Biological Insecticide

Active Ingredient: GS-omega/kappa-Hxtx-Hv1a ..................................................... 2.0%
Other Ingredients: ................................................................................................ 98.0%
Total: ................................................................................................................... 100.0%

NOTICE: Read the entire label. Use only according to label instructions. Before using the product, read TERMS AND CONDITIONS OF USE, WARRANTY DISCLAIMER, INHERENT RISKS OF USE and LIMITATION OF REMEDIES at the end of the label instructions. If such terms are unacceptable, return the unopened package at once to Vestaron Corporation.

KEEP OUT OF REACH OF CHILDREN

CAUTION

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.

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 1-800-222-1222 for emergency medical treatment information.

EPA Reg. No.: 88847-6
EPA Est. No.: 33967-NJ-001
Net Contents: XX
Lot No: XXXX
Date of Manufacture: MADE IN

Manufactured by: VESTARON
4717 Campus Drive, Ste. 1200
Kalamazoo, MI 49008

Distributed by: ISAGRO-USA
430 Davis Drive, Suite 240
Morrisville, NC 27650
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.

PRODUCT INFORMATION

SPEAR T LIQUID CONCENTRATE is a biological insecticide containing the active ingredient GS-omega/kappa-Htxx-Hv1a for use on ornamental plants, turf and edible crops against thrips, two-spotted spider mites, whiteflies, and broad mites. 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. SPEAR T LIQUID CONCENTRATE is designed for greenhouse use.

USE INSTRUCTIONS

SPEAR T LIQUID CONCENTRATE is a highly selective insecticide for use against the listed insect 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, insect activity, and other factors. Tank mix with contact insecticides/miticides to enhance performance. Refer to tank mix section.

For hard-to-wet crops, consider using a spreader/sticker or an adjuvant that has been approved for targeted crop use to enhance the adhesion of SPEAR T LIQUID CONCENTRATE to the crop. Examples of appropriate spreader/stickers or adjuvants are: 1) vegetable oils and 2) crop oils.

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 insect management whenever insecticide 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 delivering 40 gallons per acre or less volume. Smaller droplet sizes are most effective. **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. Apply 1 quart (1 liter) of spray solution per 1000 square feet of greenhouse bench space. Spray until wet (glisten), not run-off. Turn off exhaust fans and close vents during application. Begin applications when pests reach threshold levels.

**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. **SPEAR T LIQUID CONCENTRATE** is not compatible with strong oxidizers, such as chlorine, that can degrade the product. 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**

1. **Greenhouse Vegetables:**

<table>
<thead>
<tr>
<th>Crop</th>
<th>Insect Pest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cucumber (all varieties)</td>
<td>Thrips</td>
</tr>
<tr>
<td>Peppers (all varieties)</td>
<td>Two-spotted Spider mites</td>
</tr>
<tr>
<td>Tomatoes (all varieties)</td>
<td>Whiteflies</td>
</tr>
<tr>
<td>Green Beans</td>
<td>Broad Mites</td>
</tr>
<tr>
<td>Leafy Greens (all types)</td>
<td></td>
</tr>
<tr>
<td>Lettuce</td>
<td></td>
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<tr>
<td>Spinach</td>
<td></td>
</tr>
</tbody>
</table>

2. **Greenhouse Flowers and Ornamental Plants**

<table>
<thead>
<tr>
<th>Crop</th>
<th>Insect Pest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bedding Plants</td>
<td>Thrips</td>
</tr>
<tr>
<td>Ornamental Plants</td>
<td>Two-spotted Spider mites</td>
</tr>
<tr>
<td>Ornamental Flowers</td>
<td>Whiteflies</td>
</tr>
<tr>
<td>Cut Flowers</td>
<td>Broad Mites</td>
</tr>
<tr>
<td>Container Stock</td>
<td></td>
</tr>
</tbody>
</table>
3. Greenhouse Herbs and Mint

<table>
<thead>
<tr>
<th>Crop</th>
<th>Insect Pest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basil</td>
<td>Thrips</td>
</tr>
<tr>
<td>Chive</td>
<td>Two-spotted Spider mites</td>
</tr>
<tr>
<td>Cilantro</td>
<td>Whiteflies</td>
</tr>
<tr>
<td>Dill</td>
<td></td>
</tr>
<tr>
<td>Mint</td>
<td></td>
</tr>
<tr>
<td>Parsley</td>
<td></td>
</tr>
<tr>
<td>Rosemary</td>
<td></td>
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<tr>
<td>Sage</td>
<td></td>
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<tr>
<td>Thyme</td>
<td></td>
</tr>
</tbody>
</table>

**TERMS AND CONDITIONS OF USE**

If the terms of the following WARRANTY DISCLAIMER, INHERENT RISKS OF USE, and LIMITATION OF REMEDIES are not acceptable, return the unopened package at once to Vestaron Corporation. Otherwise, use of the product will constitute acceptance of the terms under WARRANTY DISCLAIMER, INHERENT RISKS OF USE and LIMITATION OF REMEDIES.

**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.

**INHERENT RISKS OF USE**

It is impossible to eliminate all risks associated with use of the product. Crop injury, lack of performance, or other unintended consequences may result because of such factors as use, storage or handling of the product not in accordance with the accompanying label instructions, abnormal conditions, presence of other materials, or other factors, all of which are beyond the control of Vestaron Corporation. All such risks shall be assumed by the user.

**LIMITATION OF REMEDIES**

To the extent permitted by applicable law, the exclusive remedy for losses or damages resulting from the product (including claims based on contract, negligence, strict liability, or other legal theories) shall be limited to replacement of the amount of product used. To the extent permitted by applicable law, Vestaron Corporation disclaims any liability for incidental, consequential, exemplary, special or indirect damages resulting from the use, storage or handling of the product.

The terms of the WARRANTY DISCLAIMER, INHERENT RISKS OF USE, and LIMITATION OF REMEDIES cannot be varied by any written or verbal statements or agreements. No employee or other agent of Vestaron Corporation is authorized to vary or exceed the terms of the WARRANTY DISCLAIMER, INHERENT RISKS OF USE, and LIMITATION OF REMEDIES in any manner. The terms may be varied only by agreement in writing signed by a duly authorized representative of Vestaron Corporation.

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PRECAUTIONARY STATEMENTS

Hazards to humans and domestic animals - CAUTION. Causes moderate eye and skin irritation. Harmful if absorbed through skin. Avoid contact with eyes, skin or clothing. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. 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.

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:
For plastic 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 puncture and dispose of in a sanitary landfill or by incineration.

For plastic containers greater than 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. Fill the container ¼ full with water. Replace and tighten enclosures. 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.