



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION

June 10, 2020

Scott Jackson, Ph.D.  
Vestaron Corporation  
VP Regulatory and Industry Affairs  
600 Park Offices Dr., Suite 117  
P.O. Box 13137  
Research Triangle Park, NC 27709

Subject: PRIA (Pesticide Registration Improvement Act) Amendment to revise the basic formulation, add alternate formulations, revise the manufacturing process, and revise the dermal precautionary statements and storage statements on the product label  
Product Name: VST 006340 LC  
EPA Registration Number: 88847-6  
Application Date: September 30, 2019  
OPP Decision Number: 556252

Dear Dr. Jackson:

The amended formulations, manufacturing process (MRID# 511340-01), and labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is acceptable.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one (1) copy of the final printed labeling before you release this product for shipment with the new labeling. In accordance with 40 CFR § 152.130(c), you may distribute or sell this product under the previously approved labeling for 18 months from the date of this letter. After 18 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR § 152.3.

Please note that the record for this product currently contains the following acceptable confidential statement of formulation (CSFs):

- Basic CSF dated 9/30/19
- Alternate CSFs 1 – 10 dated 9/30/19

Any CSFs other than the ones listed above are superseded/no longer valid.

Page 2 of 2

EPA Reg. No. 88847-6

OPP Decision No. 556252

Should you wish to add/retain a reference to your company's website on your label, then please be aware that the website becomes labeling under FIFRA and is subject to review by the U.S. Environmental Protection Agency (EPA). If the website is false or misleading, the product will be considered to be misbranded and sale or distribution of the product is unlawful under FIFRA section 12(a)(1)(E). 40 CFR § 156.10(a)(5) lists examples of statements the EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the EPA find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA-approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance Assurance.

Your release for shipment of this product constitutes acceptance of these terms. If these terms are not complied with, this registration will be subject to cancellation in accordance with FIFRA section 6.

If you have any questions, please contact Michael Glikes by phone at (703) 305-6231 or via email at [glikes.michael@epa.gov](mailto:glikes.michael@epa.gov).

Sincerely,

A handwritten signature in black ink, appearing to read 'Alan Reynolds', written in a cursive style.

Alan Reynolds, Team Leader  
Emerging Technologies Branch  
Biopesticides and Pollution  
Prevention Division (7511P)  
Office of Pesticide Programs

Enclosure

{Note: Text in curly brackets indicates optional text.}  
 [Note: Text in square brackets is a note to the reviewer.]

<b>GROUP</b>	<b>32</b>	<b>INSECTICIDE</b>
--------------	-----------	--------------------

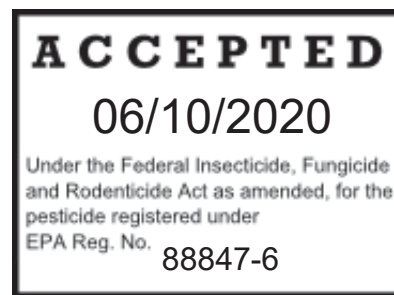
# VST-006340 LC

Biological Insecticide/Miticide

<b>MASTER LABEL, containing:</b>
<b>Sublabel A: Greenhouse and Field Use</b>
<b>Sublabel B: Greenhouse and Field Use in Tank Mixes with Bt</b>
<b>Optional Label Claims for All Labels</b>

**Alternate Brand Names:**

- “Spear® T Liquid Concentrate”
- “Spear® T Low Volume”
- “Spear® O Liquid Concentrate
- “Spear® Liquid Concentrate”
- “Spear® T 4 Liquid Concentrate”
- “Spear®-Lep”
- “Spear®-T LC”
- “Spear®-T Liquid Concentrate”
- “Spear®-T Low Volume”
- “Spear®-O Liquid Concentrate”
- “Spear®-T 4 Liquid Concentrate”
- “Spear® Lep”
- “Spear® T LC”
- “Spear®-T SL
- “Spear® SL
- “VST-006340 SL”



**Active Ingredient:**

GS-omega/kappa-Hctx-Hv1a.....	2.0%
<b>Other Ingredients:</b> .....	<u>98.0%</u>
<b>Total:</b> .....	100.0%

Contains 0.17 lb active ingredient per gallon

**EPA Reg. No.:** 88847-6  
**Net Contents:** XX  
**(Batch)(Lot) No:** XXXX

**EPA Est. No.:** XXXXX-XX-XX

{Produced for:}

{Manufactured {for}{by}:} Vestaron Corporation  
 600 Park Offices Drive, Suite 117  
 Research Triangle Park, NC 27709  
 {vestaron.com}

{Note: Text in curly brackets indicates optional text.}

[Note: Text in square brackets is a note to the reviewer.]

# {Sublabel A: Greenhouse and Field Use}

[Note: The following information will be presented as a booklet on the front of the product container. Pages 2 and 3 are the primary display panel of the booklet.]

**GROUP 32 INSECTICIDE**

## VST-006340 LC

### Biological Insecticide/Miticide

{Biological Miticide}

{{For Use Against} {Controls} {Thrips} {Western Flower Thrips} {Thrips, such as Western Flower Thrips} in Greenhouses}}

{{For Use Against} {Controls} {Whiteflies} {Two spotted Spider Mites} {Broad Mites} {Lewis Mites} {Plant-feeding Mites} {Phytophagous Mites} {and} {Aphids} in Greenhouses}}

{{Control of} {Controls} the top four major greenhouse pests: aphids, spider mites, thrips and whiteflies}}

{{Biological insecticide {Bioinsecticide} for Greenhouse {Aphids} {Broad Mites} {Thrips} {Two spotted Spider Mites} {Whiteflies}}}

{{For greenhouse {Aphid} {Broad Mite} {Thrips} {Two spotted Spider Mite} {and} {Whitefly} management}}

{{For use against} {Controls} Aphids, Broad Mites, Lewis Mites, Thrips, Two spotted Spider Mites and Whiteflies on specific field vegetables }}

{{For Use Against} {Controls} Spotted-wing Drosophila on berries and cherries}

{{For Use Against} {Controls} Asian Citrus Psyllid on citrus fruits in the field}

{{For Use Against} {Controls} {Onion Thrips} {Thrips, such as Onion Thrips} on onions}

{{For Use Against} {Controls} Psyllids on specific field crops}

{{For Use Against} {Controls} Plant-feeding Mites on hops}

{Labeled for use on food and non-food crops, ornamental flowers}

{Works with all types of non-thermal foggers}

{Works with all types of foggers}

#### Active Ingredient:

GS-omega/kappa-Hxtx-Hv1a..... 2.0%

**Other Ingredients:**..... 98.0%

**Total:**..... 100.0%

Contains 0.17 lb active ingredient per gallon

{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**

{Note: Text in curly brackets indicates optional text.}

[Note: Text in square brackets is a note to the reviewer.]

## CAUTION{/PRECAUCION

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

See {inside} {back panel} {and} {booklet} for additional Precautionary Statements 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 {and +1-352-323-3500 for International} for emergency medical treatment information and chemical emergency assistance.	

**EPA Reg. No.:** 88847-6

**Net Contents:** XX

{Made in USA}

**EPA Est. No.:** XXXXX-XX-XXX

**{Batch}{Lot} No:** XXXX

**{Produced for:}**

**{Manufactured {for}{by}:}** Vestaron Corporation

600 Park Offices Drive, Suite 117

Research Triangle Park, NC 27709

{vestaron.com}

**{Master Label} {Version No.: XXX}**

{Note: Text in curly brackets indicates optional text.}

[Note: Text in square brackets is a note to the reviewer.]

## PRECAUTIONARY STATEMENTS

**Hazards to Humans and Domestic Animals - CAUTION.** 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.

{Note: Text in curly brackets indicates optional text.}

[Note: Text in square brackets is a note to the reviewer.]

### **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 worker entry into treated areas during the Restricted Entry Interval (REI) of 4 hours unless wearing the appropriate personal protective equipment.

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**

VST-006340 LC is a biological insecticide and miticide that contains the peptide active ingredient GS-omega/kappa-Hctx-Hv1a. It is for use on ornamental plants and edible crops as an effective means for controlling pests such as aphids, broad mites, spider mites, thrips and whiteflies, as well as {Asian citrus} psyllids and spotted-wing drosophila. VST-006340 LC is a contact insecticide that functions primarily as a central nervous system inhibitor of target pests infesting labeled crops. VST-006340 LC is mixed with water and applied as a foliar spray {with ground equipment equipped with fine nozzles to minimize droplet size}.

### **GENERAL USE INSTRUCTIONS**

The active ingredient in VST-006340 LC largely acts through contact. VST-006340 LC has no systemic activity, therefore thorough coverage of infested plant parts is necessary for best performance. Small droplet size will improve coverage and penetration of the crop canopy. Use of a non-ionic {or blended organosilicone} surfactant will also improve coverage.

VST-006340 LC is effective on immature and some adult stages of the listed insect and mite pests. Earlier or younger developmental stages should be considered more susceptible. {VST-006340 LC is not effective on the egg stage.} Careful scouting to detect infestations early is important for optimal results. Repeat applications at 3-10 day intervals (or at intervals necessary to maintain control) depending upon plant growth rate, pest activity and other factors.

**{Note: Text in curly brackets indicates optional text.}**

**[Note: Text in square brackets is a note to the reviewer.]**

VST-006340 LC may be applied up to and including the day of harvest (Pre-harvest interval = 0 days).

VST-006340 LC has been evaluated for phytotoxicity on a variety of edible and non-edible crops under various normal growing conditions. It is not feasible, however, to test all crop varieties in all mixtures and combinations. Therefore, prior to treating the entire crop, test a small portion of the crop for sensitivity.

**Mixing directions:**

Do not add VST-006340 LC to the mix tank before introducing the desired amount of water. Add water to the mix tank. Start the mechanical or hydraulic agitation to provide moderate circulation before adding VST-006340 LC. Add the desired volume of VST-006340 LC to the tank and continue circulation. **Maintain circulation while loading and spraying.** Do not mix more VST-006340 LC than can be used in 24 hours.

**Tank mixing and compatibility:**

Do not combine VST-006340 LC 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.

To ensure compatibility of tank-mix combinations, evaluate prior to use. Use a jar test to determine the physical compatibility of this product with other products. Add the proportionate amounts of the products to one quart of water with agitation. Add dry formulations first, then flowables, then emulsifiable concentrates. 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.

When a surfactant is used, add it to the diluted spray solution last. Use the recommended dosage advised in the respective surfactant label to the diluted VST-006340 LC spray solution and mix thoroughly by agitation to prepare the spray solution for application.

{VST-006340 LC is not compatible with strong oxidizers, such as chlorine, since these can degrade the product. Chlorine levels typically found in potable water supplies should not present a problem with VST-006340 LC performance}.

**Use Restrictions:**

Do not apply VST-006340 LC through any type of irrigation system.

For outdoor field use, do not apply more than 10 gallons per acre per year.

**{Integrated Pest Management (IPM):**

VST-006340 LC is an important tool for sound pest management whenever pesticide use is necessary. Because the active ingredient has a novel mode of action, VST-006340 LC provides a new control method for the labelled pests. It effectively targets immature and some adult life stages. Based on sound scouting practices, use VST-006340 LC preventively to avoid infestations, as a spot spray to suppress localized infestations, or as a blanket spray to prevent outbreaks. Applying VST-006340 LC in rotation with other insecticides as a part of a resistance management program will reduce inputs of conventional insecticides and also delay development of pesticide resistance. Based on a variety of evaluations, VST-006340 LC is not disruptive to the benefits of biological control agents or other non-target species. It is not feasible, however, to test



{Note: Text in curly brackets indicates optional text.}

[Note: Text in square brackets is a note to the reviewer.]

all species of beneficials in all situations. Therefore, consult with a pest control advisor, extension agent or the manufacturer before treating an entire crop where beneficial insects serve as part of an IPM program. Consult local agricultural authorities for IPM strategies that are specific to your crop and location.}

### {Resistance Management:

<b>GROUP</b>	<b>32</b>	<b>INSECTICIDE</b>
--------------	-----------	--------------------

VST-006340 LC contains the biological peptide GS-omega/kappa-Hxtx-Hv1a, which has a novel mode of action. It is classified as a Group 32 Insecticide and is not known to be cross-resistant to any other class of insecticide. Repeated use of any mode of action, however, has the potential for pests to develop insecticide resistance. To delay development of resistance, the following practices are recommended:

- Carefully follow the specific guidelines within the use directions.
- Avoid using the same active ingredient or mode of action on consecutive generations of insects. Multiple applications to reduce a single generation, however, are acceptable. Treat the next generation with a different mode of action.
- Avoid using less than labeled rates of any insecticide when applied alone.
- Target the insect early in development to achieve the greatest benefit from the insecticide.
- Consult local agricultural authorities for specific IPM strategies developed for your crop(s) and location.}

## APPLICATION INSTRUCTIONS

### GREENHOUSE AND NURSERY USE DIRECTIONS

VST-006340 LC may be used in greenhouses (including high tunnels, lath and shade houses, interior scapes and hoop houses) and nurseries. Make applications with high pressure, low-volume or ultra-low-volume spraying and fogging equipment. VST-006340 LC is a contact insecticide so direct contact with the pest is essential for optimum performance. Better coverage and penetration of crop canopy is usually achieved when smaller spray droplets are applied. Use fine or very fine nozzles and preferably apply high pressure if hydraulic sprayer is used. Use of a non-ionic {or blended organosilicone} surfactant to improve coverage may increase performance.

For high-volume sprayers, mix 2-3 gallons of VST-006340 LC with water to a total volume of 100 gallons to prepare a 2-3% product solution. Apply as a foliar spray in enough volume per acre to achieve full coverage of the target crop (50 - 100 gallons of this spray solution are generally sufficient to treat 1 acre). For low-volume and ultra-low-volume equipment, apply 1-3 gallons of VST-006340 LC per acre. Follow the equipment manufacturer instructions carefully to determine the appropriate amount of water and/or carrier for area coverage. Repeat applications at 3-10 day intervals depending upon plant growth rate, pest activity and other factors.

### FIELD USE DIRECTIONS FOR FRUITS AND VEGETABLES

Use high pressure for application of the spray solution. Apply 1-3 gallons of VST-006340 LC per acre. Better coverage and penetration of crop canopy is usually achieved when smaller spray droplets are applied. Use very fine nozzles to create a fine spray mist. Use of a non-ionic {or blended organosilicone} surfactant to improve coverage may increase performance. Repeat applications at 3-10 day intervals depending upon plant growth rate, pest activity and other factors. Not for aerial application.

{Note: Text in curly brackets indicates optional text.}

[Note: Text in square brackets is a note to the reviewer.]

## **DIPPING OR IMMERSION TREATMENTS**

VST-006340 LC may be applied using a pre-plant dipping application to vegetative or hardwood unrooted cuttings and transplants for control of labeled pests. To prepare the dipping solution, thoroughly mix 1 gallon of VST-006340 LC with 3 gallons of water for a 25% product solution. If plant sensitivity is a concern, this concentration may be reduced to 1 gallon of VST-006340 LC with 9 gallons of water for a 10% solution. Prior to treating the entire crop, test a small portion of the crop for sensitivity. Use caution when dipping geranium, petunia and salvia cuttings because some cultivars may be sensitive.

For unrooted cuttings, place into the tank loose, or in a mesh bag or immersion tray with top. To maximize coverage, do not pack cuttings too tightly. Immerse the cuttings into the VST-006340 solution, and gently move the plants around for 5-10 seconds, or just long enough to completely wet all surfaces. Verify that there are no dry surface areas.

For bare-root transplants, hold by the roots and immerse in the VST-006340 solution. Gently move around for 5-10 seconds, or just long enough to completely wet all surfaces of the leaves and stems, but not the roots. Verify that there are no dry surface areas.

For plugs and liners, turn the tray upside down, when practical, and dip the plant tops (stems and foliage) into the VST-006340 solution. Gently move around for 5-10 seconds, or just long enough to wet all surfaces.

Once cuttings and transplants are removed from the dipping solution, plant into potting mix or soil in the usual manner. Allow treated plants to dry before misting or watering. Observe the following general guidelines:

- Clean and disinfect the dipping tank and equipment before a new dip solution is prepared.
- Prepare only as much dip solution as can be used in one day. Do not use dip solution for more than one day.
- Prior to treating a new crop, test a small number of plants for sensitivity. Immerse in dipping solution, plant into growing media, and observe over several days for plant damage. Do not use dipping if there is any visible damage to test plants.
- If plant pathogens are a concern, prepare a new dipping solution regularly.
- Submerge just long enough to wet all plant surfaces.
- Agitate dip solution throughout use.
- Do not immerse stressed or wilted cuttings or transplants.

{Note: Text in curly brackets indicates optional text.}

[Note: Text in square brackets is a note to the reviewer.]

USE VST-006340 LC ON THE FOLLOWING CROPS:

**GREENHOUSE AND NURSERY USES**

Crop	Insect/Mite Pest
<p><b>Greenhouse Vegetables:</b></p> <p><b>Vegetable, Root and Tuber (Group 1)</b>, such as: Beet, Carrot, Potato, Radish, Sugarbeet</p> <p><b>Vegetable, Bulb (Group 3)</b>, such as: Garlic, Leek, Onion (Green and Bulb)</p> <p><b>Vegetable, Leafy Except Brassica (Group 4)</b>, such as: Celery, Endive, Lettuce, Parsley, Spinach</p> <p><b>Vegetable, Brassica Leafy (Group 5)</b>, such as: Broccoli, Brussels Sprouts, Cabbage, Cauliflower, Chinese Cabbage, Collards, Kale, Kohlrabi, Mustard Greens</p> <p><b>Vegetable, Legume (Group 6)</b>, such as: Bean, Lentil, Pea, Soybean</p> <p><b>Vegetable, Fruiting (Group 8)</b>, such as: Eggplant, Pepper, Tomato</p> <p><b>Vegetable, Cucurbit (Group 9)</b>, such as: Cucumber, Melon, Squash, Watermelon</p> <p><b>Greenhouse/Nursery Flowers and Ornamental Plants</b>, such as: Bedding Plants, Container Stock, Cut Flowers, Ornamental Flowers, Ornamental Plants</p> <p><b>Greenhouse Herbs and Mint</b>, such as: Basil, Chive, Cilantro, Dill, Mint, Parsley, Rosemary, Sage, Thyme</p> <p><b>Greenhouse Fruit</b></p> <p><b>Fruit, Citrus (Group 10)</b>, such as: Grapefruit, Lemon, Lime, Orange</p> <p><b>Fruit, Stone (Group 12)</b>, such as: Cherry, Nectarine, Peach, Plum, Prune</p> <p><b>Berry (Group 13)</b>, such as: Blackberry, Blueberry, Grape, Raspberry, Strawberry</p>	<p><b>Aphids</b>, such as: Cotton/Melon Aphid Green Peach Aphid</p> <p><b>Plant-feeding Mites</b>, such as: Broad Mite Lewis Mite Two spotted Spider Mite</p> <p><b>Spotted-wing Drosophila</b></p> <p><b>Thrips</b>, such as: Onion Thrips Tobacco Thrips Western Flower Thrips</p> <p><b>White flies</b>, such as: Greenhouse Whitefly Sweet Potato Whitefly</p>

{Note: Text in curly brackets indicates optional text.}

[Note: Text in square brackets is a note to the reviewer.]

<p><b>Hemp and Tobacco</b></p>	<p><b>Aphids</b>, such as: Cotton/Melon Aphid{*} Green Peach Aphid</p> <p><b>Plant-feeding Mites</b>, such as: Broad Mite Two spotted Spider Mite</p> <p><b>Thrips</b>, such as: Onion Thrips Tobacco Thrips Western Flower Thrips</p> <p><b>White flies</b>, such as: Greenhouse Whitefly Sweet potato Whitefly</p>
--------------------------------	--

{Note: Text in curly brackets indicates optional text.}

[Note: Text in square brackets is a note to the reviewer.]

**FIELD USES**

Crop	Insect/Mite Pest
<p><b>Field Vegetables:</b></p> <p><b>Vegetables, Root and Tuber (Group 1)</b>, such as: Beet, Carrot, Potato, Radish, Sugarbeet</p> <p><b>Vegetable, Bulb (Group 3)</b>, such as: Garlic, Leek, Onion (Green and Bulb)</p> <p><b>Vegetable, Leafy Except Brassica (Group 4)</b>, such as: Celery, Endive, Lettuce, Parsley, Spinach</p> <p><b>Vegetable, Brassica Leafy (Group 5)</b>, such as: Broccoli, Brussels Sprouts, Cabbage, Cauliflower, Chinese Cabbage, Collards, Kale, Kohlrabi, Mustard Greens</p> <p><b>Vegetable, Legume (Group 6)</b>, such as: Bean, Lentil, pea, Soybean</p> <p><b>Vegetable, Fruiting (Group 8)</b>, such as: Eggplant, Pepper, Tomato</p> <p><b>Vegetable, Cucurbit (Group 9)</b>, such as: Cucumber, Melon, Squash, Watermelon</p>	<p><b>Plant-feeding Mites{*}</b>, such as: Broad Mite Lewis Mite Twospotted Spider Mite</p> <p><b>Psyllids{*}</b>, such as: Potato Psyllid</p> <p><b>Thrips{*}</b>, such as: Onion Thrips Tobacco Thrips Western Flower Thrips</p>
<p><b>Field Fruit:</b></p> <p><b>Fruit, Citrus (Group 10)</b>, such as: Grapefruit, Lemon, Lime, Orange</p> <p><b>Fruit, Pome (Group 11)</b>, such as: Pear</p> <p><b>Fruit, Stone (Group 12)</b>, such as: Cherry, Nectarine, Peach, Plum, Prune</p> <p><b>Berry (Group 13)</b>, such as: Blackberry, Blueberry, Grape, Raspberry, Strawberry</p>	<p><b>Plant-feeding Mites{*}</b>, such as: Broad Mite Citrus Rust Mite Twospotted Spider Mite</p> <p><b>Psyllids{*}</b>, such as: Asian Citrus Psyllid Pear Psylla</p> <p><b>Spotted-wing Drosophila</b></p>
<p><b>Hemp</b></p>	<p><b>Aphids{*}</b>, such as: Cotton/Melon Aphids Green Peach Aphid</p> <p><b>Plant-feeding Mites{*}</b>, such as: Broad Mite Two spotted Spider Mite</p> <p><b>Thrips{*}</b>, such as: Onion Thrips Tobacco Thrips Western Flower Thrips</p>
<p><b>Hops</b></p>	<p><b>Plant-feeding Mites{*}</b>, such as: Broad Mite Lewis Mite Twospotted Spider Mite</p>

{Note: Text in curly brackets indicates optional text.}

[Note: Text in square brackets is a note to the reviewer.]

Tobacco	Aphids{ <sup>*</sup> }, such as: Green Peach Aphid Thrips, such as; Tobacco Thrips
---------	---

{<sup>\*</sup> Not for use in California}

#### STORAGE AND DISPOSAL

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

**Pesticide Storage:** Store unopened container at room temperature. Do not store product in an open/unsealed container. Discard any remaining product after use. Do not allow product to freeze.

**Pesticide Disposal:** Discard any remaining product after use on site, or send to a waste disposal facility or pesticide disposal program.

{Note: Text in curly brackets indicates optional text.}

[Note: Text in square brackets is a note to the reviewer.]

#### **Container Handling:**

{For 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 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.

#### **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 product handling 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.**

VST-006340 LC; EPA Reg. No. 88847-6

MASTER LABEL - version (4.0) - Amendment - DRAFT January 29, 2020

Page 13 of 27

{Note: Text in curly brackets indicates optional text.}

[Note: Text in square brackets is a note to the reviewer.]

[This label reflects the unit package labeling that is affixed to the container.]

# VST-006340 LC

## Biological Insecticide/Miticide

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

See attached booklet for additional Precautionary Statements {, and} Directions for Use {, and} {Terms and Conditions of Use} {Warranty Disclaimer} {Inherent Risks of Use} {Limitation of Remedies}

### KEEP OUT OF REACH OF CHILDREN CAUTION{/PRECAUCION

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)}

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>
<p align="center"><b>HOTLINE NUMBER</b></p> <p>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 {and +1-352-323-3500 for International} for emergency medical treatment information and chemical emergency assistance.</p>	

**EPA Reg. No.:** 88847-6  
**EPA Est. No.:** XXXXX-XX-XXX  
 {Made in Italy}{Made in USA}

**Net Contents:** XX  
**{Batch}{Lot} No:** XXXX

**{Produced for:}**  
**{Manufactured {for}{by}:}** Vestaron Corporation  
 600 Park Offices Drive, Suite 117  
 Research Triangle Park, NC 27709  
 {vestaron.com}

**{Master Label} {Version No.: XXX}**



{Note: Text in curly brackets indicates optional text.}

[Note: Text in square brackets is a note to the reviewer.]

## PRECAUTIONARY STATEMENTS

**Hazards to Humans and Domestic Animals - CAUTION.** 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.

### STORAGE AND DISPOSAL

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

**Pesticide Storage:** Store unopened container at room temperature. Do not store product in an open/unsealed container. Discard any remaining product after use. Do not allow product to freeze.

**Pesticide Disposal:** Discard any remaining product after use on site, or send to a waste disposal facility or pesticide disposal program.

#### Container Handling:

*{For 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  $\frac{1}{4}$  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.

*{For 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  $\frac{1}{4}$  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.

{Note: Text in curly brackets indicates optional text.}  
[Note: Text in square brackets is a note to the reviewer.]

## Sublabel B: Greenhouse and Field Use in Tank Mixes with Bt

[Note: The following information will be presented as a booklet on the front of the product container. Pages 14 and 15 are the primary display panel of the booklet.]

GROUP 32 INSECTICIDE

# VST-006340 LC

## Biological Insecticide

{Control of lepidopteran pests in fruits, nurseries, vegetables and other high-value field crops}  
{{For control of lepidopterans {caterpillars, loopers, “worms”}}  
{For control of Colorado potato beetle}  
{For control of lepidopteran larvae}  
{Extended duration of action}  
{For use with *Bacillus thuringiensis* (Bt) products or other gut disruptors}

### Active Ingredient:

GS-omega/kappa-Htx-Hv1a..... 2.0%

Other Ingredients: ..... 98.0%

Total: ..... 100.0%

Contains 0.17 lb of active ingredient per gallon

{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{/PRECAUCION

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)}

See {inside} {back panel} {and} {booklet} for additional Precautionary Statements and Storage and Disposal.

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>

{Note: Text in curly brackets indicates optional text.}

[Note: Text in square brackets is a note to the reviewer.]

<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>
<b>HOTLINE NUMBER</b>	
Have the product container or label with you when calling a poison control center or doctor, or when going for treatment. You may also contact 1-800-535-5053 {and +1-352-323-3500 for International} for emergency medical treatment information and chemical emergency assistance.	

**EPA Reg. No.:** 88847-6

**Net Contents:** XX

{Made in USA}

**EPA Est. No.:** XXXXX-XX-XXX

**{Batch}{Lot} No:** XXXX

**{Produced for:}{Manufactured {for}{by}:}** Vestaron Corporation  
600 Park Offices Drive, Suite 117  
Research Triangle Park, NC 27709  
{vestaron.com}

**{Master Label} {Version No.: XXX}**

{Note: Text in curly brackets indicates optional text.}

[Note: Text in square brackets is a note to the reviewer.]

## PRECAUTIONARY STATEMENTS

**Hazards to Humans and Domestic Animals - CAUTION.** 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 wash water 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.

{Note: Text in curly brackets indicates optional text.}

[Note: Text in square brackets is a note to the reviewer.]

### **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 worker entry into treated areas during the Restricted Entry Interval (REI) of 4 hours unless wearing the appropriate personal protective equipment.

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**

VST-006340 LC is a biological insecticide that contains the peptide active ingredient GS-omega/kappa-Hctx-Hv1a. It is for use on ornamental plants and edible crops. To be effective against the labelled lepidopteran {and coleopteran} pests, VST-006340 LC must be tank mixed with *Bacillus thuringiensis* (Bt) products or another product that assists in moving the active ingredient to the site of activity. When ingested at labelled rates along with Bt, VST-006340 LC functions as a central nervous system inhibitor. VST-006340 LC is mixed with water and applied as a foliar spray with ground or aerial equipment equipped for conventional insecticide spraying.

VST-006340 LC tank mixes with Bt products can be used in either the field or greenhouse.

### **USE INSTRUCTIONS**

In combination with Bt, the active ingredient in VST-006340 LC largely acts through ingestion. VST-006340 LC has no systemic activity, therefore thorough coverage of infested plant parts is necessary for best performance. For some crops, directed drop nozzles by ground machine are required. VST-006340 LC in combination with Bt is only effective on the immature stages of the listed lepidopteran pests. Younger life stages or earlier instars should be considered more susceptible.

The application rate for all listed crops and targets is 1-2 pints per acre. Repeat applications at 3-10 day intervals (or at intervals necessary to maintain control) depending upon plant growth rate, pest activity and other factors. Under heavy pest pressure conditions, shorten the spray interval,

**{Note: Text in curly brackets indicates optional text.}**

**[Note: Text in square brackets is a note to the reviewer.]**

use a higher rate, and/or increase spray volume to improve spray coverage. Do not spray to run off.

VST-006340 LC may be applied up to and including the day of harvest (Pre-harvest interval = 0 days).

Adjuvants may be used to achieve uniform plant coverage on plants that are difficult to wet, closed canopy or dense foliage. Use a spreader/sticker or an adjuvant that has been approved for the targeted crop use to enhance the adhesion of VST-006340 LC to the crop.

VST-006340 LC has been evaluated for phytotoxicity on a variety of edible and non-edible crops under various normal growing conditions. It is not feasible, however, to test all crop varieties in all mixtures and combinations. Therefore, prior to treating the entire crop, test a small portion of the crop for sensitivity.

#### **Mixing directions:**

Do not add VST-006340 LC to the mix tank before introducing the desired amount of water. Add water to the mix tank. Start the mechanical or hydraulic agitation to provide moderate circulation before adding VST-006340 LC. Add the desired volume of VST-006340 LC to the mix tank and continue circulation. **Maintain circulation while loading and spraying.** Do not mix more VST-006340 LC than can be used in 24 hours.

#### **Tank mixing and compatibility:**

Do not combine VST-006340 LC 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.

To ensure compatibility of tank-mix combinations, evaluate prior to use. Use a jar test to determine the physical compatibility of this product with other products. Add the proportionate amounts of the products to one quart of water with agitation. Add dry formulations first, then flowables, then emulsifiable concentrates. 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.

When a surfactant is used, add it to the diluted spray solution last. Use the recommended dosage advised in the respective surfactant label to the diluted VST-006340 LC spray solution and mix thoroughly by agitation to prepare the spray solution for application.

{VST-006340 LC is not compatible with strong oxidizers, such as chlorine, which can degrade the product. Chlorine level typically found in potable water supplies should not present a problem with VST-006340 LC performance}.

#### **Spray volume:**

Apply VST-006340 LC tank mixes in ground and aerial equipment with quantities of water sufficient to provide thorough coverage of infested plant parts. The amount of water needed per acre will depend upon crop development, weather, application equipment and local experience. Use a minimum of 20 gallons per acre for ground applications and a minimum of 5 gallons per acre for aerial application.

{Note: Text in curly brackets indicates optional text.}

[Note: Text in square brackets is a note to the reviewer.]

Do not spray when wind speed favors drift beyond the area intended for use. Avoiding spray drift is the responsibility of the applicator.

#### **Use Restrictions:**

Do not apply this product through any type of irrigation.

For outdoor field use, do not apply more than 10 gallons of VST-006340 LC per acre per year.

#### **{Integrated Pest Management (IPM):**

VST-006340 LC is an important tool for sound pest management whenever pesticide use is necessary. Because the active ingredient has a novel mode of action, VST-006340 LC provides a new control method for the labelled pests. Based on sound scouting practices, use VST-006340 LC preventively to avoid infestations, as a spot spray to suppress localized infestations, or as a blanket spray to prevent outbreaks. Applying VST-006340 LC in rotation with other insecticides will reduce inputs of conventional insecticides and also delay development of pesticide resistance. Based on a variety of evaluations, VST-006340 LC is not disruptive to the benefits of biological control agents or other non-target species. It is not feasible, however, to test all species of beneficials in all situations. Therefore, consult with a pest control advisor, extension agent or the manufacturer before treating an entire crop where beneficial insects serve as part of an IPM program. Consult local agricultural authorities for IPM strategies that are specific to your crop and location.}

#### **{Resistance Management:**

<b>GROUP</b>	<b>32</b>	<b>INSECTICIDE</b>
--------------	-----------	--------------------

VST-006340 LC contains the biological peptide GS-omega/kappa-Hctx-Hv1a, which has a novel mode of action. It is classified as a Group 32 Insecticide and is not known to be cross-resistant to any other class of insecticide. Repeated use of any mode of action, however, has the potential for pests to develop resistance. To delay development of insecticide resistance, the following practices are recommended:

- Carefully follow the specific guidelines within the use directions.
- Avoid using the same active ingredient or mode of action on consecutive generations of insects. Multiple applications to reduce a single generation, however, are acceptable. Treat the next generation with a different mode of action.
- Avoid using less than labeled rates of any insecticide when applied alone.
- Target the insect in early development to achieve the greatest benefit from the insecticide.
- Consult local agricultural authorities for specific IPM strategies developed for your crop(s) and location.}

#### **AERIAL DRIFT REDUCTION ADVISORY INFORMATION**

##### **General:**

Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment and weather-related factors determine the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions. Where states have more stringent regulations, they should be observed. Note: This section is advisory in nature and does not supersede the mandatory label requirements.

##### **Boom Width:**

For aerial applications, the boom width must not exceed 75% of the wingspan or 90% of the rotary blade. Use upwind swath displacement and apply only when wind speed is 3-10 mph as measured by an anemometer. Use medium or coarser spray according to ASAE 572 definition for standard

**VST-006340 LC**; EPA Reg. No. 88847-6

MASTER LABEL - version (4.0) - Amendment - DRAFT January 29, 2020

Page 21 of 27

**{Note: Text in curly brackets indicates optional text.}**

**[Note: Text in square brackets is a note to the reviewer.]**

nozzles or VMD for spinning atomizer nozzles. If application includes a no-spray zone, do not release spray at a height greater than 10 feet above the ground or crop canopy.

**Application Height:**

Do not make application at a height greater than 10 feet above the top of the largest plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

**Swath Adjustment:**

When applications are made with a crosswind, the swath will be displaced downward. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase, with increasing drift potential (higher wind, smaller drops, etc.).

**Wind:**

Drift potential is lowest between wind speeds of 2-10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given speed. Application should be avoided below 2 mph due to variable wind direction and high inversion potential. NOTE: Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

**Temperature Inversions:**

Do not apply during a temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small, suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

**Sensitive Areas:**

The pesticide should only be applied when the potential for drift to adjacent sensitive areas (e.g. residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops) is minimal (e.g. when wind is blowing away from the sensitive areas). Do not allow spray to drift from the application site and contact people, structures people occupy at any time and the associated property, parks and recreation areas, non-target crops, aquatic and wetland areas, woodlands, pastures, rangelands, or animals.



{Note: Text in curly brackets indicates optional text.}

[Note: Text in square brackets is a note to the reviewer.]

## APPLICATION RATES AND VOLUMES

For all listed crops, apply 1-2 pints of VST-006340 LC per acre for all listed pests. Best performance depends on thorough coverage. Use a minimum of 20 gallons for ground applications and 5 gallons for aerial applications. Do not spray to runoff.

## PESTS CONTROLLED BY VST-006340 LC IN A TANK MIX WITH BT

### Colorado Potato Beetle\*

\*Apply in a tank mix with the low labelled rate of a beetle active Bt, such as Bt ssp. *tenebrionis*

### Lepidopteran Larvae (caterpillars, loopers, “worms”)\*, such as:

\*Apply in a tank mix with the low labelled rate of a lepidopteran active Bt, such as Bt ssp. *kurstaki*

Alfalfa Caterpillar	Fruitworms, such as Cherry,	Peach Twig Borer
<i>Amorbia</i> spp.	Cranberry, Green, Tomato	Pickleworm
Armyworms	Grape Berry Moth	Pine Butterfly
Artichoke Plume Moth	Grape Leafroller	Redhumped Caterpillar
Azalea Caterpillar	Grapeleaf Skeletonizer	Rindworms
Bagworms	Green Cloverworm	Saddleback Caterpillar
Banana Moth	Greenstriped Mapleworm	Saddled Prominent
Bollworms	Gypsy Moth	Saltmarsh Caterpillar
Browntail Moth	Headworms	Satin Moth
Buck Moth	<i>Helicoverpa</i> spp.	Skippers, such as Banana,
Budworms, such as	<i>Heliothis</i> spp.	Essex, European
Blackheaded, Jack Pine,	Hickory Shuckworm	Southwestern Corn Borer
Spruce, Tobacco	Hornworms	Soybean Podworm
California Oakworm	Imported Cabbageworm	Spanworms, such as Bruce,
Cankerworms	Io Moth	Cranberry, Currant, Elm
Chainspotted Geometer	Leafrollers, such as Filbert,	Sunflower Moth
Codling Moth	Fruittree, Obliquebanded,	<i>Thecla basilides</i>
Coneworms	Omnivorous, Redbanded,	Tomato Pinworm
Cotton Leafperforator	Leek Moth	Tufted Apple Bud Moth
Cotton Leafworm	Loopers, such as Alfalfa,	Tussock Moths, such as
Cutworms, such as Citrus,	Hemlock, Omnivorous,	Douglas-fir, Hickory,
Roughskinned, Spotted,	Soybean	Western Pine,
Variegated	Melonworm	Whitemarked
Diamondback Moth	Navel Orangeworm	Velvetbean Caterpillar
Eastern Tent Caterpillar	Oleander Caterpillar	Walnut Caterpillar
European Corn Borer	Omnivorous Leaf-tier	Webworms, such as
European Grapevine Moth	Orange Tortrix	Cabbage, Fall, Filbert,
European Pepper Moth	Orangedog	Mimosa
Forest Tent Caterpillar	Orangestriped Oakworm	Winter Moth
	Oriental Fruit Moth	

{Note: Text in curly brackets indicates optional text.}

[Note: Text in square brackets is a note to the reviewer.]

## USE VST-006340 LC IN A TANK MIX WITH BT ON THE FOLLOWING CROPS

### Vegetable and Cole Crops:

#### **Vegetable, Root and Tuber (Group 1)**, such as:

Beet, Carrot, Horseradish, Potato, Radish, Sugar Beet, Sweet Potato, Turnip, Turnip Greens

#### **Vegetable, Bulb (Group 3)**, such as:

Garlic, Leek, Onion, Shallot

#### **Vegetable, Leafy Except Brassica (Group 4)**, such as:

Celery, Endive, Lettuce, Parsley, Spinach

#### **Vegetable, Brassica Leafy (Group 5)**, such as:

Broccoli, Brussels Sprouts, Cabbage, Cauliflower, Collard, Kohlrabi

#### **Vegetable, Legume (Group 6)**, such as:

Bean, Lentil, Pea, Soybean

#### **Vegetable, Fruiting (Group 8)**, such as:

Eggplant, Pepper, Tomato

#### **Vegetable, Cucurbit (Group 9)**, such as:

Cucumber, Melon, Pumpkin, Squash, Watermelon

#### **Other Vegetables**

Artichoke, Asparagus, Malagna, Watercress

### Field Crops, such as:

Alfalfa (Hay Seed), Canola, Corn (Field, Sweet, Popcorn), Cotton, Forage Crops, Hay, Hemp, Hops, Jojoba, Peanuts, Rapeseed, Rice, Safflower, Small Grains, Sorghum, Sunflower, Tobacco

### Herbs, Mints, Spices, such as:

Basil, Dill, Oregano, Peppermint, Thyme

### Fruits, Nuts

#### **Small fruits and berries**, such as:

Blackberry, Blueberry, Cranberry, Currant, Grape, Raspberry, Strawberry

#### **Pome and Stone Fruits**, such as:

Apple, Apricot, Cherry, Nectarine, Peach, Pear, Plum, Prune, Quince

#### **Nut Trees**, such as:

Almond, Chestnut, Filbert, Pecan, Pistachio, Walnut

**Avocado, Banana, Citrus, Kiwi, Persimmon, Pineapple, Pomegranate, Tropical Fruits**

### Bedding Plants, Container Plants, Flowers, Ornamentals

#### **Greenhouse and Outdoor Nursery Crops**, such as:

Brassicas, Flowers, Fruiting groups, Hemp, Herbs and Spices, Leafy Vegetables, Ornamental plants, Tobacco, Vegetable Groups

### Forest, Ornamentals, Ornamental Fruit, Shade Trees, Shrubs, Sugar Maple Trees, Nut and Citrus Trees

{Note: Text in curly brackets indicates optional text.}

[Note: Text in square brackets is a note to the reviewer.]

## STORAGE AND DISPOSAL

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

**Pesticide Storage:** Store unopened container at room temperature. Do not store product in an open/unsealed container. Discard any remaining product after use. Do not allow product to freeze.

**Pesticide Disposal:** Discard any remaining product after use on site, or send to a waste disposal facility or pesticide disposal program.

### Container Handling:

*{For 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  $\frac{1}{4}$  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.

*{For 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  $\frac{1}{4}$  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.

## 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

**{Note: Text in curly brackets indicates optional text.}**

**[Note: Text in square brackets is a note to the reviewer.]**

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.**

{Note: Text in curly brackets indicates optional text.}

[Note: Text in square brackets is a note to the reviewer.]

[This label reflects the unit package labeling affixed to the container.]

# VST-006340 LC

## Biological Insecticide

### Active Ingredient

GS-omega/kappa-Hxtx-Hv1a..... 2.0%

**Other Ingredients:** .....98.0%

**Total:**..... 100.0%

Contains 0.17 lb active ingredient per gallon

See attached booklet for additional Precautionary Statements {, and} Directions for Use{, and {Terms and Conditions of Use}{Warranty Disclaimer}{Inherent Risks of Use}{Limitation of Remedies}}

### KEEP OUT OF REACH OF CHILDREN CAUTION{/PRECAUCION

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)}

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 {and +1-352-323-3500 for International} for emergency medical treatment information and chemical emergency assistance.	

**EPA Reg. No.:** 88847-6  
**EPA Est. No.:** XXXXX-XX-XXX  
{Made in Italy}{Made in USA}

**Net Contents:** XX  
**{Batch}{Lot} No:** XXXX

{Produced for:}  
{Manufactured {for}{by}:} Vestaron Corporation  
600 Park Offices Drive, Suite 117  
Research Triangle Park, NC 27709  
{vestaron.com}

{Master Label} {Version No.: XXX}

{Note: Text in curly brackets indicates optional text.}

[Note: Text in square brackets is a note to the reviewer.]

## PRECAUTIONARY STATEMENTS

**Hazards to Humans and Domestic Animals - CAUTION.** 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.

### STORAGE AND DISPOSAL

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

**Pesticide Storage:** Store unopened container at room temperature. Do not store product in an open/unsealed container. Discard any remaining product after use. Do not allow product to freeze.

**Pesticide Disposal:** Discard any remaining product after use on site, or send to a waste disposal facility or pesticide disposal program.

#### Container Handling:

*{For containers less than or equal to 5 gallons:}* Non-refillable 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  $\frac{1}{4}$  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.

*{For containers greater than 5 gallons:}* Non-refillable 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  $\frac{1}{4}$  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.

{Note: Text in curly brackets indicates optional text.}

[Note: Text in square brackets is a note to the reviewer.]

## Optional Label Claims for All Labels

{For greenhouse use}  
{Not for residential use}  
{Requires dilution with water prior to application - see booklet for instructions}  
{Spear® is a registered trademark of Vestaron Corporation}  
{Vestaron name and logo are registered trademarks of Vestaron Corporation}  
{Biological Insecticide}  
{Biological Pesticide}  
{Biological Miticide}  
{Biological Insecticide and Miticide}  
{Biological Peptide Insecticide}  
{Biological Peptide Pesticide}  
{Biological Peptide Miticide}  
{Biological Peptide Insecticide and Miticide}  
{Bioinsecticide}  
{Biopesticide}  
{{Novel} {Unique} class of pesticides}  
{Known mode of action}  
{{Novel} {Unique} mode of action}  
{No cross-resistance to existing products}  
{No cross-resistance to Spinosad}  
{Peptide-based pesticide}  
{Insecticidal peptide}  
{Bioinsecticidal peptide}  
{For use with ornamentals}  
{Liquid concentrate - easy to mix}  
{No noxious odor}  
{Storable at room temperature}  
{Zero-day pre-harvest interval}  
{For pre-harvest use}  
{Can be sprayed just prior to harvest}  
{Compatible with many commonly used surfactants}  
{Can be applied during flowering}  
{Allowed for use over open bloom}  
{Compatible with integrated pest management practices}  
{Manufactured by fermentation}  
{Contains no live organisms}  
{Contains no organisms}  
{Effective in low-volume sprays}