

2023-3640  
2024-03-26

## VELIFER®

For suppression of aphids, twospotted spider mites, thrips and whiteflies in greenhouse ornamentals and greenhouse vegetables

COMMERCIAL

**ACTIVE INGREDIENT:** *Beauveria bassiana* PPRI 5339 not less than  $8.0 \times 10^9$  viable spores/mL

LIVE ORGANISM

Oil Dispersion Biological Insecticide/Miticide

**REGISTRATION NUMBER: 32993**

**PEST CONTROL PRODUCTS ACT**

**IN CASE OF EMERGENCY ENDANGERING LIFE OR PROPERTY INVOLVING THIS  
PRODUCT, CALL DAY OR NIGHT  
1-800-454-2673**

**POTENTIAL SENSITIZER**

**READ THE LABEL BEFORE USING**

**KEEP OUT OF REACH OF CHILDREN**

**NET CONTENTS:** 100 mL – 1000 L

**DATE OF MANUFACTURE:**

BASF Canada Inc  
5025 Creekbank Road  
Building A, 2<sup>nd</sup> Floor  
Mississauga, Ontario L4W 0B6

1-877-371-2273

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## **PRECAUTIONS**

KEEP OUT OF REACH OF CHILDREN. May cause sensitization. Avoid contact with eyes, skin and clothing. Avoid inhaling/breathing mist. Wear waterproof gloves, long-sleeved shirt, long pants, socks with shoes and use a NIOSH-approved dust-mist filtering respirator when handling the product and during all clean-up and repair activities. Remove contaminated clothing immediately after handling this product. Wash the outside of gloves before removing. Remove clothing/PPE immediately if pesticide gets inside. Wash PPE before re-use. Wash thoroughly with soap and water after handling.

Can be applied up to and including the day of harvest. The pre-harvest interval (PHI) is 0 days.

Restricted Entry Interval: DO NOT re-enter or allow re-entry into treated areas for 4 hours or until the sprays have dried unless wearing appropriate personal protective equipment, including a NIOSH- approved dust-mist filtering respirator, waterproof gloves, long-sleeved shirt, long pants, and socks with shoes.

## **ENVIRONMENTAL PRECAUTIONS**

The potential effects of this product on some non-target beneficial insects and pollinators, that may be used in greenhouse Integrated Pest Management Programs (IPM), are not known. May be harmful to beneficial insects. Avoid direct contact with beneficial insects when using spray applications. This product may be toxic to bees exposed to direct treatment or drift. DO NOT apply this product while bees are actively foraging.

## **FIRST AID**

### **If swallowed:**

Call a poison control centre or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give anything by mouth to an unconscious person.

### **If on skin or clothing:**

Take off contaminated clothing. Rinse skin immediately with plenty of water for 15–20 minutes. Call a poison control centre or doctor for treatment advice.

### **If inhaled:**

Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control centre or doctor for further treatment advice.

### **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 centre or doctor for treatment advice.

Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

## **TOXICOLOGICAL INFORMATION:**

Treat symptomatically.

## **STORAGE**

Store in a cool, dry place, out of direct sunlight, and away from heat sources. This product should be used within 18 months of the date of manufacture when stored at 4 °C. To prevent contamination, store this product away from food or feed

## **DISPOSAL**

DO NOT reuse this container for any other purpose. This is a recyclable container, and is to be disposed of at a container collection site. Contact your local distributor/dealer or municipality for the location of the nearest collection site. Before taking the container to the collection site:

1. Triple- or pressure-rinse the empty container. Add the rinsings to the spray mixture in the tank.
2. Make the empty, rinsed container unsuitable for further use.

If there is no container collection site in your area, dispose of the container in accordance with provincial requirements.

For information on disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Contact the manufacturer and the provincial regulatory agency in case of a spill, and for clean-up of spills.

## **NOTICE TO USER**

This pest control product is to be used only in accordance with the directions on the label. It is an offence under the *Pest Control Products Act* to use this product in a way that is inconsistent with the directions on the label.

## **GENERAL INFORMATION**

VELIFER contains live spores of the naturally occurring fungus, *Beauveria bassiana* strain PPRI 5339. VELIFER is a biological insecticide/miticide used for suppression of aphids, twospotted spider mites, thrips, and whiteflies in greenhouse ornamentals and greenhouse vegetables.

## **MODE OF ACTION**

Once the spores of the fungus *Beauveria bassiana* come into contact with the cuticle of the target pest, they germinate secreting enzymes which are specific in their ability to weaken the pest cuticle. This leads to water loss and death of the pest. The fungus then invades the pest directly through the cuticle. Once inside the body of the pest, the fungus continues to grow, feeding on the internal organs. The fungus does not have to be consumed but merely has to be positioned where the pest will come into contact with the spores.

## **DIRECTIONS FOR USE**

- As this product is not registered for the control of pests in aquatic systems, DO NOT use to control aquatic pests.
- DO NOT contaminate irrigation or drinking water supplies or aquatic habitats by cleaning of equipment or disposal of wastes.
- DO NOT apply by air.
- DO NOT allow effluent or runoff from greenhouses containing this product to enter lakes, streams, ponds or other waters.

VELIFER is applied as a foliar spray for applications in greenhouse ornamentals and greenhouse vegetables. For best results, begin VELIFER applications when target pests are first observed but before injury occurs. VELIFER is a contact insecticide/miticide and must be applied in an application volume sufficient for uniform coverage, but not to the point of runoff. VELIFER can be used in an integrated pest management (IPM) program with conventional insecticide or miticides if pest pressure is severe. Use of this product in an IPM program must take into consideration that fungicides may kill the spores.

Apply VELIFER at concentrations of 450-900 mL / 1000 L of water at 3 – 10-day intervals in an application volume sufficient for uniform coverage, but not to the point of runoff. Within these ranges, use higher concentrations and shorter application intervals when target pest population densities are high.

Apply VELIFER to a small area (8–12 plants) and evaluate for 3–5 days before attempting a large-scale spray to make certain that no phytotoxicity occurs.

### **MIXING INSTRUCTIONS**

SHAKE WELL BEFORE USE.

DO NOT MIX WITH FUNGICIDE.

- Clean spray equipment thoroughly before and after applying this product.
- Remove scale, pesticide residues, and other foreign matter from the chemical supply tank and entire injector system. Flush with clean water. Failure to provide a clean tank may reduce product efficacy.
- Calibrate equipment prior to use.
- Fill spray tank  $\frac{1}{2}$  to  $\frac{3}{4}$  full of water and begin agitation.
- Make proper dilutions based on a treatment concentration of 450-900 mL VELIFER per total volume of 1000L.
- Maintain agitation throughout application.

### **IMPORTANT POINTS TO REMEMBER**

- Use prepared mixtures within 12 hours.
- Avoid exposure to direct sunlight. Recommend applying in the afternoon or evening.
- Overhead irrigation within one day of treatment could wash spores off and reduce efficacy.

### **TANK MIXES**

This product may be tank mixed with a fertilizer, a supplement, or with registered pest control products, whose labels also allow tank mixing, provided the entirety of both labels, including Directions for Use, Precautions, Restrictions, Environmental Precautions, and Spray Buffer Zones are followed for each product. In cases where these requirements differ between the tank mix partner labels, the most restrictive label must be followed. Do not tank mix products containing the same active ingredient unless specifically listed on this label. DO NOT MIX WITH FUNGICIDES.

In some cases, tank mixing pest control products can result in reduced pesticide efficacy or increased host crop injury. The user should contact BASF Canada at 1-877-371-2273 for information before applying any tank mix that is not specifically recommended on this label.

### **Tank Mix Compatibility Determination**

To determine compatibility, mix all components of the finished spray in proportionate quantities in a small jar. Add components to the test jar in the following order: wettable powders and water dispersible granules, liquid flowables and suspensions, emulsifiable concentrate formulations, and solutions. If the mixture does not ball-up or form flakes, sludge, jelly, oily films or layers, or other precipitates within 2 hours after mixing and can easily be resuspended with agitation, then the tested spray-mix is compatible. Always follow the most restrictive label regarding any precautions when tank mixing.

## **PLANT SAFETY**

VELIFER has been applied to a variety of common ornamental and vegetable plants without observed plant injury. Not all species, varieties and cultivars have been tested for tolerance to VELIFER. Always test a small group of representative plants for tolerance to VELIFER under local growing conditions and prior to large-scale use. Apply VELIFER to a small area (8–12 plants) and evaluate for 3–5 days before attempting a large-scale spray to make certain that no phytotoxicity occurs.

No unacceptable injury has occurred to the following greenhouse plants when treated with VELIFER according to label instructions.

Bell Pepper	Chrysanthemum (Belgian and Daisy)
Cucumber	Gerbera
Eggplant	Lantana
Lima Bean	Marigold (African and French)
Romaine Lettuce	Poinsettia Tomato

- DO NOT apply to plants exhibiting symptoms of stress or injury, such as stunting, wilting, leaf burn or drop, stunting, or abnormal growth.