



OPEN

## For Greenhouse Use

### Biological Insecticide/Miticide

Biological Insecticide for Greenhouse thrips/whiteflies/Two-spotted Spider mites/Broad mites/aphids/spotted wing drosophila

<b>Active Ingredient:</b> GS-omega/kappa-Hctx-Hv1a.....	2.0%
<b>Other Ingredients:</b> .....	98.0%
<b>TOTAL:</b> .....	100.0%

Requires dilution with water prior to application – see booklet instructions

## KEEP OUT OF REACH OF CHILDREN CAUTION

See back panel for Precautionary Statements,  
First Aid, and Storage and Disposal

#### FIRST AID

<b>If in eyes</b>	<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>
<b>If on skin or clothing</b>	<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>

**HOTLINE NUMBER** - Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-535-5053 for emergency medical treatment information.

**Produced for:**  
Vestaron Corporation  
4717 Campus Drive  
Kalamazoo, MI 49008  
vestaron.com

**Made in Italy**  
EPA Reg. No 88847-6  
EPA Est No 33967-NJ-001

**NET CONTENTS: 1 GALLON (128 FL OZ)**

## PRECAUTIONARY STATEMENTS

**Hazards to Humans and Domestic Animals - CAUTION.** Harmful if absorbed through skin. Causes moderate eye irritation. Avoid contact with eyes, skin or clothing. Wear protective eyewear and waterproof gloves. 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
- protective eyewear

Follow the manufacturer's instructions for cleaning / maintaining PPE. If no instructions are available, use detergent and hot water for washables. 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.
- 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:**

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 washwater or rinsate.

## 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 interval. 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 workers to enter the treated greenhouse or enclosed space until the ventilation requirements in 40 CFR 170.405(b)(3) have been met and the Restricted Entry Interval (REI) of 4 hours has expired. Until then, only handlers wearing the appropriate personal protective equipment can enter the greenhouse or enclosed space.

PPE required for early entry to treated areas (that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil or water) is:

- Coveralls
- Waterproof gloves
- Shoes plus socks
- Protective eyewear

**Product Information:** Spear T Liquid Concentrate is a biological insecticide and miticide containing the active ingredient GS-omega/kappa-Htx-Hv1a for use on ornamental plants and edible crops against thrips, two-spotted spider mites, whiteflies, broad mites, aphids and spotted wing drosophila. Spear T Liquid Concentrate functions primarily as a central nervous system inhibitor of target pests infesting labeled crops. Spear T Liquid Concentrate is mixed with water and applied as a foliar spray with ground equipment equipped with fine nozzles to minimize droplet size.

**Use Instructions:** Spear T Liquid Concentrate is a highly selective insecticide for use against the listed insect and mite pest. Close scouting and early attention to infestations is highly recommended. Proper timing of application targeting newly

hatched larvae is important for optimal results. Spear T Liquid Concentrate is not effective on the egg stage. Thorough coverage of infested plant parts is necessary. Spear T Liquid Concentrate does not have systemic activity.

Repeat applications at 3-10 day intervals depending upon plant growth rate, pest activity, and other factors. Tank mix with contact insecticides/miticides to enhance performance. Refer to tank mix section.

Spear T Liquid Concentrate has been evaluated for phytotoxicity on a variety of crops under various normal growing conditions. However, testing all crop varieties in all mixtures and combinations is not feasible. Prior to treating entire crop, test a small portion of the crop for sensitivity.

**Integrated Pest Management (IPM):** Spear T Liquid Concentrate is an important tool in sound pest management whenever pesticide use is necessary. Apply Spear T Liquid Concentrate alone or in combination and/or rotation with chemical insecticides. This will result in reduced susceptibility to insect damage and overall reduction in the use of chemical insecticides. Consult local agricultural authorities for specific IPM strategies developed for your crop(s) and location.

**Preharvest interval – agricultural use:** Spear T Liquid Concentrate can be applied up to and including the day of harvest.

**Application Instructions:** Do not apply this product through any type of irrigation system.

**Greenhouse Use Directions:** Make applications with high pressure, low volume or ultra-low volume (thermal and non-thermal foggers) misters, aerosol generators or hydraulic boom sprayers. Preferred method of application is fogging since smaller droplet sizes are most effective. Use fine or very fine nozzles and preferably apply high pressure if hydraulic sprayer is used. Spear T Liquid Concentrate is a contact kill material so direct contact with the pest is essential for optimum performance. Mix 1 part (e.g. 1 quart (1 liter)) of Spear T Liquid Concentrate (2.0% active ingredient) with 3 parts (e.g. 3 quarts (3 liters)) of water to make 4 quarts (4 liters) of 0.5% active ingredient spray solution. Use this spray solution (0.5% active ingredient) in the spray equipment for application without further dilution with water. Do not use more water to improve coverage. To determine the volume of spray solution (0.5% active ingredient spray solution) needed to cover the crop area for treatment follow the instructions given in the user manual of the model of fogger being used, up to 1 quart (1 liter) of 0.5% active ingredient spray solution per 1000 square feet. For optimal efficacy in killing aphids and spotted wing drosophila, add a surfactant to the 0.5% active ingredient spray solution prior to high pressure spray application. Use a "blended organosilicate and a non-ionic surfactant" for aphids and a non-ionic surfactant for spotted wing drosophila.

Please refer to the tank mixing section.

**Tank Mixing:** Do not combine Spear T Liquid Concentrate in the spray tank with other pesticides, surfactants, 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. Follow the most restrictive of the labeling limitations and precautions of all products used in mixtures.

Specific surfactants required for aphids and spotted wing drosophila have been listed under usage direction. Add the recommended dosage of surfactants advised in the respective surfactant labels to the diluted Spear T Liquid Concentrate spray solution (0.5% active ingredient spray solution) and mix thoroughly by agitation to prepare the spray solution for application.

Spear T Liquid Concentrate is not compatible with strong oxidizers, such as chlorine, that can degrade the product. Chlorine level typically found in potable water supplies should not present a problem with Spear T Liquid Concentrate performance. To ensure compatibility of tank-mix combinations, they must be evaluated prior to use. 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 one quart of water with agitation. Add dry formulations first, then flowables, then emulsifiable concentrates last. After thoroughly mixing, let this mixture 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.

**USE SPEAR T LIQUID CONCENTRATE ON THE FOLLOWING CROPS:**

**Pre-harvest Interval (PHI) = 0 days**

## Greenhouse Uses

### 1. Greenhouse Vegetables

Crop	Insect Pest
<b>Vegetable, root and tuber (Group 1) Such as:</b> Carrot • Potato • Beet • Sugarbeet • Radish	Thrips • Two-Spotted Spider Mite • Whiteflies • Broad Mites • Aphids <sup>1</sup>
<b>Vegetable, bulb (Group 3) Such as:</b> Garlic • Leek • Onion (Green and bulb)	
<b>Vegetable, leafy except brassica (Group 4) Such as:</b> Lettuce • Spinach • Celery • Endive • Parsley	
<b>Vegetable, brassica leafy (Group 5) Such as:</b> Broccoli • Cabbage • Mustard Greens • Brussel Sprouts • Kale • Cauliflower • Chinese Cabbage • Collards • Kohlrabi	
<b>Vegetable, Legume (Group 6) Such as:</b> Bean • Pea • Lentil • Soybean	
<b>Vegetable, fruiting (Group 8) Such as:</b> Tomato • Pepper • Eggplant	
<b>Vegetable, cucurbit (Group 9) Such as:</b> Watermelon • Melon • Cucumber • Squash	

<sup>1</sup>Add a "blended organosilicate and non-ionic surfactant" to the spray solution prior to high pressure spray application.

### 2. Greenhouse Flowers and Ornamental Plants

Crop	Insect Pest
Bedding plants • Ornamental plants • Ornamental flowers • Cut Flowers • Container Stock	Thrips • Two-Spotted Spider Mite • Whiteflies • Broad Mites • Aphids <sup>1</sup>

<sup>1</sup>Add a "blended organosilicate and non-ionic surfactant" to the spray solution prior to high pressure spray application.

### 3. Greenhouse Herbs and Mint

Crop	Insect Pest
<b>Such as:</b> Basil • Chive • Cilantro • Dill • Mint • Parsley • Rosemary • Sage • Thyme	Thrips • Two-Spotted Spider Mite • Whiteflies • Aphids <sup>1</sup>

<sup>1</sup>Add a "blended organosilicate and non-ionic surfactant" to the spray solution prior to high pressure spray application.

### 4. Greenhouse Fruit

Crop	Insect Pest
<b>Fruit, Citrus (Group 10) Such as:</b> Orange • Grapefruit • Lemon • Lime	Thrips • Two-Spotted Spider Mite • Whiteflies • Aphids <sup>1</sup> • Spotted Wing Drosophila <sup>2</sup>
<b>Fruit, Stone (Group 12) Such as:</b> Cherry • Plum • Peach • Prune • Nectarine	
<b>Berry Group (Group 13) Such as:</b> Grape • Strawberry • Blackberry • Blueberry • Raspberry	

<sup>1</sup>Add a "blended organosilicate and non-ionic surfactant" to the spray solution prior to high pressure spray application.

<sup>2</sup>Add a non-ionic surfactant to the spray solution prior to high pressure spray application.

**Warranty Disclaimer:** To the extent permitted by applicable law, Vestaron Corporation makes no warranty, express or implied, of merchantability, fitness or otherwise concerning use of the product.



For Greenhouse Use

### Biological Insecticide/Miticide

**Active Ingredient:** GS-omega/kappa-Hxtx-Hv 1a ..... 2.0%  
**Other Ingredients:** ..... 98.0%  
**TOTAL:** ..... 100.0%

## KEEP OUT OF REACH OF CHILDREN CAUTION

See attached booklet for additional Precautionary Statements,  
Directions for Use, and Warranty Disclaimer.

### FIRST AID

<b>If in eyes</b>	<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>
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### STORAGE AND DISPOSAL

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

Pesticide Storage	Store in original container at room temperature. Do not allow product to freeze. Keep container closed and away from moisture when not in use.
Pesticide Disposal	To avoid wastes, use all material in this container by application according to label directions. If wastes cannot be avoided, offer remaining product to a waste disposal facility or pesticide disposal program (often such programs are run by state or local governments or by industry).
Container Handling	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 1/4 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.

EPA Reg. No 88847-6 | EPA Est No 33967-NJ-001

Made in Italy  
(Batch)(Lot) No:

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