

COMPANION®

Liquid Biological Fungicide for Greenhouse Use

Active Ingredient:

Bacillus subtilis GB03*	0.03%
Other Ingredients:	99.97%
Total:	100.00%

*Not less than 5.5 X 10¹⁰ Colony Forming Units (CFU) per gallon

For soil enhancing purposes, Companion® also contains: Sucrose, Monosaccharides, Condensed Fermented Plant Extracts, Dextrin, an Organic Sequestrant, and a Wetting Agent.

KEEP OUT OF REACH OF CHILDREN CAUTION

First Aid	
If in eyes	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• Take off contaminated clothing.• Rinse skin immediately with plenty of water for 15 – 20 minutes.• Call a poison control center or doctor for treatment advice.
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	
See back panel for additional precautionary statements.	

Manufactured by:
Growth Products, Ltd.
PO Box 1252
White Plains, NY 10602

Net Contents: 1 Gallons
(Net Contents: 2.5 Gallons)
(Net Contents: 5 Gallons)
Questions? Call toll free (800) 648-7626

EPA Registration No. 71065-1
EPA Establishment No. 71065-NY-001
U.S. Patent Pending

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PRECAUTIONARY STATEMENTS

Hazard to humans and domestic animals: Caution. Causes eye and skin irritation. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling.

Personal Protective Equipment (PPE): Applicators and other handlers must wear long-sleeved shirt and long pants, waterproof gloves, and 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 Requirements: Users should wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. 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 sur-

(Precautionary Statements Continued)

face water is present, or to intertidal areas below the mean highwater mark.

Do not contaminate water when disposing of equipment washwater. Do not apply this product while bees are actively visiting the area. This product has not been evaluated for hazards to nontarget insects, fish, aquatic invertebrates and other aquatic organisms.

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.

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 (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 of 4 hours unless wearing appropriate PPE.

PPE requirement 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 and shoes plus socks.

GENERAL INFORMATION

Companion® is a biological fungicide for the prevention, suppression and control of soil borne diseases on a wide range of commercially important plants in greenhouses. Companion® contains the active ingredient Bacillus subtilis GB03 which quickly colonizes the developing root system. Companion® suppresses disease, providing control of root diseases such as Rhizoctonia, Pythium, Fusarium and Phytophthora. Companion® has been shown to increase root mass on many greenhouse plant materials. Companion® provides biological protection for a more vigorous root system in the presence of disease causing organisms.

For greenhouses and enclosed nurseries, apply through irrigation systems as a drench at the time of seeding and transplanting, as well as a periodic drench throughout the plant's lifecycle, for the control of problem fungi. Companion® is most effective when applied as a preventative treatment repeated every 14 to 28 days prior to the onset of disease. Use Companion® in combination with reduced rates of chemical fungicides to enhance and prolong disease control.

IMPORTANT: Companion® is only registered for use in protected growing environments (e.g. glasshouse or greenhouse), and is not registered for use in non-protected environments (e.g. non-contained nurseries or slat houses).

Note: Companion® can be applied to sterilized or fumigated soil but **MUST BE APPLIED AFTER STERILIZATION OR FUMIGATION.**

TANK MIXING INSTRUCTIONS

Companion® is a concentrate liquid, not a suspension, so when mixing with water minimal agitation is required. Fill ½ tank volume with water, then tank mix with other materials, add products in the following order: wettable powders, dry flowables, liquid flowables, emulsifiable concentrates, and soluble and liquid fertilizers. Thoroughly mix all materials. Add required amount of Companion® and remaining required amount of water to tank. Companion® is compatible with other fertilizers, fungicides and technical materials. Always check the product labels for mixing guidelines. Companion® can be tank mixed with chemical fungicides. For

best results, use tank mixture the same day it is prepared to assure viability. DO NOT MIX WITH ACIDS SUCH AS SULFURIC ACID.

It is always advisable to conduct a tank spray compatibility test when you plan to mix this product with other products. To determine the physical compatibility of this product with other products, use a jar test. Using a quart jar, add the proportionate amounts of the products to approximately one quart of water, with agitation. Add dry formulas first, then flowables, then emulsifiables, with concentrates last. After thorough mixing, allow this mixture to stand for 5 minutes. If the combination remains mixed or can be readily remixed, it is physically compatible. Once compatibility has been proven, use the same procedure for adding required ingredients to the spray tank.

PACKAGING

Store Companion® under normal warehouse conditions. Companion® is packaged in an easy to use dispensing system. Locate the dispensing tap, which will be tucked inside the carton. Pull out inner plastic container neck with cap on. Remove cap and immediately screw on tap tightly. To open tap, turn to left. No air will be allowed into container while tap is on. Do not leave open.

ANNUAL AND PERENNIAL FLOWERS, BEDDING PLANTS, FOLIAGE PLANTS, GROUND COVERS, DECIDUOUS TREES AND SHRUBS

Companion® is a broad-spectrum biological fungicide which prevents, suppresses and controls a variety of root diseases on a wide variety of commercially important plants. It is also effective as a pre-plant dip on cuttings and bulbs. For soil drench applications, best crop protection is achieved with preventative treatments repeated every 14 - 28 days.

IRRIGATION APPLICATION

Companion® is a concentrate liquid that can be injected through irrigation systems such as sprinkler, flood (basin) or drip (trickle) irrigation systems without concern for clogging or abrasion. Use Companion® on container, bench, or bed-grown ornamentals in greenhouses or enclosed nurseries, and on annual and perennial flowers, bedding plants, foliage plants, ground covers, deciduous trees and shrubs grown for indoor and outdoor landscaping. Companion® can also be diluted with water and other fertilizers, pesticides and technical materials.

Injector Ratio	1:100	1:200
Companion® per gallon	16 oz.	32 oz.
Companion® per 10 gallons	160 oz.	320 oz.

DIRECT SIPHON

Companion® 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.

SOIL DRENCH APPLICATION IN GREENHOUSES AND ENCLOSED NURSERIES

Use Companion® on container, bench, or bed-grown ornamentals in greenhouses or enclosed nurseries, and on annual and perennial flowers, bedding plants, foliage plants, ground covers, deciduous trees and shrubs grown for indoor and outdoor landscaping. Apply as a drench or directed spray using hand held, mechanical or motorized spray equipment or directed spray using sprinkler irrigation systems. Begin applications during or after seeding, sticking of cuttings or

Companion® Soil Drench		
Plant Type	Amount Of Companion®	Application Notes
Bedding Plants	Mix 16 fl. oz. with 100 gallons of water -OR- Mix 1 teaspoon with 1 gallon of water	Re-treat at 14 day intervals if additional applications are necessary
Foliage Plants		
Flowers		
Woody Ornamentals		

after transplanting to propagation beds, containers, pots or trays. Thoroughly soak the growing media through root zone. Apply Companion® throughout the plant growth cycle.

Apply to container-grown plants, and bed and bench grown plants, according to the guidelines below.

Companion® Drench For Bed & Bench Grown Plants		
Soil Depth (inches)	Sq. Ft. / 100 gals.	Pints Per Sq. Ft.
3" or less	800	1 pint
4 - 6"	400	2 pints
6 - 12"	200	4 pints

Companion® Drench For Container Grown Plants		
Pot Diameter (inches)	Min. Drench Volume Fl. Oz. / Pot	Number Of Pots Per 100 Gallons
4"	2	6,400
6"	4	3,200
8"	10	1,280
10"	20	640
12"	30	426

PLANT DIP APPLICATION

Use Companion® for soft wood, medium and hard wood cuttings as a preventative for plant and cutting diseases caused by Rhizoctonia, Pythium, Fusarium and Phytophthora. Immerse cuttings in solution of Companion® (16 oz. per 50 gal) for 5 - 15 seconds. Companion® can be mixed with rooting hormone solutions that contain IBA (indolebutyric acid) and NAA (naphthaleneacetic acid).

CLOSED SYSTEMS FOR EBB AND FLOW, AND HYDROPONICS APPLICATION

Mix 1 oz. per 30 gallons of water for closed continuous recirculation systems used in hydroponics growing or ebb and flow in rock wool and peat / perlite mixtures. Be sure to clean mix tank on a weekly basis. Presoak transplants in same solution mix.

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: Do not reuse empty container. Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or, if allowed by state and local authorities, by incineration. If burned keep out of smoke.

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. Buyer/User purchases this product to the foregoing Conditions of Sale and Limited Warranty, which, subject to applicable law, may be varied only by a written agreement signed by a duly authorized representative of Growth Products, Ltd. If these terms are not acceptable, return all products to the place of purchase, unopened for a full refund.