water that result in the runoff of spray material.
<i>Fusarium</i> spp. <i>Phytophthora</i> spp. <i>Pythium</i> spp. <i>Rhizoctonia</i> spp. <i>Verticillium</i> spp.	Plant Dip (bare root)	For improved plant growth and suppression of soil-borne diseases, apply immediately prior to transplanting.

Sugarcane (No Crop Group)		
Cultivars, varieties, and/or hybrids of <i>Saccharum officinarum</i> .		
Disease	Application Method	Application Instructions
Brown Rust (<i>Puccinia melanocephala</i>) Orange Rust (<i>Puccinia kuehnii</i>)	Foliar	Apply preventatively or when the first disease symptoms are visible. Reapply every 7 to 14 days, as needed. <u>By Ground:</u> Apply to runoff. <u>By Air:</u> For improved performance, tank mix or rotate with other fungicides approved for this use.
<i>Fusarium</i> spp. <i>Phytophthora</i> spp. <i>Pythium</i> spp. <i>Rhizoctonia</i> spp.	In-Furrow	Direct spray into seed furrow at planting just before covering seeds. See SOIL TREATMENT section for further information.

Tobacco (No Crop Group)		
Cultivars, varieties, and/or hybrids of <i>Nicotiana tabacum</i> and <i>Nicotiana rustica</i> .		
Disease	Application Method	Application Instructions
Blue Mold (<i>Peronospora tabacinae</i>)	Foliar	Apply to runoff. Apply preventatively or when the first disease symptoms are visible. 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	For improved plant growth and suppression of soil-borne diseases, apply immediately prior to transplanting.

Tree Nuts (Crop Group 14-12)		
African nut-tree; almond; beechnut; Brazil nut; Brazilian pine; bunya; bur oak; butternut; cajou nut; candlenut; cashew; chestnut; chinquapin; coconut; coquito nut; dika nut; ginkgo; guiana chestnut; hazelnut (filbert); heartnut; hickory nut; Japanese horse-chestnut; macadamia nut; mongongo nut; monkey-pot; monkey puzzle nut; okari nut; pachira nut; peach palm nut; pecan; pequi; pili nut; pine nut; pistachio; sapucaia nut; tropical almond; walnut, black; walnut, English; yellowhorn; cultivars, varieties, and/or hybrids of these.		
Disease	Application Method	Application Instructions
Alternaria Late Blight, Alternaria Leaf Spot (<i>Alternaria</i> spp.) Anthracnose (<i>Collectotrichum</i> spp., <i>Gnomonia leptostyla</i>) Bacterial Canker (<i>Erwinia nigrifluens</i> , <i>Pseudomonas syringae</i>) Botryosphaeria Blight (<i>Botryosphaeria dothidea</i>) Brown Rot (<i>Monilinia</i> spp.) Eastern Filbert Blight (<i>Anisogramma anomala</i>) Green Fruit Rot (<i>Botrytis cinerea</i>) Leaf Rust (<i>Tranzschelia discolor</i>) Scab (<i>Cladosporium carpophilum</i> , <i>Sphaceloma perseae</i>) Shot Hole (<i>Wilsonomyces carpophilus</i>) Walnut Blight (<i>Xanthomonas campestris</i>)	Foliar	Apply preventatively. Reapply every 7 to 14 days, as needed. For improved performance, use this product in a tank mix or rotational program with other fungicides approved for this use. Avoid excessive amounts of water that result in the runoff of spray material.
<i>Fusarium</i> spp. <i>Phytophthora</i> spp. <i>Pythium</i> spp. <i>Rhizoctonia</i> spp. <i>Verticillium</i> spp.	Plant Dip (bare root)	For improved plant growth and suppression of soil-borne diseases, apply immediately prior to transplanting.

Tropical and Subtropical Fruit, Edible Peel Group (Crop Group 23)		
Acai; acerola; achachairú; African plum; agritos; almondette; ambarella; apak palm; appleberry; arazá; arbutus berry; babaco; bacaba palm; bacaba-de-leque; bayberry, red; bignay; bilimbi; borjón; breadnut; cabeluda; cajou, fruit; cambucá; carandas-plum; carob; cashew apple; Ceylon iron wood; Ceylon olive; cherry-of-the-Rio-Grande; Chinese olive, black; Chinese olive, white; chirauli-nut; ciruela verde; cocoplum; date; Davidson's plum; desert-date; doum palm coconut; false sandalwood; feijoa; fig; fragrant manjack; gooseberry, Abyssinian; gooseberry, Ceylon; gooseberry, Indian; gooseberry, otaheite; governor's plum; grumichama; guabiroba; guava; guava berry; guava, Brazilian; guava, cattley; guava, Costa Rican; guava, para; guava, purple strawberry; guava, strawberry; guava, yellow strawberry; guayabillo; illawarra plum; imbé; imbu; Indian-plum; jaboticaba; Jamaica-cherry; jambolan; jelly palm; jujube, Indian; kaffir-plum; kakadu plum; kapundung; karanda; kwai muk; lemon aspen; mangaba; Marian plum; mombin, Malayan; mombin, purple; mombin, yellow; monkeyfruit; monos plum; mountain cherry; nance; natal plum; noni; olive; papaya, mountain; pataú; peach palm, fruit; persimmon, black; persimmon, Japanese; pitomba; plum-of-Martinique; pomerac; rambai; rose apple; rukam; rumberry; sea grape; sentul; sete-capotes; silver aspen; starfruit; Surinam cherry; tamarind; uvalha; water apple; water pear; water berry; wax jambu; cultivars, varieties, and hybrids of these commodities.		
Disease	Application Method	Application Instructions
All listed crops EXCEPT Olive		
Anthrachnose (<i>Colletotrichum gloeosporioides</i>) 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	Apply preventatively or when the first disease symptoms are visible. Reapply every 7 to 14 days, as needed. <u>By Ground:</u> Apply to runoff. <u>By Air:</u> For improved performance, tank mix or rotate with other fungicides approved for this use.
<i>Fusarium</i> spp. <i>Phytophthora</i> spp. <i>Pythium</i> spp. <i>Rhizoctonia</i> spp. <i>Verticillium</i> spp.	Plant Dip	For improved plant growth and suppression of soil-borne diseases, apply immediately prior to transplanting.
Olive		
Olive Knot (<i>Pseudomonas savastanoi</i>)	Foliar	Apply preventatively or when the first disease symptoms are visible. Avoid excessive amounts of water that result in the runoff of spray material. Reapply every 7 to 14 days, as needed. For improved performance, use this product in a tank mix or rotational program with other fungicides approved for this use.

Tropical and Subtropical Fruit, Inedible Peel Group (Crop Group 24)		
<p>Abiu; aisen; akee apple; atemoya; avocado; avocado, Guatemalan; avocado, Mexican; avocado, West Indian; bacury; bael fruit; banana; banana, dwarf; binjai; biriba; breadfruit; Burmese grape; canistel; cat's-eyes; champedak; cherimoya; cupuacú; custard apple; dragon fruit; durian; elephant-apple; etambe; granadilla; granadilla, giant; ilama; inga; jackfruit; jatobá; karuka; kei apple; langsat; lanjut; longan; lucuma; lychee; mabolo; madras-thorn; mammy-apple; manduro; mango; mango, horse; mango, Saipan; mangosteen; marang; marmaladebox; matisia; mesquite; mongongo, fruit; monkey-bread-tree; monstera; nicobar-breadfruit; paho; pandanus; papaya; passionflower, winged-stem; passionfruit; passionfruit, banana; passionfruit, purple; passionfruit, yellow; pawpaw, common; pawpaw, small-flower; pelipisan; pequi; pequia; persimmon, American; pineapple; pitahaya; pitaya; pitaya, amarilla; pitaya, roja; pitaya, yellow; plantain; pomegranate; poshte; prickly pear, fruit; prickly pear, Texas, fruit; pulasan; quandong; rambutan; saguaro; sapodilla; sapote, black; sapote, green; sapote, mamey; sapote, white; sataw; satinleaf; screw-pine; Sierra Leone-tamarind; soncoya; soursop; Spanish lime; star apple; sugar apple; sun sapote; tamarind-of-the-Indies; velvet tamarind; wampi; white star apple; wild loquat; cultivars, varieties, and hybrids of these commodities.</p>		
Disease	Application Method	Application Instructions
<p>Anthracnose (<i>Colletotrichum gloeosporioides</i>) 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>)</p>	Foliar	<p>Apply preventatively or when the first disease symptoms are visible. Reapply every 7 to 14 days, as needed.</p> <p><u>By Ground:</u> Apply to runoff.</p> <p><u>By Air:</u> For improved performance, tank mix or rotate with other fungicides approved for this use.</p>
<p><i>Fusarium</i> spp. <i>Phytophthora</i> spp. <i>Pythium</i> spp. <i>Rhizoctonia</i> spp. <i>Verticillium</i> spp.</p>	Plant Dip	<p>For improved plant growth and suppression of soil-borne diseases, apply immediately prior to transplanting.</p>

GREENHOUSE, NURSERY, AND COMMERCIAL LANDSCAPE ORNAMENTAL PLANTS, SHRUBS, AND TREES

For use to control listed diseases of container, bench, flat, plug, bed, or field-grown ornamentals in greenhouses, shadehouses, outdoor nurseries, retail nurseries, and other commercial landscape areas. Not for homeowner use.

Ornamental Plants, Shrubs, and Trees		
Herbaceous Ornamentals: Flowering plants, foliage plants, bedding plants; Woody Ornamentals: Broadleaves, shrubs and trees; Conifers, shrubs and trees.		
Disease	Application Method	Application Instructions
Anthracnose (<i>Colletotrichum</i> spp.) Bacteria (<i>Erwinia</i> spp., <i>Pseudomonas</i> spp., <i>Xanthomonas</i> spp.) Black spot of roses (<i>Diplocarpon rosae</i>) Blossom Blight (<i>Monilinia</i> spp.) Downy Mildew (<i>Peronospora</i> spp., <i>Plasmopara viticola</i>) Gray Mold (<i>Botrytis cinerea</i>) Leaf Spot (<i>Alternaria</i> spp., <i>Cercospora</i> spp., <i>Entomosporium</i> spp., <i>Myrothecium</i> spp., <i>Septoria</i> spp.) Powdery Mildew (<i>Erysiphe</i> spp., <i>Oidium</i> spp., <i>Podosphaera</i> spp., <i>Sphaerotheca</i> spp.) Rust (<i>Puccinia</i> spp.) Scab (<i>Venturia</i> spp.)	Foliar	Apply to runoff. Apply preventatively (before disease symptoms are visible) at the 4- to 7-leaf stage. Reapply every 7 to 14 days, as needed, as needed.
<i>Fusarium</i> spp. <i>Phytophthora</i> spp. <i>Pythium</i> spp. <i>Rhizoctonia</i> spp. <i>Verticillium</i> spp.	Soil Drench	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. Reapply every 10 to 14 days, as needed.
	Plant Dip	For improved plant growth and suppression of soil-borne diseases, apply immediately prior to transplanting.
	Chemigation	For improved plant growth and suppression of soil-borne diseases, apply this product through drip irrigation immediately after transplant and at 14-day intervals, as needed, or begin 14 days after transplant when soil drench applications are used.

TURF AND LANDSCAPE GRASSES

For use to control listed diseases of ornamental and turf grasses, including golf courses, sod farms, lawns, and other landscape areas. Not for homeowner use.

Ornamental Grasses and Turfgrass		
Bluegrass; bentgrass; bermudagrass; dichondra; fescue; orchardgrass; <i>Poa annua</i> ; ryegrass; St. Augustine grass; zoysia mixtures; and other grasses		
Disease	Application Method	Application Instructions
Anthracnose (<i>Colletotrichum graminicola</i>) Bentgrass/Bermudagrass Dead Spot (<i>Ophiosphaerella agrostidis</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 dichondrae</i>) Dollar Spot (<i>Lanzia</i> spp., <i>Moellerodiscus</i> spp. formerly <i>Sclerotinia homeocarpa</i>) Flag smut (<i>Urocystis agropyri</i>) Fusarium Patch (<i>Fusarium nivale</i>) Gray Leaf Spot (<i>Pyricularia grisea</i>) Gray Snowmold (<i>Typhula</i> spp.) Melting Out Leaf Spot (<i>Bipolaris</i> spp., <i>Drechslera</i> spp.) Necrotic Ring Spot (<i>Leptosphaeria korrae</i>) Pink Patch (<i>Limonomyces roseipellis</i>) Pink Snowmold (<i>Microdochium nivale</i>) Powdery Mildew (<i>Erysiphe graminis</i>) Pythium Blight, Pythium Root Rot (<i>Pythium phanidermatum</i> , <i>Pythium</i> spp.) Red Thread (<i>Laetisaria fuciformis</i>) Rust (<i>Puccinia</i> spp.) Rhizoctonia Large Patch (<i>Rhizoctonia solani</i>) Southern Blight (<i>Sclerotium rolfsii</i>) Spring Dead Spot (<i>Leptosphaeria korrae</i> , <i>Leptosphaeria narmari</i> , <i>Ophiosphaerella herpotricha</i> , <i>Gaeumannomyces graminis</i>) Stripe Smut (<i>Ustilago striiformis</i>) Summer Bentgrass Decline Summer Patch / Poa Patch (<i>Magnaporthe poae</i>) Take-All Patch (<i>Gaeumannomyces graminis</i>) Yellow Patch (<i>Rhizoctonia cerealis</i>) Yellow Tuft / Downy Mildew (<i>Sclerophthora macrospora</i>) Zoysia Patch (<i>Rhizoctonia solani</i>)	Foliar	Apply preventatively or when the first disease symptoms are visible and reapply every 7-14 days.

CHEMIGATION INSTRUCTIONS

Apply by chemigation to deliver 5 to 22 fl oz product/A according to the instructions below and diluted as specified in the **CROPS** section.

GENERAL REQUIREMENTS

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.

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

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

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

A person knowledgeable of the chemigation system and responsible for its operation, or under 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

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.

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.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.

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.

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.

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.

Do not apply when wind speed favors drift beyond the area intended for treatment.

SPECIFIC REQUIREMENTS FOR SPRINKLER CHEMIGATION

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.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.

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.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.

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.

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.

Do not apply when wind speed favors drift beyond the area intended for treatment.

SPECIFIC REQUIREMENTS FOR FLOOD (BASIN), FURROW AND BORDER CHEMIGATION

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.

The systems utilizing a pressurized water and pesticide injection system must meet the following requirements:

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.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.

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.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.

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.

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

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.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.

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.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.

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.

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

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.

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.

Prepare a solution in the chemical tank by filling the tank with the required water and then adding product as required.

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

Container Handling:

{For Nonrefillable Retail Containers less than or equal to 5 gallons}

Nonrefillable 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 dispose of in trash or in a sanitary landfill or by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

{For Nonrefillable Bulk Containers greater than 5 gallons (for repackaging into retail containers)}

Nonrefillable 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. 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, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

{For Refillable Bulk Containers greater than 5 gallons (for repackaging into retail containers)}

Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or a mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. When empty, return to point of sale or to the manufacturer.

WARRANTY

AgroSpheres, Inc. warrants that the material contained herein conforms to the description on the label and is reasonably fit for the purposes referred to in the directions for use. Timing and method of application, weather, watering practices, nature of soil, the disease problem, condition of the crop, incompatibility with other chemicals not specifically recommended and other influencing factors in the use of this product are beyond the control of the seller. To the extent consistent with applicable law, buyer assumes all risks of use, storage or handling of this material not in strict accordance with directions given herein. NO OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR MERCHANTABILITY IS MADE.

SUBLABEL B: AGRICULTURAL AND GREENHOUSE CROPS

GROUP BM 01 FUNGICIDE

Thyme Oil 26% LC

A Botanical Extract for Use as a Biofungicide on All Listed Crops and Diseases



[OMRI Seal-see last page for optional graphics]

Active Ingredient:

Thyme oil 26%

Other Ingredients: 74%

Total..... 100%

KEEP OUT OF REACH OF CHILDREN

DANGER – PELIGRO

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

FIRST AID

IF IN EYES:	Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.
IF ON SKIN OR CLOTHING:	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
Have the product container or label with you when calling a poison control center or doctor, or if going for treatment.	

Manufactured [By][For]



AgroSpheres, Inc.
1180 Seminole Trail, Suite 100
Charlottesville VA 22901

EPA Reg. No. 99869-2

EPA Est. No. _____

[Lot][Batch]: _____

Net Contents:

ESL _____

Ver. _____

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

DANGER: CORROSIVE. Causes irreversible eye injury. Harmful if absorbed through skin. Do not get in eyes or on clothing. Avoid contact with skin, eyes, or clothing. Wear eye protection (safety glasses, goggles, or face shield). Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

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

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

- Users should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Users should remove PPE immediately after handling this product. 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.

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 48 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
- Eye protection
- Waterproof gloves
- Shoes plus socks

NON-AGRICULTURAL USE REQUIREMENTS

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

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

PRODUCT INFORMATION

Thyme Oil 26% LC is a fungicide-bactericide for the control of various plant diseases on agricultural crops (including those grown for seed), greenhouse crops (including those grown in shade houses, lath houses, and controlled environments), and/or turf and ornamentals. Thyme Oil 26% LC contains a botanical extract from the herb, thyme (*Thymus* spp.), that controls and/or suppresses listed fungal and bacterial disease organisms. Thyme oil is non-systemic and acts by membrane disruption. The oil disrupts the cell walls and cell membranes while inhibiting cell division and replication of the fungal disease organisms effectively stopping the spread of disease.

This product is formulated with AgroSpheres® proprietary adjuvant, AgroSpheres® Microbially-Derived Minicells, which microencapsulates the oil, improving product stability and enhancing efficacy against target fungal and bacterial pathogens. AgroSpheres® adjuvant slows the release of the thyme oil by up to two weeks after which the oil and the AgroSpheres® naturally degrade in soil and air.

For best results, use this product as a preventative treatment before onset of disease to protect the growing leaf tissue. This product can also be used as a curative treatment after disease is already present. See specific information for diseases controlled and use rates on ornamental plants, shrubs, trees, and edible crops.

MIXING INSTRUCTIONS

SHAKE WELL BEFORE USE

Use 100-mesh nozzle screens or larger. Use higher water volumes with larger sized crops and extensive foliage to secure thorough coverage. Prepare only the amount of spray mix that is required for the immediate operation. Do not allow the mixture to stand overnight in the spray tank.

See CHEMIGATION, PLANT DIP, SEED TREATMENT, and SOIL TREATMENT sections for specific application directions.

Stand-alone use: Fill the mix tank halfway full of water. Begin agitation, then add product to the mix tank, followed by the remainder of water. Continue mixing until product has completely dispersed into the mix water. Maintain agitation during application until all the mixture has been applied.

Tank-mixtures: Fill the mix tank half- to three-quarters full of water. Turn on agitation before adding any tank mix partners and maintain constant agitation throughout the mixing and application process. Recommended order of addition of tank-mix partners is as follows: wettable powders, dry flowable formulations, liquid flowable formulations, and emulsifiable formulations. Ensure complete dispersion of each tank-mix partner before adding the next component. After all desired components have been added and are completely dispersed, add the remainder of water. **Do not pre-mix with any other tank mix component prior to adding to the spray tank.**

Use tank mixes only in states where the tank mix product and application site are registered. Do not mix with another product that prohibits such mixing. Do not exceed any label dosage rates. Read and follow all label directions for tank mix partners for specific application rates, application timing, and precautions. Use of the tank mix must be in accordance with the more restrictive label limitations and precautions of all products used in the mixture.

Compatibility: This product is compatible with many commonly used pesticides, fertilizers, adjuvants, and surfactants, but has not been evaluated for all potential combinations. To ensure compatibility, conduct a "jar test." Using a suitable container, add the proportional amounts of product to water using the recommended addition order outlined above. 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. Do not combine this product 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.

APPLICATION DIRECTIONS AND USE RATES

This product, when used as directed, reduces and/or controls incidence of the bacterial and fungal diseases listed below. Thyme oil is exempt from the requirement of a tolerance on all food and feed crops and commodities and may be applied to any food or non-food crop up to and including the day of harvest (pre-harvest interval = 0 days).

Thorough and uniform coverage is essential for effective disease control. Apply adequate spray volume to achieve complete spray coverage. Use higher water volumes with larger sized crops and extensive foliage to ensure thorough coverage. See specific application instructions pertaining to each crop for additional details.

The higher rates in the rate range or shorter spray intervals may be required under conditions of heavy infection pressure, highly susceptible varieties, or when disease conducive environmental conditions exist. FAILURE TO FOLLOW THE DIRECTIONS AND PRECAUTIONS ON THIS LABEL MAY RESULT IN POOR DISEASE CONTROL, AND/OR CROP INJURY. Applications may be made at longer spray intervals under low to moderate disease pressure.

FOLIAR TREATMENT INSTRUCTIONS

This product can be applied foliarly by ground or air to protect against listed diseases. The following use rates are recommended unless specified differently in the **CROPS** section:

GROUND APPLICATION

Apply through most commonly-used ground equipment including tractor-mounted boom, airblast, high clearance, hose-end, backpack, and/or other pressurized sprayers; hose-end or hand-held sprayers; foggers or mist blowers; water wheel and other drench applicators; and shank or other soil injection method.

- Application Rate: 16 to 32 fl oz of product/A
- Recommended Dilution: 50 to 160 gal of water.
- Finished Spray: Apply a minimum of 50 gal/A of finished spray for tree and vine crops and a minimum of 15 gal/A of finished spray for field and vegetable crops.

AERIAL APPLICATION

Apply by fixed- or rotary-winged aircraft or drone.

- Application Rate: 16 to 32 fl oz of product/A
- Recommended Dilution: 5 to 15 gal of water.
- Finished Spray: Apply a minimum of 15 gal/A of finished spray for tree and vine crops and 5 gal/A of finished spray for field and vegetable crops. Use standard precautions to minimize spray drift.

CHEMIGATION

This product can be applied 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.

- Application Rate: 5 to 22 fl oz product/A according to the instructions in the **CHEMIGATION** section below.

PLANT DIP (SEED PIECE) INSTRUCTIONS

Apply 4 to 8 fl oz product per 10 gal of water as a pre-plant dip immediately prior to transplanting, unless specified differently in the **CROPS** section.

SOIL TREATMENT INSTRUCTIONS

This product can be applied as a soil drench, in-furrow spray, or soil injection and to protect against certain soil-borne diseases. The following use rates are recommended unless specified differently in the **CROPS** section:

SOIL DRENCH APPLICATIONS:

Dilute ½ gal in 100 gal of water (1 qt in 50 gal) and apply at a sufficient rate to thoroughly soak the growing media and root zone.

SHANKED-IN AND INJECTED APPLICATIONS:

This product can be shanked-in or injected into the soil either alone or with most types of liquid nutrient products.

IN-FURROW APPLICATIONS:

Apply as an in-furrow spray at planting at a rate of 14 fl oz product/A or 1 fl oz/1,000 row feet according to the chart below. Apply in minimal water (5 to 15 gal of water is recommended) and direct the spray into the seed furrow just before the seeds are covered.

Rate/1,000 row ft	In-Furrow Application Rates Product per Acre (fl oz)					
	30" Rows (17,424 row ft/A)	32" Rows (16,315 row ft/A)	34" Rows (15,374 row ft/A)	36" Rows (14,520 row ft/A)	38" Rows (13,754 row ft/A)	40" Rows (13,068 row ft/A)
1.0 fl oz	17.4 fl oz	16.3 fl oz	15.4 fl oz	14.5 fl oz	13.75 fl oz	13 fl oz

GREENHOUSE APPLICATION

For greenhouse application on the crops and diseases listed:

- Application Rate: 16 to 32 fl oz of product
- Dilution Rate: 60 to 160 gal of water
- Spray Directions: Spray until just before point of runoff. Repeat at 7- to 14-day intervals as needed. See specific application instructions for each crop for additional details.

ORNAMENTAL PLANTS, SHRUBS, AND TREES

- Application Rate: 16 to 32 fl oz of product/A
- Dilution Rate: 60 to 160 gal of water
- Finished Spray: Apply at 15 to 50 gal/A of finished spray (1 gal/1,000 ft²).

ROTATIONAL CROPS

There are no restrictions concerning rotation of crops. Follow a crop rotation program that maintains or builds soil organic matter, works to control pests, manages and conserves nutrients, and protects against erosion.

INTEGRATED PEST MANAGEMENT (IPM)

Thyme oil can be used in an IPM program with other conventional fungicides as part of a resistance management strategy. Alternating use of thyme oil followed by conventional fungicides or used in tank mixes aids in resistance management. Follow all label instructions for each registered product taking care not to exceed amounts or treatment intervals on the label.

This product may be used with disease forecasting or Extension advisory programs that recommend application timings based on environmental factors favorable to disease development. Consult with your agricultural advisor, University contact or Extension Service for IPM strategies established for your area.

FIELD AND GREENHOUSE FOOD AND FEED CROPS

Berry and Small Fruit (Crop Group 13-07)		
Bushberry (13-07B); Caneberry (13-07A); Low Growing Berry (13-07G); Small Fruit Vine Climbing (13-07D); cultivars, varieties, and/or hybrids of these.		
Disease	Application Method	Application Instructions
<u>Bushberry (13-07B)</u> Aronia berry; blueberry, highbush; blueberry, lowbush; buffalo currant; Chilean guava; cranberry, highbush; currant, black; currant, red; elderberry; European barberry; gooseberry; honeysuckle, edible; huckleberry; jostaberry; Juneberry (Saskatoon berry); lingonberry; native currant; salal; sea buckthorn; cultivars, varieties, and/or hybrids of these. <u>Caneberry (13-07A)</u> Blackberry; loganberry; raspberry, black and red; wild raspberry; cultivars, varieties, and/or hybrids of these.		
Alternaria Fruit Rot (<i>Alternaria</i> spp.) Anthracnose Fruit Rot (<i>Colletotrichum acutatum</i>) Bacterial Canker (<i>Pseudomonas syringae</i>) Botrytis Blight (<i>Botrytis cinerea</i>) Leaf Rust (<i>Pucciniastrum vaccinii</i>) Leaf Spot and Blotch (<i>Mycosphaerella</i> spp., <i>Septoria</i> spp.) Mummy Berry (<i>Monilinia vaccinii-corymbosi</i>) Phomopsis Leaf Spot, Twig Blight, and Fruit Rot (<i>Phomopsis</i> spp.)	Foliar	Apply to runoff. Apply preventatively or when the first disease symptoms are visible. Reapply every 7 to 14 days, as needed. <u>Anthracnose Fruit Rot and Alternaria Fruit Rot on Blueberries</u> : Apply at green tip and continue treatment every 7 to 10 days, as needed. <u>Bacterial Canker</u> : Apply prior to Fall rains and repeat applications during dormancy before Spring growth. For improved control, tank mix with another registered fungicide approved for this use. <u>Mummy Berry</u> : Apply at bud break. Apply preventatively. Reapply every 7 to 14 days, as needed. For improved control, tank mix with another registered fungicide approved for this use.
<u>Low Growing Berry (13-07G)</u> Bearberry; bilberry; blueberry, lowbush; cloudberry; cranberry; lingonberry; muntries; partridgeberry; strawberry; cultivars, varieties, and/or hybrids of these.		
Anthracnose (<i>Colletotrichum</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	Apply to runoff. Apply preventatively or when the first disease symptoms are visible. Reapply every 7 to 14 days, as needed.
Black Root Rot (<i>Rhizoctonia</i> spp., <i>Pythium</i> spp., <i>Fusarium</i> spp., <i>Cylindrocarpon</i> spp.) Colletotrichum Crown Rot (<i>Colletotrichum</i> spp.) Phytophthora Root Rot and Crown Rot (<i>Phytophthora</i> spp.) Verticillium Wilt (<i>Verticillium</i> spp.)	Plant Dip	Apply immediately prior to transplanting for improved plant growth and suppression of soil-borne diseases.
	Soil Drench	Thoroughly soak growing media and root zone. Apply during or shortly after transplant to reduce transplant shock, suppress soil-borne diseases, and improve root growth. Reapply every 10 to 14 days, as needed.
<i>Fusarium</i> spp. <i>Pythium</i> spp. <i>Phytophthora</i> spp. <i>Rhizoctonia</i> spp. <i>Verticillium</i> spp.	Chemigation	Apply through drip irrigation immediately after transplant and at 14-day intervals, as needed. Alternatively, apply 14 days after transplant when soil drench applications are used.

Berry and Small Fruit (Crop Group 13-07)		
Bushberry (13-07B); Caneberry (13-07A); Low Growing Berry (13-07G); Small Fruit Vine Climbing (13-07D); cultivars, varieties, and/or hybrids of these.		
Disease	Application Method	Application Instructions
Small Fruit Vine Climbing (13-07D)		
Amur river grape; gooseberry; grape; kiwifruit, fuzzy; kiwifruit, hardy; maypop; schisandra berry; cultivars, varieties, and/or hybrids of these.		
Angular Leaf Spot (<i>Mycosphaerella angulata</i>) Anthrachnose (<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>) Phomopsis Fruit Rot (<i>Phomopsis viticola</i>) Powdery Mildew (<i>Uncinula necator</i>) Ripe Rot (<i>Colletotrichum gloeosporioides</i>) Sour Rot (<i>Alternaria tenuis</i> , <i>Aspergillus</i> spp., <i>Botrytis cinerea</i> , <i>Cladosporium herbarum</i> , <i>Penicillium</i> spp., <i>Rhizopus arrhizus</i>)	Foliar	Apply to runoff. Apply preventatively or when the first disease symptoms are visible. Reapply every 7 to 14 days, as needed.
<i>Phytophthora</i> spp. <i>Verticillium</i> spp.	Plant Dip	Apply immediately prior to transplanting for improved plant growth and suppression of soil-borne diseases.

Brassica (Cole) Head and Stem Vegetables (Crop Group 5-16) Broccoli; Brussels sprouts; cabbage; cabbage, Chinese, napa; cauliflower; cultivars, varieties, and hybrids of these commodities.		
Disease	Application Method	Application Instructions
Alternaria Leaf Spot (<i>Alternaria</i> spp.) Downy Mildew (<i>Peronospora</i> spp.) Pin Rot Complex (<i>Alternaria/Xanthomonas</i>) Powdery Mildew (<i>Erysiphe</i> spp.) Xanthomonas Leaf Spot (<i>Xanthomonas campestris</i>)	Foliar	Apply in sufficient water to ensure thorough coverage to the point of runoff. Apply preventatively or when the first disease symptoms are visible. Reapply every 7-14 days. For improved performance, use in a tank mix or rotational program with other registered fungicides approved for this use.

Bulb Vegetables (Crop Group 3-07)		
Chive, fresh leaves; chive, Chinese, fresh leaves; daylily, bulb; elegans hosta; fritillaria, bulb; fritillaria, leaves; garlic, bulb; garlic, great-headed, bulb; garlic, serpent, bulb; kurrat; lady's leek; leek; leek, wild; lily, bulb; onion, Beltsville bunching; onion, bulb; onion, Chinese, bulb; onion, fresh; onion, green; onion, macrostem; onion, pearl; onion, potato, bulb; onion, tree, tops; onion, Welsh, tops; shallot, bulb; shallot, fresh leaves; cultivars, varieties, and/or hybrids of these.		
Disease	Application Method	Application Instructions
Botrytis Leaf Blight (<i>Botrytis squamosa</i>) Botrytis Neck Rot (<i>Botrytis</i> spp.) Downy Mildew (<i>Peronospora</i> spp.) Onion Purple Blotch (<i>Alternaria porri</i>) Powdery Mildew (<i>Erysiphe</i> spp.) Rust (<i>Puccinia porri</i>) Stemphyllium Leaf Blight (<i>Stemphyllium vesicarium</i>)	Foliar	Apply to the point of runoff. Apply preventatively or when the first disease symptoms are visible. Reapply every 7 to 14 days, as needed.
<i>Fusarium</i> spp. <i>Pythium</i> spp. <i>Rhizoctonia</i> spp.	Soil Drench	Thoroughly soak growing media and root zone. Apply during or shortly after transplant to reduce transplant shock, suppress soil-borne diseases, and improve root growth. Reapply every 10 to 14 days, as needed.
	In-Furrow	Direct spray into seed furrow just before covering seeds. See SOIL TREATMENT section for further information.
	Chemigation	Apply at 1-4 qt product/A immediately after transplant. Repeat at 14-day intervals, as needed. Alternatively, begin 14 days after transplant when plant dip or soil drench applications are used. See CHEMIGATION section for further information.
	Plant Dip	Apply immediately prior to transplanting for improved plant growth and suppression of soil-borne diseases.

Cereal Grains (Crop Group 15-22) including Forage, Hay, Stover and Straw (Crop Group 16-22) Amaranth, grain and purple; baby corn; barley; buckwheat (including tartary); canarygrass (annual); canihua; chia; corn (field and sweet); cram cram; fonio (black and white); grain sorghum; huauzontle grain; Inca wheat; Job's tears; millet (all); oat (all); popcorn; prince's feather; psyllium (including blond); quinoa; rice (all); rye; teff; teosinte; triticale; wheat (all); wild rice (including eastern); cultivars, varieties, and/or hybrids of these commodities; and forage, hay, stover and straw of these commodities.		
Disease	Application Method	Application Instructions
All listed crops EXCEPT Corn		
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.) Powdery Mildew (<i>Erysiphe graminis</i>) Rice Blast (<i>Pyricularia grisea</i>) Rust (<i>Puccinia</i> spp.) Septoria Leaf Spot (<i>Septoria</i> spp.) Sheath Spot and Blight (<i>Rhizoctonia oryzae</i> , <i>Thanatephorus cucumeris</i>)	Foliar	Apply at flag leaf stage to maximize yield. Apply preventatively or when the first disease symptoms appear. Reapply every 7 to 14 days, as needed depending on crop growth and disease pressure. When plants are under high disease pressure, tank mix with another fungicide for more effective control. <u>Recommended spray volume by ground:</u> 15-40 gal of finished spray/A.
Corn ONLY		
Anthrachnose Leaf Blight (<i>Colletotrichum graminicola</i>) 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	Consult your local Extension Specialist or Crop Consultant regarding the optimum timing of fungicide applications. For improved performance, tank mix or use in rotation with other registered fungicides approved for this use. Reapply every 7 to 14 days, as needed.

Citrus Fruits (Crop Group 10-10)		
Australian desert lime; Australian finger-lime; Australian round lime; Brown River finger lime; calamondin; citron; citrus hybrids; grapefruit; Japanese summer grapefruit; kumquat; lemon; lime; Mediterranean mandarin; mount white lime; New Guinea wild lime; orange, sour; orange, sweet; pummelo; Russell River lime; satsuma mandarin; sweet lime; tachibana orange; Tahiti lime; tangelo; tangerine (mandarin); tangor; trifoliate orange; uniq fruit; cultivars, varieties, and/or hybrids of these.		
Disease	Application Method	Application Instructions
Alternaria Brown Spot (<i>Alternaria alternata</i>) Bacterial Blast (<i>Pseudomonas syringae</i>) Bacterial Canker (<i>Xanthomonas</i> spp.) Black Spot (<i>Guignardia citricarpa</i> , <i>Phyllosticta citricarpa</i>) Greasy Spot (<i>Mycosphaerella citri</i>) Melanose (<i>Diaporthe citri</i>) Postbloom Fruit Drop (<i>Colletotrichum acutatum</i>) Scab (<i>Elsinoe australis</i> , <i>Elsinoe fawcetti</i>)	Foliar	Apply preventatively before disease is evident. For improved performance, tank mix or use in rotation with other registered fungicides approved for this use. Reapply every 7 to 14 days, as needed. Avoid excessive amounts of dilution water, which may cause runoff of spray material.

Cucurbit Vegetables (Crop Group 9)		
Chayote (fruit); Chinese waxgourd (Chinese preserving melon); citron melon; cucumber; gherkin; gourd, edible (includes hyotan, cucuzza, hechima, Chinese okra); Momordica spp. (includes balsam apple, balsam pear, bittermelon, Chinese cucumber); muskmelon (includes true cantaloupe, cantaloupe, casaba, crenshaw melon, golden pershaw melon, honeydew melon, honey balls, mango melon, Persian melon, pineapple melon, Santa Claus melon and snake melon); pumpkin; squash, summer (includes crookneck squash, scallop squash, straightneck squash, vegetable marrow, zucchini); squash, winter (includes butternut squash, calabaza, hubbard squash, acorn squash, spaghetti squash); watermelon; cultivars, varieties, and/or hybrids of these.		
Disease	Application Method	Application Instructions
<i>Alternaria</i> Blight (<i>Alternaria cucumerina</i>) Anthrachnose (<i>Colletotrichum lagenarium</i>) Cercospora Leaf Spot (<i>Cercospora citrulina</i>) Damping-off (<i>Fusarium</i> spp., <i>Pythium</i> spp., <i>Phytophthora</i> spp., <i>Rhizoctonia solani</i>) Downy Mildew (<i>Pseudoperonospora cubensis</i>) Gummy Stem Blight (<i>Didymella bryoniae</i>) Phytophthora Blight (<i>Phytophthora capsici</i>) Powdery Mildew (<i>Erysiphe cichoracearum</i> , <i>Sphaerotheca fuliginea</i>)	Foliar	Apply to the point of runoff. Apply preventatively or when the first disease symptoms are visible. Reapply every 7 to 14 days, as needed. For improved performance, tank mix or use in rotation with other registered fungicides approved for this use.
<i>Fusarium</i> spp. <i>Phytophthora</i> spp. <i>Pythium</i> spp. <i>Rhizoctonia</i> spp. <i>Verticillium</i> spp.	Soil Drench	Thoroughly soak growing media and root zone. Apply during or shortly after transplant to reduce transplant shock, suppress soil-borne diseases, and improve root growth. Reapply every 10 to 14 days, as needed.
	In-Furrow	Direct spray into seed furrow just before covering seeds. See SOIL TREATMENT section for further information.
	Plant Dip	Apply immediately prior to transplanting for improved plant growth and suppression of soil-borne diseases.
	Chemigation	Apply immediately after transplant. Repeat at 14-day intervals, as needed. Alternatively, begin 14 days after transplant when plant dip or soil drench applications are used. See CHEMIGATION section for further information.

Fruiting Vegetables (Crop Group 8-10)		
African eggplant; bush tomato; bell pepper; cocona; currant tomato; eggplant; garden huckleberry; goji berry; groundcherry; martynia; naranjilla; okra; pea eggplant; pepino; non-bell pepper; roselle; scarlet eggplant; sunberry; tomatillo; tomato; tree tomato; cultivars, varieties, and/or hybrids of these.		
Disease	Application Method	Application Instructions
Bacterial Blight (<i>Xanthomonas</i> spp.) Bacterial Spot (<i>Xanthomonas</i> spp.) Bacterial Speck (<i>Pseudomonas syringae</i>) Black Mold (<i>Alternaria alternata</i>) Damping-off (<i>Fusarium</i> spp., <i>Pythium</i> spp., <i>Rhizoctonia solani</i>) Early Blight (<i>Alternaria solani</i>) Gray Mold (<i>Botrytis cinerea</i>) Late Blight (<i>Phytophthora infestans</i>) Phytophthora Blight (<i>Phytophthora capsici</i>) Powdery Mildew (<i>Erysiphe</i> spp., <i>Leveillula taurica</i> , <i>Oidopsis taurica</i> , <i>Sphaerotheca</i> spp.) Target Spot (<i>Corynespora cassicola</i>)	Foliar	Apply preventatively. Increase water volume as plant size increases. Reapply every 7 to 14 days, as needed. Under heavy pressure, tank mix or use in rotation with other registered fungicides approved for this use for improved performance. <u>Phytophthora Blight</u> : Apply in combination with labeled rates of a copper fungicide or another fungicide labeled for Phytophthora Blight control. Reapply every 7 to 14 days, as needed.
<i>Fusarium</i> spp. <i>Phytophthora</i> spp. <i>Pythium</i> spp. <i>Rhizoctonia</i> spp. <i>Verticillium</i> spp.	Soil Drench	Thoroughly soak growing media and root zone. Apply during or shortly after transplant to reduce transplant shock, suppress soil-borne diseases, and improve root growth. Reapply every 10 to 14 days, as needed.
	In-Furrow	Direct spray into seed furrow at planting just before covering seeds. See SOIL TREATMENT section for further information.
	Plant Dip	Apply immediately prior to transplanting for improved plant growth and suppression of soil-borne diseases.
	Chemigation	Apply immediately after transplant. Repeat at 14-day intervals, as needed. Alternatively, begin 14 days after transplant when plant dip or soil drench applications are used. See CHEMIGATION section for further information.

Grass Forage, Fodder, and Hay (Crop Group 17) Forage, fodder, stover, and hay of any grass, <i>Gramineae/Poaceae</i> family (either green or cured) except sugarcane and those included in the cereal grains group, that will be fed to or grazed by livestock, all pasture and range grasses and grasses grown for hay or silage; includes grass grown for seed.		
Disease	Application Method	Application Instructions
Powdery Mildew (<i>Erysiphe graminis</i> , <i>Oidium</i> spp., <i>Podosphaera</i> spp., <i>Sphaerotheca</i> spp.) Rust (<i>Puccinia</i> spp.)	Foliar	Apply preventatively or when the first disease symptoms are visible. Reapply every 7 to 14 days, as needed. <u>By Ground:</u> Apply to runoff. <u>By Air:</u> For improved performance, tank mix or rotate with other fungicides approved for this use.

Hemp (No Crop Group)		
Cultivars, varieties, and/or hybrids of <i>Cannabis sativa</i> L. with total THC concentration of not more than 0.3 percent on a dry weight basis.		
Disease	Application Method	Application Instructions
Anthracnose (<i>Colletotrichum</i> spp.) Bacterial blight (<i>Pseudomonas cannabina</i>) Brown blight (<i>Alternaria alternata</i>) Brown leaf spot and stem canker (<i>Ascochyta</i> spp.) Gray mold (<i>Botrytis cinerea</i>) Hemp leaf spot (<i>Bipolaris</i> , <i>Cercospora</i> , <i>Curvularia</i> spp.) Powdery mildew (<i>Leveillula</i> , <i>Podosphaera</i> , <i>Sphaerotheca</i> spp.) Olive leaf spot (<i>Cercospora cannabis</i>) Stemphylium leaf and stem spot (<i>Stemphylium botryosum</i>) White leaf spot (<i>Phomopsis ganjae</i>) Xanthomonas leaf spot (<i>Xanthomonas campestris</i>) Yellow leaf spot (<i>Septoria</i> spp.)	Foliar	Apply at first appearance of leaves or just after transplant and repeat at 3-14 day intervals as needed, in sufficient water to obtain thorough coverage of foliage. Tank mix or rotate with other registered fungicides for improved control.
<i>Fusarium</i> spp. <i>Phytophthora</i> spp. <i>Pythium</i> spp. <i>Rhizoctonia</i> spp. <i>Verticillium</i> spp.	Plant Dip	Apply immediately prior to transplanting for improved plant growth and suppression of soil-borne diseases.

Herb Crop Group (Crop Group 25)		
Includes fresh leaves (25A) and dried leaves (25B) of all Crop Group 25 herbs including basil (<i>Ocimum</i> spp.); catnip; chive; cilantro/coriander; curry; edible flowers (multiple species including angelica, balm, borage, burnet, chervil, chicory, clary, costmary, horehound, hyssop, lavender, lovage, nasturtium, rosemary, sage, savory, thyme, wormwood); lemongrass; marjoram/oregano (<i>Origanum</i> spp.); mint (<i>Mentha</i> spp.); parsley (dried leaves); sweet bay; tansy; tarragon; tea (multiple varieties of white, green, yellow, oolong, black, and dark, including camomile/chamomile); woodruff; and cultivars, varieties, and/or hybrids of these commodities.		
Disease	Application Method	Application Instructions
Downy Mildew (<i>Peronospora</i> spp.) Powdery Mildew (<i>Erysiphe</i> spp.) Rust (<i>Puccinia</i> spp.)	Foliar	Apply preventatively or when the first disease symptoms are visible. Reapply every 7 to 14 days, as needed. <u>By Ground:</u> Apply to runoff. <u>By Air:</u> For improved performance, tank mix or rotate with other fungicides approved for this use.

Hops (No Crop Group)		
Cultivars, varieties, and/or hybrids of <i>Humulus</i> spp.		
Disease	Application Method	Application Instructions
Downy Mildew (<i>Pseudoperonospora humuli</i>) Powdery mildew (<i>Sphaerotheca macularis</i>)	Foliar	<p>Apply preventatively when disease symptoms are first visible or when environmental conditions are conducive to rapid disease development. Repeat sprays at 7-day intervals, as needed.</p> <p><i>Minimum spray volumes</i> for hop growth stages are as follows:</p> <p><u>Emergence to Training</u>: 20 gal of finished spray/A. Coverage will vary with the size of the vines and the type of spray equipment.</p> <p><u>Training to Wire-Touch</u>: 50 gal of finished spray/A. Coverage will vary with the size of the vines and the type of spray equipment.</p> <p><u>Wire-Touch through Harvest</u>: 100 gal of finished spray/A. Higher water volumes may be necessary to achieve thorough coverage after side arms develop.</p>
<i>Fusarium</i> spp. <i>Phytophthora</i> spp. <i>Pythium</i> spp. <i>Rhizoctonia</i> spp. <i>Verticillium</i> spp.	Plant Dip	Apply immediately prior to transplanting for improved plant growth and suppression of soil-borne diseases.

Leafy Vegetables (Crop Group 4-16)		
<p>Amaranth, Chinese; amaranth, leafy; arugula; aster, Indian; blackjack; broccoli, Chinese; broccoli raab; cabbage, Abyssinian; cabbage, Chinese, bok choy; cabbage, seakale; cat's whiskers; cham-chwi; cham-na-mul; chervil, fresh leaves; chipilin; chrysanthemum, garland; cilantro, fresh leaves; collards; corn salad; cosmos; cress, garden; cress, upland; dandelion, leaves; dang-gwi, leaves; dillweed; dock; dol-nam-mul; ebolo; endive; escarole; fameflower; feather cockscomb; Good King Henry; hanover salad; huauzontle; jute, leaves; kale; lettuce, bitter; lettuce, head; lettuce, leaf; maca, leaves; mizuna; mustard greens; orach; parsley, fresh leaves; plantain, buckhorn; primrose, English; purslane, garden; purslane, winter; radicchio; radish, leaves; rape greens; rocket, wild; shepherd's purse; spinach; spinach, Malabar; spinach, New Zealand; spinach, tanier; Swiss chard; turnip greens; violet, Chinese, leaves; watercress; cultivars, varieties, and hybrids of these commodities.</p>		
Disease	Application Method	Application Instructions
<p>Bacterial Blight/Rot (<i>Xanthomonas</i> spp.) Cercospora leafspot (<i>Cercospora</i> spp.) Downy Mildew (<i>Bremia lactuca</i>, <i>Peronospora</i> spp.) Late Blight (<i>Septoria apiicola</i>) Pink Rot (<i>Sclerotinia sclerotiorum</i>) Powdery Mildew (<i>Erysiphe</i> spp.) Sclerotinia Head and Leaf Drop (<i>Sclerotinia minor</i>, <i>Sclerotinia sclerotiorum</i>) White Rust (<i>Albugo occidentalis</i>)</p>	Foliar	<p>Apply preventatively or when the first disease symptoms are visible. Reapply every 7 to 14 days, as needed.</p> <p><u>By Ground:</u> Apply to runoff.</p> <p><u>By Air:</u> For improved performance, tank mix or rotate with other fungicides approved for this use.</p>

Legume Vegetables (Crop Group 6-22), Including Forage and Hay (Crop Group 7-22)		
Bean (all), including dry seed (6-22E), edible podded (6-22A), succulent (6-22A&C), and succulent shelled (6-22C); pea (all), including dry seed (6-22F), edible podded (6-22B), succulent (6-22B&D), and succulent shelled (6-22D); soybean, including seed, vegetable edible podded (edamame), and vegetable succulent shelled (edamame); including cultivars, varieties, and/or hybrids of these commodities; and any plant parts that will be used as animal feed (except soybeans).		
Disease	Application Method	Application Instructions
All listed crops EXCEPT Soybean		
Bacterial Blight (<i>Xanthomonas campestris</i>) Gray Mold (<i>Botrytis cinerea</i>) Powdery Mildew (<i>Erysiphe</i> spp.) Pythium (aerial blight phase) (<i>Pythium</i> spp.) Rice Blast (<i>Pyricularia grisea</i>) Rust (<i>Puccinia</i> spp., <i>Uromyces appendiculatus</i>) White Mold (<i>Sclerotinia sclerotiorum</i>)	Foliar	Apply at flag leaf stage to maximize yield. Apply preventatively or when the first disease symptoms appear. Reapply every 7 to 14 days, as needed depending on crop growth and disease pressure. When plants are under high disease pressure, tank mix with another fungicide for more effective control.
<i>Fusarium</i> spp. <i>Phytophthora</i> spp. <i>Pythium</i> spp. <i>Rhizoctonia</i> spp.	In-Furrow	Direct spray into seed furrow at planting just before covering seeds. See SOIL TREATMENT section for further information.
Soybean ONLY		
Aerial Web Blight (<i>Rhizoctonia solani</i>) Alternaria Leafspot (<i>Alternaria</i> spp.) Anthracnose (<i>Colletotrichum truncatum</i>) Asian Soybean Rust (<i>Phakopsora pachyrhizi</i>) Brown Spot (<i>Septoria glycines</i>) Cercospora Blight (<i>Cercospora kikuchii</i>) Frog-eyed Leaf Spot (<i>Cercospora sojina</i>) Pod and Stem Blight (<i>Diaporthe</i> spp.) Septoria Brown Spot (<i>Septoria glycines</i>) White Mold (<i>Sclerotinia sclerotiorum</i>)	Foliar	Apply this product preventatively or when the first disease symptoms are visible and reapply every 7-14 days. <u>By Ground:</u> Apply to runoff. <u>By Air:</u> For improved performance, tank mix or rotate with other fungicides approved for this use.
<i>Fusarium</i> spp. <i>Phytophthora</i> spp. <i>Pythium</i> spp. <i>Rhizoctonia</i> spp.	In-Furrow	Direct spray into seed furrow at planting just before covering seeds. See SOIL TREATMENT section for further information.

Nongrass Animal Feeds (Forage, Fodder, Straw, and Hay) (Crop Group 18) Alfalfa; bean, velvet; clover (<i>Trifolium</i> spp., <i>Melilotus</i> spp.); kudzu; lespedeza; lupin; sainfoin; trefoil; vetch; vetch, crown; vetch, milk.		
Disease	Application Method	Application Instructions
Powdery Mildew (<i>Erysiphe graminis</i> , <i>Oidium</i> spp., <i>Podosphaera</i> spp., <i>Sphaerotheca</i> spp.) Rust (<i>Puccinia</i> spp.)	Foliar	Apply preventatively or when the first disease symptoms are visible. Reapply every 7 to 14 days, as needed. <u>By Ground:</u> Apply to runoff. <u>By Air:</u> For improved performance, tank mix or rotate with other fungicides approved for this use.

Oilseeds (Crop Group 20)		
Borage; calendula; castor oil plant; Chinese tallowtree; cottonseed; crambe; cuphea; echium; euphorbia; evening primrose; flax seed; gold of pleasure; hare's ear mustard; jojoba; lesquerella; lunaria; meadowfoam; milkweed; mustard seed; niger seed; oil radish; poppy seed; rapeseed; rose hip; safflower; sesame; stokes aster; sunflower; sweet rocket; tallowwood; tea oil plant; vernonia; cultivars, varieties, and/or hybrids of these.		
Disease	Application Method	Application Instructions
All listed crops EXCEPT Cotton		
Bacterial Pustule (<i>Xanthomonas</i> spp.) Bacterial Speck (<i>Pseudomonas syringae</i> pv. <i>glycinea</i>) 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 (<i>Sclerotinia sclerotiorum</i>)	Foliar	Apply preventatively or when the first disease symptoms are visible. Reapply every 7 to 14 days, as needed. <u>By Ground:</u> Apply to runoff. <u>By Air:</u> For improved performance, tank mix or rotate with other fungicides approved for this use.
Cotton		
Alternaria Leaf Spot, Boll Rot (<i>Alternaria</i> spp.) Anthracnose, Boll Rot (<i>Glomeria</i> spp.) Ascochyta Blight, Boll Rot (<i>Ascochyta</i> spp.) Cercospora Blight and Leaf Spot (<i>Cercospora</i> spp.) Diplodia Boll Rot (<i>Diplodia</i> spp.) Hard Lock, Boll Rot (<i>Fusarium</i> spp.) Leaf Spot (<i>Corynespora cassicola</i>) Phoma Blight, Boll Rot (<i>Phoma</i> spp.) Rust (<i>Puccinia</i> spp., <i>Phykopsora</i> spp.) Stemphyllium Leaf Spot (<i>Stemphyllium</i> spp.)	Foliar	<u>By Ground:</u> For foliar and Boll Rot disease control, apply this product preventatively prior to disease development using sufficient volume for thorough coverage. Repeat applications at 7 to 14-day intervals. <u>By Air:</u> For improved performance, use this product in a tank mix or rotational program with other registered fungicides. Repeat applications at 7 to 14-day intervals.
<i>Fusarium</i> spp. <i>Phytophthora</i> spp. <i>Pythium</i> spp. <i>Rhizoctonia</i> spp. <i>Verticillium</i> spp.	In-Furrow	Direct spray into seed furrow at planting just before covering seeds. See SOIL TREATMENT section for further information.

Peanuts (No Crop Group)		
Cultivars, varieties, and/or hybrids of <i>Arachis hypogaea</i> .		
Disease	Application Method	Application Instructions
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 (<i>Cercosporidium personatum</i>) Rhizoctonia Foliar Blight, Peg, and Root Rot (<i>Rhizoctonia solani</i>) White Mold (<i>Sclerotium rolfsii</i>)	Foliar	Apply preventatively or when the first disease symptoms are visible. Reapply every 7 to 14 days, as needed. <u>By Ground</u> : Apply to runoff. <u>By Air</u> : For improved performance, tank mix or rotate with other fungicides approved for this use.
Aspergillus Crown Rot (<i>Aspergillus niger</i>) <i>Fusarium</i> spp. <i>Phytophthora</i> spp. <i>Pythium</i> spp. <i>Rhizoctonia</i> spp. <i>Verticillium</i> spp. White Mold (<i>Sclerotium rolfsii</i>)	Soil Drench	Thoroughly soak growing media and root zone. Apply during or shortly after transplant to reduce transplant shock, suppress soil-borne diseases, and improve root growth. Reapply every 10 to 14 days, as needed.
	In-Furrow	Direct spray into seed furrow at planting just before covering seeds. See SOIL TREATMENT section for further information.

Pome Fruits (Crop Group 11-10)		
Apple; azarole; crabapple; loquat; mayhaw; medlar; pear; pear, Asian; quince; quince, Chinese; quince, Japanese; tejocote; cultivars, varieties, and/or hybrids of these.		
Disease	Application Method	Application Instructions
Alternaria Blotch (<i>Alternaria mali</i>) Apple Scab (<i>Venturia inaequalis</i>) Bitter Rot (<i>Colletotrichum</i> spp.) Black Rot/Frogeye Leaf Spot (<i>Botryosphaeria obtusa</i>) Bot Rot (<i>Botryosphaeria dothidea</i>) Brooks Spot (<i>Mycosphaerella pomi</i>) Bull's Eye Rot (<i>Neofabraea</i> spp.) Cedar-Apple Rust (<i>Gymnosporangium juniperi-virginianae</i>) Fire Blight (<i>Erwinia amylovora</i>) Flyspeck (<i>Zygophiala jamaicensis</i>) Powdery Mildew (<i>Podosphaera leucotricha</i>) Scab (<i>Venturia</i> spp.) Sooty Blotch (<i>Gaeastrum polystigmati</i> , <i>Leptodontium elatius</i> , <i>Peltaster fructicola</i>) White Rot (<i>Botryosphaeria dothidea</i>)	Foliar	Apply preventatively. Reapply every 7 to 14 days, as needed. For improved performance, use this product in a tank mix or rotational program with other fungicides approved for this use. Avoid excessive amounts of water that result in the runoff of spray material.
Phytophthora spp. Pythium spp.	Plant Dip (bare root)	For improved plant growth and suppression of soil-borne diseases, apply immediately prior to transplanting.

Root and Tuber Vegetables (Crop Group 1), Including Leaves† (Human Food or Animal Feed) (Crop Group 2) Arracacha; arrowroot; artichoke, Chinese; artichoke, Jerusalem; beet, garden†; beet, sugar†; burdock, edible†; canna, edible; carrot†; cassava, bitter and sweet (manioc, yuca)†; celeriac (celery root)†; chayote (root); chervil, turnip-rooted†; chicory†; chufa; dasheen (taro)†; ginger; ginseng; horseradish; leren; parsley, turnip-rooted; parsnip†; potato; radish†; radish, oriental (daikon)†; rutabaga†; salsify (oyster plant); salsify, black†; salsify, Spanish; skirret; sweet potato†; tanier (cocoyam)†; turmeric; turnip†; yam bean (jicama, manioc pea); yam, true† † Leaves of these crops.		
Disease	Application Method	Application Instructions
All Listed Crops		
Bacterial Leaf Blight (<i>Xanthomonas campestris</i>) Black Root Rot / Black Crown Rot (<i>Alternaria</i> spp.) Downy Mildew (<i>Peronospora</i> spp.) Early Blight (<i>Alternaria solani</i>) Gray Mold (<i>Botrytis</i> spp.) Late Blight (<i>Phytophthora infestans</i>) Powdery Mildew (<i>Erysiphe</i> spp.) White Mold (<i>Sclerotinia sclerotiorum</i>)	Foliar	Apply to runoff. Apply preventatively or when the first disease symptoms are visible. Reapply every 7-14 days.
Clubroot (<i>Plasmodiophora brassicae</i>) Common Scab (<i>Streptomyces scabies</i>) <i>Fusarium</i> spp. <i>Phytophthora</i> spp.	Soil Drench	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. Reapply every 10 to 14 days, as needed.
<i>Pythium</i> spp. <i>Rhizoctonia</i> spp. <i>Verticillium</i> spp.	In-Furrow	Direct spray into seed furrow just before covering seeds. See SOIL TREATMENT section for additional information.
	Chemigation	Apply at 1-4 qt product/A immediately after transplant. Repeat at 14-day intervals. Alternatively, begin 14 days after transplant when plant dip or soil drench applications are used.
	Seed Piece Dip	Apply as a pre-plant dip to transplants or seed pieces immediately prior to transplanting.
Artichokes ONLY		
Leaf Spot (<i>Cercospora beticola</i>) Powdery Mildew (<i>Erysiphe cichoracearum</i> , <i>Leveillula taurica</i>) Ramularia (<i>Ramularia</i> spp.) Rust (<i>Uromyces betae</i>)	Foliar	Apply to the point of runoff. Apply preventatively or when the first disease symptoms are visible. Reapply every 7-14 days.
	Chemigation	For improved plant growth and suppression of soil-borne diseases, apply through drip irrigation immediately after transplant and at 14-day intervals or begin 14 days after transplant when soil drench applications are used. See CHEMIGATION section for further information.
Sugar Beet ONLY		
Leaf Spot (<i>Cercospora beticola</i>) Powdery Mildew (<i>Erysiphe betae</i> , <i>Erysiphe polygoni</i>) Ramularia (<i>Ramularia</i> spp.) Rust (<i>Uromyces betae</i>)	Foliar	Apply to the point of runoff. Apply preventatively or when the first disease symptoms are visible. Reapply every 7-14 days.

Spices (Crop Group 26)		
Includes all spices in Crop Group 26 including bark, fruit, root, seed, and/or stem of the following: angelica; chervil; cinnamon; clove; coriander; cumin; dill; fennel; fenugreek; lovage; mustard; nasturtium; nutmeg; pepper; peppercorn; poppy seed; rue; saffron crocus; sassafras; saw palmetto; sesame; tamarind; and cultivars, varieties, and/or hybrids of these commodities.		
Disease	Application Method	Application Instructions
Downy Mildew (<i>Peronospora</i> spp.) Powdery Mildew (<i>Erysiphe</i> spp.) Rust (<i>Puccinia</i> spp.)	Foliar	Apply preventatively or when the first disease symptoms are visible. Reapply every 7 to 14 days, as needed. <u>By Ground:</u> Apply to runoff. <u>By Air:</u> For improved performance, tank mix or rotate with other fungicides approved for this use.

Stalk, Stem, and Leaf Petiole (Crop Group 22)		
Agave; aloe vera; asparagus; bamboo, shoots; cardoon; celery; celery, Chinese; celtuce; fennel, Florence, fresh leaves and stalk; fern, edible, fiddlehead; fuki; kale, sea; kohlrabi; palm hearts; prickly pear, pads; prickly pear, Texas, pads; rhubarb; udo; zuiki; cultivars, varieties, and hybrids of these commodities.		
Disease	Application Method	Application Instructions
Botrytis Blight (<i>Botrytis cinerea</i>) Rust (<i>Puccinia aspargi</i>)	Foliar	Apply to runoff. Apply preventatively or when the first disease symptoms are visible. Reapply every 7-14 days.

Stone Fruit (Crop Group 12-12)		
Apricot; apricot, Japanese; capulin; cherry, black; cherry, Nanking; cherry, sweet; cherry, tart; Jujube, Chinese; nectarine; peach; plum; plum, American; plum, beach; plum, Canada; plum, cherry; plum, Chickasaw; plum, Damson; plum, Japanese; plum, Klamath; plum, prune; plumcot; sloe; cultivars, varieties, and/or hybrids of these.		
Disease	Application Method	Application Instructions
Alternaria Spot/Fruit Rot (<i>Alternaria alternata</i>) Anthracnose (<i>Colletotrichum</i> spp.) Bacterial Canker (<i>Pseudomonas</i> spp.) 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>)	Foliar	Apply preventatively. Reapply every 7 to 14 days, as needed. For improved performance, use this product in a tank mix or rotational program with other fungicides approved for this use. Avoid excessive amounts of water that result in the runoff of spray material.
<i>Fusarium</i> spp. <i>Phytophthora</i> spp. <i>Pythium</i> spp. <i>Rhizoctonia</i> spp. <i>Verticillium</i> spp.	Plant Dip (bare root)	For improved plant growth and suppression of soil-borne diseases, apply immediately prior to transplanting.

Sugarcane (No Crop Group) Cultivars, varieties, and/or hybrids of <i>Saccharum officinarum</i> .		
Disease	Application Method	Application Instructions
Brown Rust (<i>Puccinia melanocephala</i>) Orange Rust (<i>Puccinia kuehnii</i>)	Foliar	Apply preventatively or when the first disease symptoms are visible. Reapply every 7 to 14 days, as needed. <u>By Ground</u> : Apply to runoff. <u>By Air</u> : For improved performance, tank mix or rotate with other fungicides approved for this use.
<i>Fusarium</i> spp. <i>Phytophthora</i> spp. <i>Pythium</i> spp. <i>Rhizoctonia</i> spp.	In-Furrow	Direct spray into seed furrow at planting just before covering seeds. See SOIL TREATMENT section for further information.

Tobacco (No Crop Group)		
Cultivars, varieties, and/or hybrids of <i>Nicotiana tabacum</i> and <i>Nicotiana rustica</i> .		
Disease	Application Method	Application Instructions
Blue Mold (<i>Peronospora tabacinae</i>)	Foliar	Apply to runoff. Apply preventatively or when the first disease symptoms are visible. 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	For improved plant growth and suppression of soil-borne diseases, apply immediately prior to transplanting.

Tree Nuts (Crop Group 14-12)		
African nut-tree; almond; beechnut; Brazil nut; Brazilian pine; bunya; bur oak; butternut; cajou nut; candlenut; cashew; chestnut; chinquapin; coconut; coquito nut; dika nut; ginkgo; guiana chestnut; hazelnut (filbert); heartnut; hickory nut; Japanese horse-chestnut; macadamia nut; mongongo nut; monkey-pot; monkey puzzle nut; okari nut; pachira nut; peach palm nut; pecan; pequi; pili nut; pine nut; pistachio; sapucaia nut; tropical almond; walnut, black; walnut, English; yellowhorn; cultivars, varieties, and/or hybrids of these.		
Disease	Application Method	Application Instructions
Alternaria Late Blight, Alternaria Leaf Spot (<i>Alternaria</i> spp.) Anthracnose (<i>Collectotrichum</i> spp., <i>Gnomonia leptostyla</i>) Bacterial Canker (<i>Erwinia nigrifluens</i> , <i>Pseudomonas syringae</i>) Botryosphaeria Blight (<i>Botryosphaeria dothidea</i>) Brown Rot (<i>Monilinia</i> spp.) Eastern Filbert Blight (<i>Anisogramma anomala</i>) Green Fruit Rot (<i>Botrytis cinerea</i>) Leaf Rust (<i>Tranzschelia discolor</i>) Scab (<i>Cladosporium carpophilum</i> , <i>Sphaceloma perseae</i>) Shot Hole (<i>Wilsonomyces carpophilus</i>) Walnut Blight (<i>Xanthomonas campestris</i>)	Foliar	Apply preventatively. Reapply every 7 to 14 days, as needed. For improved performance, use this product in a tank mix or rotational program with other fungicides approved for this use. Avoid excessive amounts of water that result in the runoff of spray material.
<i>Fusarium</i> spp. <i>Phytophthora</i> spp. <i>Pythium</i> spp. <i>Rhizoctonia</i> spp. <i>Verticillium</i> spp.	Plant Dip (bare root)	For improved plant growth and suppression of soil-borne diseases, apply immediately prior to transplanting.

Tropical and Subtropical Fruit, Edible Peel Group (Crop Group 23)		
Acai; acerola; achachairú; African plum; agritos; almondette; ambarella; apak palm; appleberry; arazá; arbutus berry; babaco; bacaba palm; bacaba-de-leque; bayberry, red; bignay; bilimbi; borjón; breadnut; cabeluda; cajou, fruit; cambucá; carandas-plum; carob; cashew apple; Ceylon iron wood; Ceylon olive; cherry-of-the-Rio-Grande; Chinese olive, black; Chinese olive, white; chirauli-nut; ciruela verde; cocoplum; date; Davidson's plum; desert-date; doum palm coconut; false sandalwood; feijoa; fig; fragrant manjack; gooseberry, Abyssinian; gooseberry, Ceylon; gooseberry, Indian; gooseberry, otaheite; governor's plum; grumichama; guabiroba; guava; guava berry; guava, Brazilian; guava, cattley; guava, Costa Rican; guava, para; guava, purple strawberry; guava, strawberry; guava, yellow strawberry; guayabillo; illawarra plum; imbé; imbu; Indian-plum; jaboticaba; Jamaica-cherry; jambolan; jelly palm; jujube, Indian; kaffir-plum; kakadu plum; kapundung; karanda; kwai muk; lemon aspen; mangaba; Marian plum; mombin, Malayan; mombin, purple; mombin, yellow; monkeyfruit; monos plum; mountain cherry; nance; natal plum; noni; olive; papaya, mountain; pataú; peach palm, fruit; persimmon, black; persimmon, Japanese; pitomba; plum-of-Martinique; pomerac; rambai; rose apple; rukam; rumberry; sea grape; sentul; sete-capotes; silver aspen; starfruit; Surinam cherry; tamarind; uvalha; water apple; water pear; water berry; wax jambu; cultivars, varieties, and hybrids of these commodities.		
Disease	Application Method	Application Instructions
All listed crops EXCEPT Olive		
Anthrachnose (<i>Colletotrichum gloeosporioides</i>) 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	Apply preventatively or when the first disease symptoms are visible. Reapply every 7 to 14 days, as needed. <u>By Ground:</u> Apply to runoff. <u>By Air:</u> For improved performance, tank mix or rotate with other fungicides approved for this use.
<i>Fusarium</i> spp. <i>Phytophthora</i> spp. <i>Pythium</i> spp. <i>Rhizoctonia</i> spp. <i>Verticillium</i> spp.	Plant Dip	For improved plant growth and suppression of soil-borne diseases, apply immediately prior to transplanting.
Olive		
Olive Knot (<i>Pseudomonas savastanoi</i>)	Foliar	Apply preventatively or when the first disease symptoms are visible. Avoid excessive amounts of water that result in the runoff of spray material. Reapply every 7 to 14 days, as needed. For improved performance, use this product in a tank mix or rotational program with other fungicides approved for this use.

Tropical and Subtropical Fruit, Inedible Peel Group (Crop Group 24)		
<p>Abiu; aisen; akee apple; atemoya; avocado; avocado, Guatemalan; avocado, Mexican; avocado, West Indian; bacury; bael fruit; banana; banana, dwarf; binjai; biriba; breadfruit; Burmese grape; canistel; cat's-eyes; champedak; cherimoya; cupuacú; custard apple; dragon fruit; durian; elephant-apple; etambe; granadilla; granadilla, giant; ilama; inga; jackfruit; jatobá; karuka; kei apple; langsat; lanjut; longan; lucuma; lychee; mabolo; madras-thorn; mammy-apple; manduro; mango; mango, horse; mango, Saipan; mangosteen; marang; marmaladebox; matisia; mesquite; mongongo, fruit; monkey-bread-tree; monstera; nicobar-breadfruit; paho; pandanus; papaya; passionflower, winged-stem; passionfruit; passionfruit, banana; passionfruit, purple; passionfruit, yellow; pawpaw, common; pawpaw, small-flower; pelipisan; pequi; pequia; persimmon, American; pineapple; pitahaya; pitaya; pitaya, amarilla; pitaya, roja; pitaya, yellow; plantain; pomegranate; poshte; prickly pear, fruit; prickly pear, Texas, fruit; pulasan; quandong; rambutan; saguaro; sapodilla; sapote, black; sapote, green; sapote, mamey; sapote, white; sataw; satinleaf; screw-pine; Sierra Leone-tamarind; soncoya; soursop; Spanish lime; star apple; sugar apple; sun sapote; tamarind-of-the-Indies; velvet tamarind; wampi; white star apple; wild loquat; cultivars, varieties, and hybrids of these commodities.</p>		
Disease	Application Method	Application Instructions
<p>Anthrachnose (<i>Colletotrichum gloeosporioides</i>) 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>)</p>	Foliar	<p>Apply preventatively or when the first disease symptoms are visible. Reapply every 7 to 14 days, as needed.</p> <p><u>By Ground:</u> Apply to runoff.</p> <p><u>By Air:</u> For improved performance, tank mix or rotate with other fungicides approved for this use.</p>
<p><i>Fusarium</i> spp. <i>Phytophthora</i> spp. <i>Pythium</i> spp. <i>Rhizoctonia</i> spp. <i>Verticillium</i> spp.</p>	Plant Dip	<p>For improved plant growth and suppression of soil-borne diseases, apply immediately prior to transplanting.</p>

GREENHOUSE, NURSERY, AND LANDSCAPE ORNAMENTAL PLANTS, SHRUBS, AND TREES

For use to control listed diseases of container, bench, flat, plug, bed, or field-grown ornamentals in greenhouses, shadehouses, outdoor nurseries, retail nurseries, and other landscape areas. Not for homeowner use.

Ornamental Plants, Shrubs, and Trees		
Herbaceous Ornamentals: Flowering plants, foliage plants, bedding plants; Woody Ornamentals: Broadleaves, shrubs and trees; Conifers, shrubs and trees		
Disease	Application Method	Application Instructions
Anthracnose (<i>Colletotrichum</i> spp.) Bacteria (<i>Erwinia</i> spp., <i>Pseudomonas</i> spp., <i>Xanthomonas</i> spp.) Black spot of roses (<i>Diplocarpon rosae</i>) Blossom Blight (<i>Monilinia</i> spp.) Downy Mildew (<i>Peronospora</i> spp., <i>Plasmopara viticola</i>) Gray Mold (<i>Botrytis cinerea</i>) Leaf Spot (<i>Alternaria</i> spp., <i>Cercospora</i> spp., <i>Entomosporium</i> spp., <i>Myrothecium</i> spp., <i>Septoria</i> spp.) Powdery Mildew (<i>Erysiphe</i> spp., <i>Oidium</i> spp., <i>Podosphaera</i> spp., <i>Sphaerotheca</i> spp.) Rust (<i>Puccinia</i> spp.) Scab (<i>Venturia</i> spp.)	Foliar	Apply to runoff. Apply preventatively (before disease symptoms are visible) at the 4- to 7-leaf stage. Reapply every 7 to 14 days, as needed, as needed.
<i>Fusarium</i> spp. <i>Phytophthora</i> spp. <i>Pythium</i> spp. <i>Rhizoctonia</i> spp. <i>Verticillium</i> spp.	Soil Drench	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. Reapply every 10 to 14 days, as needed.
	Plant Dip	For improved plant growth and suppression of soil-borne diseases, apply immediately prior to transplanting.
	Chemigation	For improved plant growth and suppression of soil-borne diseases, apply this product through drip irrigation immediately after transplant and at 14-day intervals, as needed, or begin 14 days after transplant when soil drench applications are used.

CHEMIGATION INSTRUCTIONS

Apply by chemigation to deliver 5 to 22 fl oz product/A according to the instructions below and diluted as specified in the **CROPS** section.

GENERAL REQUIREMENTS

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.

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

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

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

A person knowledgeable of the chemigation system and responsible for its operation, or under 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

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.

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.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.

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.

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.

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.

Do not apply when wind speed favors drift beyond the area intended for treatment.

SPECIFIC REQUIREMENTS FOR SPRINKLER CHEMIGATION

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.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.

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.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.

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.

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.

Do not apply when wind speed favors drift beyond the area intended for treatment.

SPECIFIC REQUIREMENTS FOR FLOOD (BASIN), FURROW AND BORDER CHEMIGATION

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.

The systems utilizing a pressurized water and pesticide injection system must meet the following requirements:

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.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.

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.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.

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.

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

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.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.

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.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.

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.

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

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.

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.

Prepare a solution in the chemical tank by filling the tank with the required water and then adding product as required.

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

Container Handling:

{For Nonrefillable Retail Containers less than or equal to 5 gallons}

Nonrefillable 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 dispose of in trash or in a sanitary landfill or by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

{For Nonrefillable Bulk Containers greater than 5 gallons (for repackaging into retail containers)}

Nonrefillable 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. 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, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

{For Refillable Bulk Containers greater than 5 gallons (for repackaging into retail containers)}

Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or a mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. When empty, return to point of sale or to the manufacturer.

WARRANTY

AgroSpheres, Inc. warrants that the material contained herein conforms to the description on the label and is reasonably fit for the purposes referred to in the directions for use. Timing and method of application, weather, watering practices, nature of soil, the disease problem, condition of the crop, incompatibility with other chemicals not specifically recommended and other influencing factors in the use of this product are beyond the control of the seller. To the extent consistent with applicable law, buyer assumes all risks of use, storage or handling of this material not in strict accordance with directions given herein. NO OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR MERCHANTABILITY IS MADE.

SUBLABEL C: TURF & ORNAMENTAL LANDSCAPE CROPS

GROUP BM 01 FUNGICIDE

Thyme Oil 26% LC Biofungicide

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



[OMRI Seal-see last page for optional graphics]

Active Ingredient:

Thyme oil 26%

Other Ingredients: 74%

Total..... 100%

KEEP OUT OF REACH OF CHILDREN

DANGER – PELIGRO

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

FIRST AID

IF IN EYES:	Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.
IF ON SKIN OR CLOTHING:	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
Have the product container or label with you when calling a poison control center or doctor, or if going for treatment.	

Manufactured [By][For]



AgroSpheres, Inc.
1180 Seminole Trail, Suite 100
Charlottesville VA 22901

EPA Reg. No. 99869-2

EPA Est. No. _____

[Lot][Batch]: _____

Net Contents:

ESL _____

Ver. _____

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

DANGER: CORROSIVE. Causes irreversible eye injury. Harmful if absorbed through skin. Do not get in eyes or on clothing. Avoid contact with skin, eyes, or clothing. Wear eye protection (safety glasses, goggles, or face shield). Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

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

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

- Users should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Users should remove PPE immediately after handling this product. 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.

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 48 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
- Eye protection
- Waterproof gloves
- Shoes plus socks

NON-AGRICULTURAL USE REQUIREMENTS

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

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

PRODUCT INFORMATION

Thyme Oil 26% LC is a fungicide-bactericide for the control of various plant diseases on agricultural crops (including those grown for seed), greenhouse crops (including those grown in shade houses, lath houses, and controlled environments), and/or turf and ornamentals. Thyme Oil 26% LC contains a botanical extract from the herb, thyme (*Thymus* spp.), that controls and/or suppresses listed fungal and bacterial disease organisms. Thyme oil is non-systemic and acts by membrane disruption. The oil disrupts the cell walls and cell membranes while inhibiting cell division and replication of the fungal disease organisms effectively stopping the spread of disease.

This product is formulated with AgroSpheres® proprietary adjuvant, AgroSpheres® Microbially-Derived Minicells, which microencapsulates the oil, improving product stability and enhancing efficacy against target fungal and bacterial pathogens. AgroSpheres® adjuvant slows the release of the thyme oil by up to two weeks after which the oil and the AgroSpheres® naturally degrade in soil and air.

For best results, use this product as a preventative treatment before onset of disease to protect the growing leaf tissue. This product can also be used as a curative treatment after disease is already present. See specific information for diseases controlled and use rates on ornamental plants, shrubs, trees, and turf.

MIXING INSTRUCTIONS

SHAKE WELL BEFORE USE

Use 100-mesh nozzle screens or larger. Use higher water volumes with larger sized crops and extensive foliage to secure thorough coverage. Prepare only the amount of spray mix that is required for the immediate operation. Do not allow the mixture to stand overnight in the spray tank.

See CHEMIGATION, PLANT DIP, and SOIL TREATMENT sections for specific application directions.

Stand-alone use: Fill the mix tank halfway full of water. Begin agitation, then add product to the mix tank, followed by the remainder of water. Continue mixing until product has completely dispersed into the mix water. Maintain agitation during application until all the mixture has been applied.

Tank-mixtures: Fill the mix tank half- to three-quarters full of water. Turn on agitation before adding any tank mix partners and maintain constant agitation throughout the mixing and application process. Recommended order of addition of tank-mix partners is as follows: wettable powders, dry flowable formulations, liquid flowable formulations, and emulsifiable formulations. Ensure complete dispersion of each tank-mix partner before adding the next component. After all desired components have been added and are completely dispersed, add the remainder of water. **Do not pre-mix with any other tank mix component prior to adding to the spray tank.**

Use tank mixes only in states where the tank mix product and application site are registered. Do not mix with another product that prohibits such mixing. Do not exceed any label dosage rates. Read and follow all label directions for tank mix partners for specific application rates, application timing, and precautions. Use of the tank mix must be in accordance with the more restrictive label limitations and precautions of all products used in the mixture.

Compatibility: This product is compatible with many commonly used pesticides, fertilizers, adjuvants, and surfactants, but has not been evaluated for all potential combinations. To ensure compatibility, conduct a "jar test." Using a suitable container, add the proportional amounts of product to water using the recommended addition order outlined above. 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. Do not combine this product 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.

APPLICATION DIRECTIONS AND USE RATES

This product, when used as directed, reduces and/or controls incidence of the bacterial and fungal diseases listed below. Thyme oil is exempt from the requirement of a tolerance on all food and feed crops and commodities and may be applied to any food or non-food crop up to and including the day of harvest (pre-harvest interval = 0 days).

Thorough and uniform coverage is essential for effective disease control. Apply adequate spray volume to achieve complete spray coverage. Use higher water volumes with larger sized crops and extensive foliage to ensure thorough coverage. See specific application instructions pertaining to each crop for additional details.

The higher rates in the rate range or shorter spray intervals may be required under conditions of heavy infection pressure, highly susceptible varieties, or when disease conducive environmental conditions exist. FAILURE TO FOLLOW THE DIRECTIONS AND PRECAUTIONS ON THIS LABEL MAY RESULT IN POOR DISEASE CONTROL, AND/OR CROP INJURY. Applications may be made at longer spray intervals under low to moderate disease pressure.

ORNAMENTAL PLANTS, SHRUBS, TREES, GRASSES, AND TURF GRASSES

- Application Rate: 16 to 32 fl oz of product/A
- Dilution Rate: 60 to 160 gal of water
- Finished Spray: Apply at 15 to 50 gal/A of finished spray (1 gal/1,000 ft²).

PLANT DIP (SEED PIECE) INSTRUCTIONS

Apply 4 to 8 fl oz product per 10 gal of water as a pre-plant dip immediately prior to transplanting, unless specified differently in the **CROPS** section. Apply immediately prior to transplanting for improved plant growth and suppression of soil-borne diseases.

SOIL TREATMENT INSTRUCTIONS

This product can be applied as a soil drench, in-furrow spray, or soil injection to protect against certain soil-borne diseases. The following use rates are recommended unless specified differently in the **CROPS** section:

SOIL DRENCH APPLICATIONS:

Dilute ½ gal in 100 gal of water (1 qt in 50 gal) and apply at a sufficient rate to thoroughly soak the growing media and root zone. Make an initial application during or shortly after transplant to reduce transplant shock and suppress soil-borne diseases. Repeat applications every 10 to 14 days, as needed.

SHANKED-IN AND INJECTED APPLICATIONS:

This product can be shanked-in or injected into the soil either alone or with most types of liquid nutrient products.

CHEMIGATION

This product can be applied 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. Apply 5 to 22 fl oz product/A according to the instructions in the **CHEMIGATION** section below.

ROTATIONAL CROPS

There are no restrictions concerning rotation of crops. Follow a crop rotation program that maintains or builds soil organic matter, works to control pests, manages and conserves nutrients, and protects against erosion.

INTEGRATED PEST MANAGEMENT (IPM)

This product can be used in an IPM program with other conventional fungicides as part of a resistance management strategy. Alternating use of this product followed by conventional fungicides or used in tank mixes aids in resistance management. Follow all label instructions for each registered product taking care not to exceed amounts or treatment intervals on the label.

This product may be used with disease forecasting or Extension advisory programs that recommend application timings based on environmental factors favorable to disease development. Consult with your agricultural advisor, University contact or Extension Service for IPM strategies established for your area.

ORNAMENTAL PLANTS, SHRUBS, TREES, AND TURF, AND ORNAMENTAL LANDSCAPE CROPS

For use to control listed diseases of ornamental plants, shrubs, trees, and turf grasses, including golf courses, sod farms, lawns, and other landscape areas. Not for homeowner use.

Ornamental Plants, Shrubs, and Trees		
Herbaceous Ornamentals: Flowering plants, foliage plants, bedding plants		
Woody Ornamentals: Broadleaves, shrubs and trees; Conifers, shrubs and trees		
Disease	Application Method	Application Instructions
Anthracnose (<i>Colletotrichum</i> spp.) Bacteria (<i>Erwinia</i> spp., <i>Pseudomonas</i> spp., <i>Xanthomonas</i> spp.) Black spot of roses (<i>Diplocarpon rosae</i>) Blossom Blight (<i>Monilinia</i> spp.) Downy Mildew (<i>Peronospora</i> spp., <i>Plasmopara viticola</i>) Gray Mold (<i>Botrytis cinerea</i>) Leaf Spot (<i>Alternaria</i> spp., <i>Cercospora</i> spp., <i>Entomosporium</i> spp., <i>Myrothecium</i> spp., <i>Septoria</i> spp.) Powdery Mildew (<i>Erysiphe</i> spp., <i>Oidium</i> spp., <i>Podosphaera</i> spp., <i>Sphaerotheca</i> spp.) Rust (<i>Puccinia</i> spp.) Scab (<i>Venturia</i> spp.)	Foliar	Apply to runoff. Apply preventatively (before disease symptoms are visible) at the 4- to 7-leaf stage. Reapply every 7 to 14 days, as needed, as needed.
<i>Fusarium</i> spp. <i>Phytophthora</i> spp. <i>Pythium</i> spp. <i>Rhizoctonia</i> spp. <i>Verticillium</i> spp.	Soil Drench	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. Reapply every 10 to 14 days, as needed.
	Plant Dip	For improved plant growth and suppression of soil-borne diseases, apply immediately prior to transplanting.
	Chemigation	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.

Ornamental Grasses and Turfgrass		
Bluegrass; bentgrass; bermudagrass; dichondra; fescue; orchardgrass; <i>Poa annua</i> ; ryegrass; St. Augustine grass; zoysia mixtures; and other grasses		
Disease	Application Method	Application Instructions
Anthrachnose (<i>Colletotrichum graminicola</i>) Bentgrass/Bermudagrass Dead Spot (<i>Ophiosphaerella agrostidis</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 dichondrae</i>) Dollar Spot (<i>Lanzia</i> spp., <i>Moellerodiscus</i> spp. formerly <i>Sclerotinia homeocarpa</i>) Flag smut (<i>Urocystis agropyri</i>) Fusarium Patch (<i>Fusarium nivale</i>) Gray Leaf Spot (<i>Pyricularia grisea</i>) Gray Snowmold (<i>Typhula</i> spp.) Melting Out Leaf Spot (<i>Bipolaris</i> spp., <i>Drechslera</i> spp.) Necrotic Ring Spot (<i>Leptosphaeria korrae</i>) Pink Patch (<i>Limonomyces roseipellis</i>) Pink Snowmold (<i>Microdochium nivale</i>) Powdery Mildew (<i>Erysiphe graminis</i>) Pythium Blight, Pythium Root Rot (<i>Pythium phanidermatum</i> , <i>Pythium</i> spp.) Red Thread (<i>Laetisaria fuciformis</i>) Rust (<i>Puccinia</i> spp.) Rhizoctonia Large Patch (<i>Rhizoctonia solani</i>) Southern Blight (<i>Sclerotium rolfsii</i>) Spring Dead Spot (<i>Leptosphaeria korrae</i> , <i>Leptosphaeria narmari</i> , <i>Ophiosphaerella herpotricha</i> , <i>Gaeumannomyces graminis</i>) Stripe Smut (<i>Ustilago striiformis</i>) Summer Bentgrass Decline Summer Patch / Poa Patch (<i>Magnaporthe poae</i>) Take-All Patch (<i>Gaeumannomyces graminis</i>) Yellow Patch (<i>Rhizoctonia cerealis</i>) Yellow Tuft / Downy Mildew (<i>Sclerophthora macrospora</i>) Zoysia Patch (<i>Rhizoctonia solani</i>)	Foliar	Apply preventatively or when the first disease symptoms are visible and reapply every 7-14 days.

CHEMIGATION INSTRUCTIONS

Apply by chemigation to deliver 5 to 22 fl oz product/A according to the instructions below and diluted as specified in the **CROPS** section.

GENERAL REQUIREMENTS

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.

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

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

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

A person knowledgeable of the chemigation system and responsible for its operation, or under 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

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.

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.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.

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.

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.

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.

Do not apply when wind speed favors drift beyond the area intended for treatment.

SPECIFIC REQUIREMENTS FOR SPRINKLER CHEMIGATION

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.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.

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.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.

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.

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.

Do not apply when wind speed favors drift beyond the area intended for treatment.

SPECIFIC REQUIREMENTS FOR FLOOD (BASIN), FURROW AND BORDER CHEMIGATION

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.

The systems utilizing a pressurized water and pesticide injection system must meet the following requirements:

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.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.

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.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.

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.

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

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.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.

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.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.

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.

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

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.

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.

Prepare a solution in the chemical tank by filling the tank with the required water and then adding product as required.

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

Container Handling:

{For Nonrefillable Retail Containers less than or equal to 5 gallons}

Nonrefillable 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 dispose of in trash or in a sanitary landfill or by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

{For Nonrefillable Bulk Containers greater than 5 gallons (for repackaging into retail containers)}

Nonrefillable 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. 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, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

{For Refillable Bulk Containers greater than 5 gallons (for repackaging into retail containers)}

Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or a mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. When empty, return to point of sale or to the manufacturer.

WARRANTY

AgroSpheres, Inc. warrants that the material contained herein conforms to the description on the label and is reasonably fit for the purposes referred to in the directions for use. Timing and method of application, weather, watering practices, nature of soil, the disease problem, condition of the crop, incompatibility with other chemicals not specifically recommended and other influencing factors in the use of this product are beyond the control of the seller. To the extent consistent with applicable law, buyer assumes all risks of use, storage or handling of this material not in strict accordance with directions given herein. NO OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR MERCHANTABILITY IS MADE.

OPTIONAL LABEL TEXT (MAY APPEAR ON ANY SUBLABEL)

- OMRI Seal: Any variation of the seals presented below:



- Graphics for Supplemental Distributor Products

