

Aqueous Suspension Biofungicide/Bactericide



# FOR ORGANIC PRODUCTION



# **KEEP OUT OF REACH OF CHILDREN**

See Inside Panels for Additional Precautionary Statements

## **MANUFACTURED BY:**

Certis USA LLC 9145 Guilford Road, Suite 175 Columbia, MD 21046



EPA Reg. No. 70051-107 EPA Est. No. 70051-CA-1

Lot Number:

**Net Contents:** 

ESL20221028, ESN20221121 Ver. 20240513

This is a Specimen Label. It may not reflect the most-recent approved label for use in your state. Always refer to the label on the product packaging for approved use instructions. Please contact your Certis sales representative for more information.

#### PRECAUTIONARY STATEMENTS

## PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Shoes plus socks

Mixer/loaders and applicators must wear a NIOSH approved particulate filter with any N, R, P filter with NIOSH approval number prefix TC-84A; or a NIOSH- approved powered air purifying respirator with an HE filter with NIOSH approval number prefix TC-21C. Repeated exposure to high concentrations of microbial proteins can cause allergic sensitization.

Follow the manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry. When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides (40 CFR §170.607 (d), (e), and (f)), the handler PPE requirements may be reduced or modified as specified in the WPS.

## **USER SAFETY RECOMMENDATIONS**

Users should:

- Remove clothing/PPE immediately if pesticides get inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.
- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.

#### **ENVIRONMENTAL HAZARDS**

For Terrestrial Uses: Do not apply directly to water or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters or rinsate. Do not apply when weather conditions favor drift or runoff from treated areas.

#### PRODUCT INFORMATION

This product is a broad-spectrum preventative biofungicide/bactericide for control or suppression of fungal and bacterial plant diseases. The active ingredient is a strain (D747) of the beneficial bacterium *Bacillus amyloliquefaciens*. This product also colonizes plant root hairs, preventing establishment of disease-causing fungi and bacteria.

This product can be applied alone or in combination and/or rotation with chemical fungicides as a tool for integrated disease management in agricultural crops, ornamental, and nursery plants, and turfgrass. This product offers a valuable tool for management of resistance to chemical fungicides through its multiple and unique modes of action.

This product can be applied up to and including the day of harvest.

#### DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. For any requirements specific to your State or Tribe, consult the State or Tribal agency responsible for pesticide regulation.

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.

#### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard 40 CFR Part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry intervals. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

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

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil or water is: coveralls, chemical resistant gloves (made of any waterproof material), shoes plus socks.

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

## 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.

#### MIXING AND HANDLING INSTRUCTIONS

Mix the required amount of product in water with sufficient agitation to maintain a uniform suspension in the spray or mixing tank. Tank should be cleaned prior to use. Do not use highly alkaline or highly acidic water to mix sprays. Use a buffering agent if necessary to maintain neutrality (pH 6 to 8) of water in the tank. Maintain agitation during application. Apply immediately after mixing; do not allow spray mix to stand overnight.

This product can be mixed and used with other agricultural chemicals for which such mixing is permitted by the product labels, in accordance with the most restrictive of those label limitations and precautions. If such a mixture is planned, a compatibility "jar test" should first be conducted by mixing the correct proportions of product and the other intended agricultural chemicals in a small volume of water.

## **APPLICATION METHODS**

Ground: Apply through most commonly-used ground application equipment, such as (but not limited to): tractor-mounted boom, airblast, high clearance, hose-end, backpack, and 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.

Aerial: Apply by fixed or rotary winged aircraft in a minimum of 3 gallons of water per acre. Use standard precautions to minimize spray drift.

Chemigation: Apply through drip (trickle) and sprinkler-type irrigation equipment. Refer to the section entitled "Chemigation Instructions" for detailed instructions.

# **Agricultural Crops**

Target disease/pathogen (bacteria & fungi)	Additional information									
Except Corn**										
Powdery mildew (Erysiphe graminis)										
Rust (Puccinia spp.)†										
Rice blast (Pyricularia oryzae)										
Sheath spot/blight (Rhizoctonia and Thanatephorus										
spp.)	† Suppression only. For improved control, mix or rotate									
Smut ( <i>Tilletia barclayana</i> )	with chemical fungicide approved for such use.									
Bacterial blight/streak (Xanthomonas spp.)	** Not for use in California.									
Stem rots (Magnaporthe and Sclerotium spp.)										
Cercospora leaf spot										
Brown rot/leaf spots/smuts (Ceratobasidium,										
Cochliobolus, Dreschlera, and Entyloma spp.)										
C	orn Only									
Botrytis spp.										
Southern leaf blight ( <i>Bipolaris maydis</i> / Cochliobolus heterostrophus/ Helminthosporium maydis)										
Rusts (Puccinia spp.)										
Leaf spots (Cercospora and Cercosporidium spp.)†	† Suppression only. For improved control, mix or rotate									
Common rust (Puccinia sorghi)†	with chemical fungicide approved for such use.									
"Damping off," seedling blights, and root or crown	See instructions for "Soil application."									
diseases caused by Pythium, Rhizoctonia,	† Suppression only. For improved control, mix or rotate									
Fusarium, Phytophthora, or Verticillium† spp.	with chemical fungicide approved for such use.									

## Legume Vegetables (Succulent or Dried) (Crop Group 6):

Bean (Lupinus spp.) (includes grain lupin, sweet lupin, white lupin, and white sweet lupin); bean (Phaseolus spp.) (includes field bean, kidney bean, lima bean, navy bean, pinto bean, runner bean, snap bean, tepary bean, wax bean); bean (Vigna spp.) (includes adzuki bean, asparagus bean, blackeyed pea, catjang, Chinese longbean, cowpea, Crowder pea, moth bean, mung bean, rice bean, southern pea, urd bean, yardlong bean); broad bean (fava bean); chickpea (garbanzo bean); guar; jackbean; lablab bean (hyacinth bean); lentil; pea (Pisum spp.) (includes dwarf pea, edible-podded pea, English pea, field pea, garden pea, green pea, snowpea, sugar snap pea); pigeon pea; soybean; soybean (immature seed); sword bean.

Target disease/pathogen (bacteria & fungi)	Additional information						
Gray mold (Botrytis cinerea)  Powdery mildew (Microsphaera diffusa)  Rusts†, including Uromyces appendiculatus, Puccinia spp., and Asian soybean rust (Phayospora pachyrhizi)  Ascochyta blight (Ascochyta rabiei)**  Halo blight (Pseudomonas syringae pv. Phaseolicola)**  Common bacterial blight (Xanthomonas axonopodis pv. Phaseoli)**  Bacterial brown spot (Pseudomonas syringae)**	† Suppression only. For improved control, mix or rotate with chemical fungicide approved for such use.  ** Not for use in California.						

# Legume Vegetables (Succulent or Dried) (Crop Group 6):

Bean (Lupinus spp.) (includes grain lupin, sweet lupin, white lupin, and white sweet lupin); bean (Phaseolus spp.) (includes field bean, kidney bean, lima bean, navy bean, pinto bean, runner bean, snap bean, tepary bean, wax bean); bean (Vigna spp.) (includes adzuki bean, asparagus bean, blackeyed pea, catjang, Chinese longbean, cowpea, Crowder pea, moth bean, mung bean, rice bean, southern pea, urd bean, yardlong bean); broad bean (fava bean); chickpea (garbanzo bean); guar; jackbean; lablab bean (hyacinth bean); lentil; pea (Pisum spp.) (includes dwarf pea, edible-podded pea, English pea, field pea, garden pea, green pea, snowpea, sugar snap pea); pigeon pea; soybean; soybean (immature seed); sword bean.

Target disease/pathogen (bacteria & fungi)	Additional information						
White mold (Sclerotinia sclerotiorum)	Apply at or immediately following planting (but before plant emergence) as a banded seedline treatment 4 to 6 inches wide. Make second application at thinning or cultivation in sufficient water and multiple nozzles to ensure thorough coverage of lower leaves and surrounding soil surface. Incorporation with light irrigation after application may improve disease control. Repeat at 10-14 day intervals if conditions promoting disease persist. Alternatively, apply at early flowering and again at petal fall.						
"Damping off," seedling blights, and root or crown diseases caused by <i>Pythium</i> , <i>Rhizoctonia</i> , <i>Fusarium</i> , <i>Phytophthora</i> , or <i>Verticillium</i> † spp.	See instructions for "Soil application." † Suppression only. For improved control, mix or rotate with chemical fungicide approved for such use.						

#### Oilseed Crops\*\* (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.

Target disease/pathogen (bacteria & fungi)	Additional information							
White mold/Stem rot (Sclerotinia sclerotiorum) Rusts†, including Uromyces appendiculatus, Puccinia spp., and Asian soybean rust (Phayospora pachyrhizi) Bacterial Speck (Pseudomonas syringae pv.glycinea) Bacterial Pustule (Xanthamonas spp.) Brown Spot (Septoria glycines)	† Suppression only. For improved control, mix or rotate with chemical fungicide approved for such use.  ** Not for use in California.							
Cercospora Leaf Spot Pod and Stem Blights (Diaporthe and Phomopsis spp.) Downy Mildew (Peronospora mansherica)								

Peanuts Peanuts										
Target disease/pathogen (bacteria & fungi)	Additional information									
White mold (Sclerotinia sclerotiorum)	Apply at or immediately following planting (but before plant emergence) as a banded seedline treatment 4 to 6 inches wide. Make second application at thinning or cultivation in sufficient water and multiple nozzles to ensure thorough coverage of lower leaves and surrounding soil surface. Incorporation with light irrigation after application may improve disease control. Repeat at 10-14 day intervals if conditions promoting disease persist. Alternatively, apply at early flowering and again at petal fall.									
Botrytis spp. Rusts (Puccinia spp.) Leaf spots (Cercospora and Cercosporidium spp.)†	† Suppression only. For improved control, mix or rotate with chemical fungicide approved for such use.									
"Damping off," seedling blights, and root or crown diseases caused by <i>Pythium</i> , <i>Rhizoctonia</i> , <i>Fusarium</i> , <i>Phytophthora</i> , or <i>Verticillium</i> † spp.	See instructions for "Soil application." † Suppression only. For improved control, mix or rotate with chemical fungicide approved for such use.									

Root and Tuber Vegetables (Crop Group 1)										
Target disease/pathogen (bacteria & fungi)	Additional information									
Sugar Beets										
Leaf spots (Cercospora and Ramularia spp.)										
Powdery mildew (Erysiphe spp.)	** Not for use in California.									
Rust (Uromyces betae)										

# **APPLICATION INSTRUCTIONS:**

Field-grown (outdoor) crops:
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<u>Foliar application</u>: For control of diseases on foliage, flowers, fruit, or other above-ground parts of plants: Mix product in water and apply as a spray at a rate of **0.5 to 3 quarts** of product per acre in sufficient water to achieve thorough coverage of the crop canopy with minimal runoff. Begin applications at crop emergence, transplanting, or when conditions are conducive to development of disease. Repeat application every 3 to 10 days as needed, for as long as conditions favor disease development. Lower rate (0.5 quarts per acre) may be applied under light to moderate disease pressure, to smaller (e.g. newly-emerged) plants, or when this product is used in a tank mix with other fungicides whose labels allow such use. Under severe disease pressure, or when environmental conditions and plant stage are conducive to rapid disease development, use higher label rate (3 quarts/acre), apply more frequently (every 3-7 days), and mix or rotate this product with other fungicides for improved performance.

## Soil application:

For control of soil-borne diseases infecting seeds, seedlings, roots, crown, stems, or other plant parts below ground or in contact with soil: Apply product at **0.5 to 4.5 pints or 8 to 72 ounces per acre**.

Mix the required amount in sufficient water to apply by one of the following methods:

• Soil drench applied to transplants in flats or pots in the greenhouse or nursery any time prior to transplanting (see additional drench instructions under "Nurseries, greenhouses, shade houses, and ornamental plants" below).

- Soil drench at transplanting, using a "water wheel" injector, spray nozzles/hoses, or other method to drench each root ball and/or planting hole.
- Soil or seedline drench, or banded spray (in-furrow) at planting. See the section on "Banded (in-furrow) application" below for additional instructions.

Follow-up (post-planting) preventative applications can be made every 2-4 weeks by one or more of the following methods, if needed:

- Drip (trickle) or any type of sprinkler irrigation, any time after planting or transplanting. See Chemigation Instructions for additional information.
- Spray directly onto the soil surface and/or lower plant parts. If targeting root disease, follow immediately with sufficient overhead sprinkler irrigation to move product to the root zone.
- Injection directly into the rooting zone using shanks or similar equipment.

Lower rates (0.5 to 2 pints or 8 to 32 ounces) of product per acre may be applied under light disease pressure, to smaller plants, or when this product is used in a tank mix with other fungicides whose labels allow such use. Under moderate to severe disease pressure, or when environmental conditions and plant stage are conducive to rapid disease development, use higher label rates (2 - 4.5 pints per acre or 32 to 72 ounces), apply more frequently (every 2 weeks), and mix or rotate this product with other fungicides for improved performance.

For control of soil-borne nematodes\*\*: Apply at a rate of **1 to 2 quarts per acre** as a part of a soil disease management program for nematode suppression.

Mix the required amount in sufficient water to apply by one of the following methods:

- Soil drench applied to transplants in flats or pots in the greenhouse or nursery any time prior to transplanting (see additional drench instructions under "Nurseries, greenhouses, shade houses, and ornamental plants" below).
- Soil drench at transplanting, using a "water wheel" injector, spray nozzles/hoses, or other method to drench each root ball and/or planting hole.
- Soil or seedline drench, or banded spray (in-furrow) at planting. See the section on "Banded (in-furrow) application" below for additional instructions.

Follow-up (post-planting) preventative applications can be made every 2-4 weeks by one or more of the following methods, if needed:

- Drip (trickle) or any type of sprinkler irrigation, any time after planting or transplanting. See Chemigation Instructions for additional information.
- Spray directly onto the soil surface and/or lower plant parts.
- Injection directly into the rooting zone using shanks or similar equipment.

<sup>\*\*</sup> Not for use in California.

<u>Banded (in-furrow) application</u>: Use the table below (rate of product per acre) to determine the correct application rate in fluid ounces per 1,000 row feet based on row spacing and desired rate per acre. Mix the required amount of product in water and apply as banded spray (4" to 6" wide) or seedline drench centered over the planting furrow. Apply directly over seeds in the furrow just before they are covered with soil. The volume of water required per acre or per 1,000 row feet will depend on the application equipment used. Consult your local cooperative extension service if you need assistance calibrating band spraying equipment.

Rates for banded (in-furrow) application: Find desired application rate of product per acre in the left column. Read across that line to the correct row spacing indicated at the top to find the number of fluid ounces per 1,000 row feet that will provide the desired application rate per acre.

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	duct /acre	Space between rows (inches)														
Pt	fl oz	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40
0.5	8	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.6	0.6
0.75	12	0.3	0.3	0.4	0.4	0.5	0.5	0.6	0.6	0.6	0.7	0.7	0.8	0.8	0.9	0.9
1.0	16	0.4	0.4	0.5	0.6	0.6	0.7	0.7	0.8	0.9	0.9	1.0	1.0	1.1	1.2	1.2
1.25	20	0.5	0.5	0.6	0.7	0.8	8.0	0.9	1.0	1.1	1.1	1.2	1.3	1.4	1.5	1.5
1.5	24	0.6	0.6	0.7	8.0	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.7	1.8
1.75	28	0.6	0.7	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	2.1
2.0	32	0.7	0.9	1.0	1.1	1.2	1.3	1.5	1.6	1.7	1.8	2.0	2.1	2.2	2.3	2.4
2.25	36	0.8	1.0	1.1	1.2	1.4	1.5	1.7	1.8	1.9	2.1	2.2	2.3	2.5	2.6	2.8
2.5	40	0.9	1.1	1.2	1.4	1.5	1.7	1.8	2.0	2.1	2.3	2.4	2.6	2.8	2.9	3.1
2.75	44	1.0	1.2	1.3	1.5	1.7	1.9	2.0	2.2	2.4	2.5	2.7	2.9	3.0	3.2	3.4
3.0	48	1.1	1.3	1.5	1.7	1.8	2.0	2.2	2.4	2.6	2.8	2.9	3.1	3.3	3.5	3.7
3.25	52	1.2	1.4	1.6	1.8	2.0	2.2	2.4	2.6	2.8	3.0	3.2	3.4	3.6	3.8	4.0
3.5	56	1.3	1.5	1.7	1.9	2.1	2.4	2.6	2.8	3.0	3.2	3.4	3.6	3.9	4.1	4.3
3.75	60	1.4	1.6	1.8	2.1	2.3	2.5	2.8	3.0	3.2	3.4	3.7	3.9	4.1	4.4	4.6
4.0	64	1.5	1.7	2.0	2.2	2.4	2.7	2.9	3.2	3.4	3.7	3.9	4.2	4.4	4.7	4.9

Hopper Box application\*\*: Apply at a rate of 1 quart per acre of seed in the planter or auger hopper-box. To mix, fill hopper-box to ½ full of seed. Spread ½ of the total amount of product evenly over the surface of the seed. Next, fill the hopper-box to ¾ full of seed and spread ⅓ of the total amount of product evenly over the surface of the seed. Next, fill the hopper-box with the remaining seed and apply the remaining ⅓ of the total amount of product evenly over the surface of the seed. Thoroughly mix seed, being cautious that you do not damage the seed. Alternatively, apply at a rate of 1 quart per acre of seed as seed is augured from auger hopper box to planter hopper box. Use higher rates when there is a history of heavy *Rhizoctonia* pressure in the field or for higher levels of protection.

<sup>\*\*</sup>Not for Use in California.

## STORAGE AND DISPOSAL

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

*Pesticide Storage*: Store in a dry area inaccessible to children. Store in original containers only. Keep container closed when not in use.

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

## Container Handling:

## Containers ≤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 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.

## Containers >5 gallons:

Nonrefillable container. Do not reuse or refill this container. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 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.

#### **CHEMIGATION INSTRUCTIONS**

#### General information:

- 1. Apply product only through drip (trickle) irrigation (including micro-irrigation through spaghetti tubes or individual tubes) or sprinkler irrigation (including impact or microsprinklers, microjet, overhead boom, water gun, solid set, lateral move, end tow, side-roll, center pivot, or hand move, including mist-type systems); or with hand-held calibrated irrigation equipment (such as a hand-held wand with injector). Do not apply this product through any other type of irrigation system.
- 2. Crop injury or lack of effectiveness can result from non-uniform distribution of treated water.
- 3. If you have questions about calibration, contact State Extension Service specialists, equipment manufacturers or other experts.
- 4. Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place.
- 5. A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

## **Public water system chemigation**

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.

- 1. 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.
- 2. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection.
- 3. 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.
- 4. 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.
- 5. 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.
- 6. Do not apply when wind speed favors drift beyond the area intended for treatment.
- 7. Remove scale, pesticide residues, and other foreign matter from the chemical supply tank and injector system and flush with clean water before use. Failure to provide a clean tank, free of scale or residues may reduce effectiveness of this product.
- 8. Dilute the product in water following the label mixing directions. It may be premixed in a supply tank with water, fertilizer, or other appropriate tank-mixed agricultural chemicals. Agitation is necessary. Application should be continuous in sufficient water to apply the specified rate evenly to the entire treated area.

## Drip (trickle) and micro-irrigation 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.
- 2. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- 3. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- 4. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- 5. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
- 6. Systems must use a metering pump such as a positive displacement injection pump (i.e., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
- 7. Dilute the product in water following the label mixing directions. It may be premixed in a supply tank with water, fertilizer, or other appropriate tank-mixed agricultural chemicals. Agitation is necessary. Apply to moderately moist soils. Use volumes that thoroughly wet the soil but that do not cause significant runoff or excessive drip from pots. Application should be continuous in sufficient water to apply the recommended rate evenly to the entire treated area.

## Sprinkler chemigation:

- 1. The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.
- 2. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- 3. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- 4. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- 5. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
- 6. Systems must use a metering pump, such as a positive displacement injection pump (i.e., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
- 7. Dilute the product in water following the label mixing directions. It may be premixed in a supply tank with water, fertilizer, or other appropriate tank-mixed agricultural chemicals. Agitation is

necessary. Apply to moderately moist soils. Use volumes that thoroughly wet the soil but that do not cause significant runoff or excessive drip from pots. Application should be continuous in sufficient water to apply the recommended rate evenly to the entire treated area.

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

#### WARRANTY

Certis USA LLC warrants that the material contained herein conforms to the description on the label and is reasonably fit for the purpose 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 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 THE FITNESS OR MERCHANTABILITY IS MADE.

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