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# COMPANION<sup>®</sup>

## LIQUID BIOLOGICAL FUNGICIDE

For Greenhouse, Nursery and Ornamental Crops

- For Prevention, Control and Suppression of Soil and Foliar Diseases
- Activates ISR (Induced Systemic Resistance) in Plants

### Active Ingredient:

*Bacillus subtilis* GB03\* .....00.03%

Other Ingredients: .....99.97%

Total: .....100.00%

\*Not less than 5.5 X 10<sup>10</sup> Colony Forming Units (CFU) per gallon

### Guaranteed Analysis:

Total Nitrogen (N) .....2%

2% Protein Hydrolysate Nitrogen

Available Phosphate (P<sub>2</sub>O<sub>5</sub>) .....3%

Soluble Potash (K<sub>2</sub>O) .....2%

Iron (Fe) .....0.06%

Calcium (Ca) .....1%

Magnesium (Mg) .....0.5%

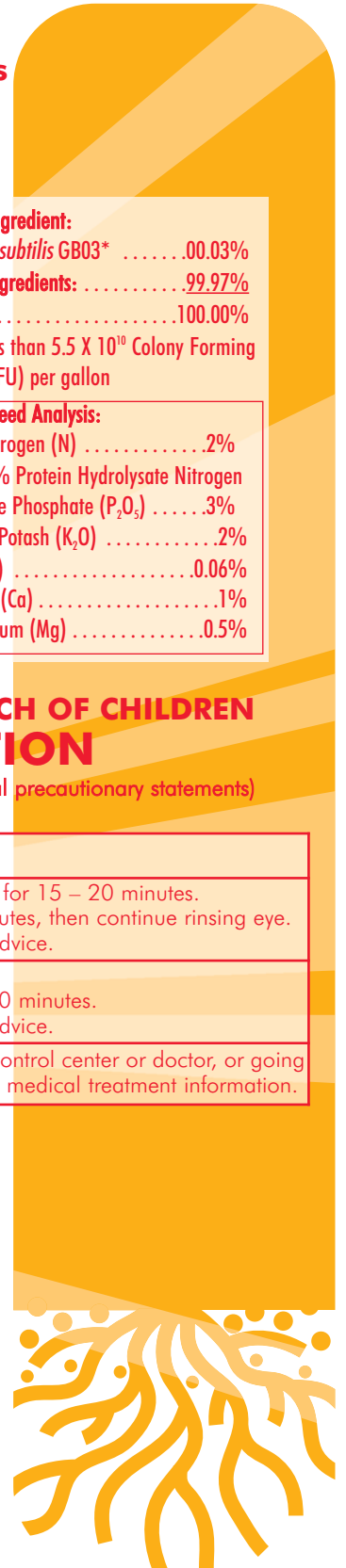
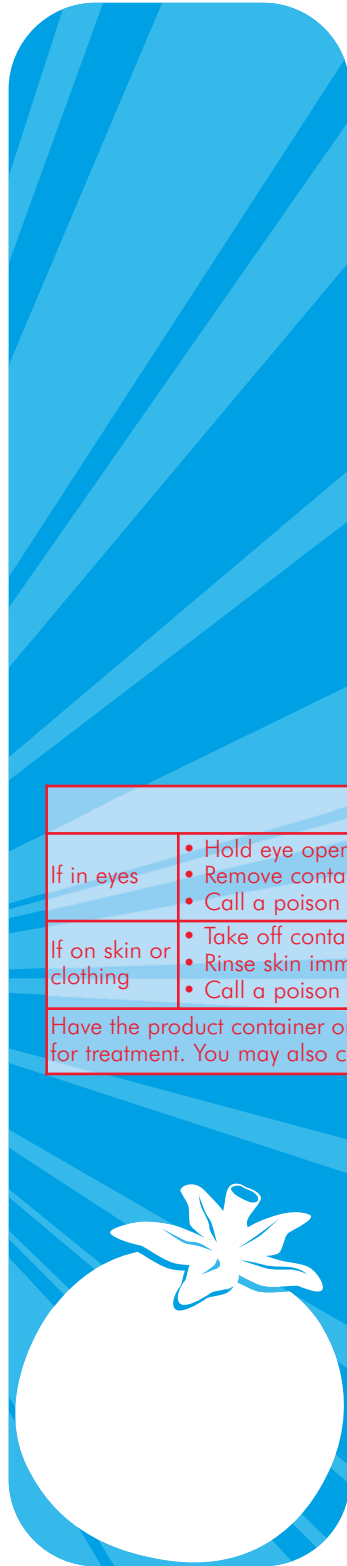
**KEEP OUT OF REACH OF CHILDREN  
CAUTION**

(See back panel for additional precautionary statements)

### FIRST AID

If in eyes	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15 – 20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
If on skin or clothing	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15 – 20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-222-1222 for emergency medical treatment information.



Another quality product from:  
Growth Products, Ltd.  
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Questions? Call (800) 648-7626  
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EPA Establishment No. 71065-NY-001  
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Net Contents:  1 Gallon  2.5 Gallon  5 Gallon

# COMPANION® LIQUID BIOLOGICAL FUNGICIDE

## PRECAUTIONARY STATEMENTS

**Hazards to Humans and Domestic Animals:** CAUTION. Causes moderate eye and skin irritation. Avoid contact with eyes, skin or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

**Personal Protective Equipment (PPE):** Applicators and other handlers must wear:

- long-sleeved shirt and long pants
- waterproof gloves
- shoes plus socks

Mixer/loaders and applicators must wear a dust/mist-filtering respirator meeting NIOSH standards of at least N-95, R-95, or P-95. Repeated exposure to high concentrations of microbial proteins can cause allergic sensitization. Follow manufacturer's instructions for cleaning / maintaining PPE. 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. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

**Environmental Hazards:** Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean highwater mark. Do not contaminate water when cleaning equipment or disposing of equipment washwater.

## 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), notification to workers, and Restricted-Entry Interval. The requirements in this box only apply to the 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). There is a REI of four (4) hours for this product. 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 over long-sleeved shirt and long pants
- Waterproof gloves
- 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.

## GENERAL INFORMATION GREENHOUSE, NURSERY AND ORNAMENTAL CROPS

- Use On Greenhouse and Nursery Crops Including Annuals, Perennials, Woody Ornamentals, Flowering Shrubs, Tropical Plants, Palms, Herbs, and Fruit and Nut Trees
- For Prevention, Control and Suppression of Root and Foliar Diseases
- Activates the Plant's Defense / Immune System (Induced Systemic resistance [ISR])
- A Rhizosphere Bacterium
- Quickly Establishes Beneficial Colonies on Roots and Leaves
- Stimulates Healthier Roots and Accelerates Plant Growth
- Antagonistic to Blue-Green Algae (Cyanobacteria)

## 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 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.

### Product Description:

Companion® Liquid Biological Fungicide is a broad-spectrum biological fungicide for the prevention, control and suppression of soil borne and foliar diseases on greenhouse and all outdoor nursery crops. Companion® Liquid Biological Fungicide contains the active ingredient *Bacillus subtilis* GBO3 which is a rhizosphere bacterium that quickly establishes beneficial colonies on the plant's roots and leaves. It stimulates healthier roots, accelerates plant growth and activates the defense system of plants. Companion® Liquid Biological Fungicide is most effective when applied prior to the onset of disease. Use Companion® Liquid Biological Fungicide in combination and/or rotation with chemical fungicides to enhance disease control.

TABLE 1 – DISEASE LIST

<b>Black Root Rot, Early Blight</b> <i>Aspergillus</i> spp. <b>Crown Rot, Damping-off Fungus, Gray Mold, Leaf blight</b> <i>Alternaria</i> spp. <b>Gray Mold, Blight</b> <i>Botrytis cinerea</i> <b>Root Rot</b> <i>Pythium</i> spp. <b>Powdery Mildew</b> <i>Golovinomyces cichoracearum</i> , formerly called <i>Erysiphe cichoracearum</i> <i>Podosphaera xanthii</i> , formerly called <i>Sphaerotheca fuliginea</i> .	<b>Late Blight, Blackeye</b> <i>Phytophthora</i> spp. <b>Wilt</b> <i>Fusarium oxysporum</i> <b>Root Rot, Bottom / Stem Rot</b> <i>Rhizoctonia solani</i> <b>Blight</b> <i>Sclerotinia minor</i> <b>Bacterial Leaf spot</b> <i>Xanthomonas campestris</i>
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### Modes of Action:

Companion® Liquid Biological Fungicide has multiple modes of action in preventing, controlling and suppressing plant diseases. It produces a broad-spectrum antibiotic (Iturin) that disrupts pathogen cell-wall formation. It is a competitive and fast colonizing rhizosphere bacterium, which occupies the plant's root hairs or leaf surfaces preventing the growth and antagonistic effects of soil borne and foliar pathogens. The active ingredient is known to stimulate phytohormones, which trigger the plant's systemic resistance to disease Induced Systemic Resistance (ISR), the defense mechanisms of the plant for prolonged periods of time. It is non-selective to plant materials.

### PGPR (Plant Growth-Promoting Rhizobacteria):

Companion® Liquid Biological Fungicide is classified as a Plant Growth-Promoting Rhizobacteria (PGPR). PGPR are free-living bacteria that have beneficial effects on plants as they enhance seed emergence, rooting, and stimulate growth.

## INTEGRATED PEST (DISEASE) MANAGEMENT (IPM)

Companion® Liquid Biological Fungicide is an important tool in sound disease management whenever fungicide use is necessary. Apply Companion® Liquid Biological Fungicide alone or in combination and / or rotation with chemical fungicides. This will result in reduced susceptibility to disease and overall reduction in the use of chemical fungicides. Consult local agricultural authorities for specific IPM strategies developed for your crop (s) and location.

## RESISTANCE MANAGEMENT

Companion® Liquid Biological Fungicide is an important tool to prevent the development of resistant pathogens that often occur with chemical fungicide products. Companion® Liquid Biological Fungicide's multiple and unique modes of action inhibit the pathogen's ability to develop resistance. Use Companion® Liquid Biological Fungicide in combination with lower rates of chemical fungicide for improved efficacy and/or in rotation with chemical fungicides to reduce chemical applications.

## PREHARVEST INTERVAL – AGRICULTURAL USE

Companion<sup>®</sup> Liquid Biological Fungicide can be applied up to and including the day of harvest.

## MIXING INSTRUCTIONS

### Tank Mixing:

SHAKE WELL before use and before mixing with water. Companion<sup>®</sup> Liquid Biological Fungicide must be diluted with water prior to use. It can be used in all commonly used spray and injection equipment. Special care should be taken when tank mixing. Be sure that all tanks have been cleaned before use. Add water to 3/4 level of the tank. Add specific amount of Companion<sup>®</sup> Liquid Biological Fungicide to the tank. Mix thoroughly. Maintain agitation while spraying. DO NOT let stand overnight.

### Compatibility:

Companion<sup>®</sup> Liquid Biological Fungicide is compatible with most high quality fertilizers, micronutrients, organic materials, wetting agents, surfactants, fungicides, herbicides and insecticides. Companion<sup>®</sup> Liquid Biological Fungicide can also be mixed and applied with Contact and Systemic Fungicides. Do NOT mix with copper based fungicides, concentrated acids such as sulfuric acid, solvents, oxidizing agents or bacteri-

cides. Do not mix with products with a pH below 4 or above 9. Be sure to apply all of tank mix solution the same day to assure viability of spores. Observe the most restrictive of the labeling limitations and precautions of all products used in mixtures. Consult your Growth Products representative for more information on Companion<sup>®</sup> Liquid Biological Fungicide compatibility.

## APPLICATION INSTRUCTIONS

### Irrigation Systems:

Since Companion<sup>®</sup> Liquid Biological Fungicide is a homogenous solution that is 100% miscible in water it may be applied through all types of irrigation systems such as overhead boom and mist-type systems, sprinklers such as impact or micro-sprinklers, pressurized drench or drip-trickle systems, micro-irrigation such as spaghetti-tube or individual tube irrigation, hand-held calibrated irrigation equipment such as hand-held wand with injector, hydroponics, continuous feed and ebb and flood systems.

### Direct Siphon:

Companion<sup>®</sup> Liquid Biological Fungicide can be siphoned directly from the original container. This can be done with a variable proportioner that can be set to high ratios. This eliminates the need to mix stock concentrates or stir the mixing barrels. For 100 PPM set injector to 1:800.

## USE SITES

### Horticultural and Nursery Applications:

Use in greenhouses, glass houses, shade houses, enclosed nurseries, and outdoor field grown and container nursery plants, including perennials, ornamentals, trees, seedlings, ornamental grasses, all types of hardwood and softwood cuttings, palms, foliage plants, cut flowers, cut foliage and ferns, seedlings, plugs, bench or bed grown plants, vegetables, and herbs. Use as a drench at the time of seeding and transplanting, as well as a periodic soil drench or spray throughout the plant's lifecycle for the prevention, control and suppression of important plant diseases.

### HORTICULTURAL AND NURSERY CROPS

Crop	Rates	Frequency & Notes
For Flowering Plants including Bedding Plants such as Annuals, Perennials, and Cut Flowers	<b>Drench Rate:</b> 16 fl. oz. per 100 gallons water <b>Foliar Rate:</b> 32 fl. oz. per 100 gal water <b>Field Grown:</b> 32 – 64 fl. oz. per acre	To use as a preventative program, make first application at time of seeding or germination. Repeat application every 14 – 28 days.
Propagation of Soft-wood and Hard-wood Cuttings	<b>Dip Rate:</b> Mix 1 –2 fl. oz. per gallon water	Dip basal end of cuttings individually or in bunches for 5 seconds at time of planting.
	<b>Drench Rate:</b> 16 fl. oz. per 100 gallons water	Use as a drench for general propagation and disease control. Apply every 14 - 28 days.
	<b>Mist Propagation:</b> 1 tsp. per 10 gallons water	Inject daily through system.
Foliage and Tropical Plants	<b>Drench Rate:</b> 16 fl. oz. per 100 gallons water <b>Foliar Rate:</b> 32 fl. oz. per 100 gallons water <b>Field Grown:</b> 32 – 64 fl. oz. per acre	To use as a preventative program, make first application at time of seed germination. Repeat application every 14 – 28 days.
Shade and Outdoor Nursery Crops, Containerized Trees, Woody Vines, Foliage, Palms	<b>Drench Rate:</b> 16 fl. oz. per 100 gallons water <b>Foliar Rate:</b> 32 fl. oz. per 100 gallons water <b>Field Grown:</b> 32 – 64 fl. oz. per acre	Apply through Irrigation such as drip, overhead, sprayer, sprinkler systems, ebb and flood.
Orchids	<b>Dip Rate:</b> Mix 1 –2 fl. oz. per gallon water	Use as a dip immediately before time of transplant.
	<b>Drench Rate:</b> 16 fl. oz. per 100 gallons water	Use as a drench for general propagation and disease control. Apply every 14- 28 days.
	<b>Mist Propagation:</b> 1 tsp. per 10 gallons waters	Inject daily through system.
Field Grown Trees (such as Fruit and Nut Trees), Shrubs and Ornamentals	<b>Field Grown:</b> 32 – 64 fl. oz. per acre	To use as a preventative program, apply every 14 – 28 days. Can be applied through all types of irrigation systems such as drip tape, overhead or sprayer.
Bare Root Transplants	<b>Dip Rate:</b> Mix 1 –2 fl. oz. per gallon water	Apply before cold storage and at time of removal from cold storage.

<b>Vegetable Plug Production, such as: Leafy, Fruiting and Cole Crops</b>	<b>Drench Rate:</b> 16 fl. oz. per 100 gallons water	To use as a preventative program, make first application at time of seed germination or transplant. Repeat application every 14 – 28 days.
<b>Herbs and Spices, such as: Coriander, Basil, Chives, Dill, Rosemary, Sage &amp; Mint</b>	<b>Drench Rate:</b> 16 fl. oz. per 100 gallons water <b>Field Grown:</b> 32 – 64 fl. oz. per acre	Apply prior to seed germination and just prior to field transplant. (For Hydroponically grown herbs, see Hydroponics Chart)
<b>Bulbs such as Caladium, Tulips, Amaryllis, Hyacinth</b>	<b>Dip Rate:</b> Mix 1 –2 fl. oz. per gallon water <b>Drench Rate:</b> 16 fl. oz. per 100 gallons water <b>Field Grown:</b> 32 – 64 fl. oz. per acre	As a preventative disease control, use as a dip immediately before time of transplant or prior to cold storage. Repeat application every 14 – 28 days after planting.
<b>Interiorscape: For Foliage Plants, Palms, Seasonal Flowering Plants such as Poinsettia, Chrysanthemums, Bromeliads</b>	1 tsp per 1 gallon of water. For larger volumes, mix 1.6 fluid oz. per 10 gallons of water.	Begin application at time of installation and continue application once per month as a maintenance program.

**Application as a soil drench in greenhouses, shade houses and nurseries:**

Use Companion<sup>®</sup> Liquid Biological Fungicide on container, bench, or bed-grown ornamentals in greenhouses or outdoor nurseries, and on ornamentals grown for indoor and outdoor landscaping. Use as a drench during seeding, sizing up and when transplanting. Companion<sup>®</sup> Liquid Biological Fungicide is antagonistic to Blue-Green Algae (Cyanobacteria) that often grows in irrigation lines and stock tanks.

**GREENHOUSE AND NURSERY INJECTION RATIO**

1:100	1:200	Frequency & Notes
16 fl. oz. of Companion Liquid Biological Fungicide per gallon of stock tank (160 fl.oz. per 100 gallons of stock tank)	32 fl. oz. of Companion Liquid Biological Fungicide per gallon of stock tank (320 fl.oz. per 100 gallons of stock tank)	At the time of seeding, sizing up or transplant use as a drench until thoroughly soaked.

**Applications by Growing System:**

Use Companion<sup>®</sup> Liquid Biological Fungicide in hydroponics systems to prevent, control, and suppress a broad variety of plant diseases. It will also improve the plant's vigor and yield. Companion<sup>®</sup> Liquid Biological Fungicide will encourage and maintain healthy white roots and increase root mass. The active ingredient will flourish in this environment, where it quickly adapts and establishes itself on the root systems of plants. Companion<sup>®</sup> Liquid Biological Fungicide is easily injected through all systems either by proportioners or through standard fertilizer injectors.

**GROWING SYSTEMS**

System	Rate	Frequency & Notes
<b>Closed Re-circulating System for Ebb and Flow in Rockwool and Peat Moss, Perlite Mixtures, and Ebb and Flood.</b>	<b>Charging Rate:</b> Mix 1 fl. oz. per 30 gallons water (30 ml per 120 liters) <b>Recharging Rate:</b> 1 fl. oz. per 50 gallons of water. (30 ml per 200 Liters Water)	Apply Companion <sup>®</sup> Liquid Biological Fungicide after each water change. Be sure to clean mix tank weekly. Pre-soak transplants in same solution mix.
<b>Open Systems</b>	Mix 16 fl. oz. per 100 gallons of nutrient mix (500 ml per 400 liters).	Apply the solution with Companion <sup>®</sup> Liquid Biological Fungicide at the end of the watering cycle so that it stays in the system longer. Repeat the application every 14 to 28 days.
<b>Constant Feed and Mist Systems</b>	Apply 1 fl. oz. in 100 gallons of water.	Inject daily through system.
<b>Soilless Mix Hydro Gardens (Aggregate Systems), Aeroponics, Nutrient Film Technique, Trickle Feed Method and Soil Gardens with Peat Moss, Perlite Mixtures, Vermiculite, Sand, Gravel, Clay Pebbles, Foam Chips and Rockwool Medias.</b>	Mix 16 fl. oz. per 100 gallons of nutrient mix (500 ml per 400 liters).	Apply every 14 – 28 days. Apply the solution with Companion <sup>®</sup> Liquid Biological Fungicide at the end of the watering cycle so that it stays in system longer.
<b>Hydroponics Systems for Herbs and Leafy Crops, Tomatoes and Fruiting Vegetables</b>	<b>Seed or Plugs</b> Mix 4 fl. oz. in 1 gallon of water	Soak seeds/plugs with a solution before placing them in growing trays.
	<b>Charging Rate:</b> 1 fl. oz. per 30 gallons water in nutrient tank (30 ml per 120 liters)	Apply at time of placement in trays. Run through system.
	<b>Recharging Rate:</b> 1 oz. per 50 gallons of water. (30 ml per 200 liters water)	Replenish every time water is added or every 5 – 7 days.

### Tissue Cultured Plantlets (Microproagation):

Tissue cultured plantlets require special attention. They must acclimate from completely sterile "lab conditions" into the greenhouse environment. At this stage of transplant the plants are as close to sterile as possible, and as such contain no beneficial bacteria. Once a tray is planted in a peat-based medium, it is important to immediately apply Companion® Liquid Biological Fungicide. This will protect the new root structure from disease and improve rooting.

TISSUE CULTURE (MICROPROGATION)		
Crop	Rate	Frequency & Notes
Plantlets	1 tsp. per 1 gallon of water (5 ml per 4 L water). For larger volumes mix 1.6 fl. oz. per 10 gallons water.	At time of transplant drench plug trays until thoroughly soaked. Repeat every 7 – 14 days through entire plug stage.

### CHEMIGATION

#### General Requirements -

- 1) Apply this product only through a drip system or sprinkler including center pivot, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set, hand move, flood (basin), furrow, border or drip (trickle) irrigation systems. Do not apply this product through any other type of irrigation system.
- 2) Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.
- 3) If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.
- 4) Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place.
- 5) A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

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

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

#### Specific Requirements for Sprinkler Chemigation -

- 1) The system must contain a functional check valve, vacuum relief valve

and low-pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.

- 2) The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- 3) The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- 4) The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- 5) The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
- 6) Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being filled with a system interlock.
- 7) Do not apply when wind speed favors drift beyond the area intended for treatment.

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

- 1) Systems using a gravity flow pesticide dispensing system must meter the pesticide into the water at the head of the field and downstream of a hydraulic discontinuity such as a drop structure or weir box to decrease potential for water source contamination from backflow if water flow stops.
- 2) The systems utilizing a pressurized water and pesticide injection system must meet the following requirements:
  - a. The system must contain a functional check valve, vacuum relief valve and low-pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.
  - b. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
  - c. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
  - d. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
  - e. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
  - f. Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being filled with a system interlock.

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

1) The system must contain a functional check valve, vacuum relief valve and low-pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.

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

3) The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

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

5) The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

6) Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being filled with a system interlock.

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

1) Remove scale, pesticide residues, and other foreign matter from the chemical supply tank and entire injector system. Flush with clean water. Failure to provide a clean tank, void of scale or residues may cause product to lose effectiveness or strength.

2) Determine the treatment rates as indicated in the directions for use and make proper dilutions. Product can be applied continuously or at any time during the water application.

3) Prepare a solution in the chemical tank by filling the tank with the required water and then adding product as required. The product will immediately go into suspension without any required agitation.

#### **Notice - Read carefully conditions of sale and limited warranty statement.**

As its sole express warranty, Growth Products, Ltd., warrants that this product conforms to the microbial description on the label and is reasonably fit for purposes stated on the label only when used in accordance with directions and instructions specified on the label, subject to the inherent risks set forth above. Only as permitted by applicable law, in the event of a breach of this limited warranty, Growth Products, Ltd. shall not be liable for consequential damages subject to applicable law. Growth Products, Ltd. neither makes nor authorizes any of its distributors to make any warranty of fitness or merchantability, guaranty or representation, express or implied, concerning this material. Buyer assumes the responsibility to handle, use and store this product in accordance with the safety instructions and use directions contained on the label. To the extent consistent with applicable law, the Buyer/User purchases this product to the foregoing Conditions of Sale and Warranty which may be varied only by a written agreement signed by a duly authorized representative of Growth Products, Ltd., and if these terms are not acceptable, return all product to the place of purchase, unopened for a full refund.

## **STORAGE AND DISPOSAL**

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

**Pesticide Storage:** Store in a dry place out of direct sunlight and away from heat sources. Keep from overheating or freezing.

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

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