



We create chemistry

SPECIMEN

# Velifer™

## Fungal Contact Insecticide/Miticide

Oil Dispersion Spore Concentrate of *Beauveria bassiana* strain PPRI 5339

For biological control of the labeled piercing and sucking insect or mite pests in enclosed commercial greenhouses on ornamentals, fruits, vegetables, herbs and spices, including vegetable, fruit, herb, and spice transplants for the consumer market

**Active Ingredient:**

<i>Beauveria bassiana</i> strain PPRI 5339*	8.00%
<b>Other Ingredients:</b>	92.00%
<b>Total:</b>	100.00%

\*Velifer contains a minimum of 8x10<sup>9</sup> viable spores per mL

EPA Reg. No. 71840-22

EPA Est. No. 67064-ZAF-001

**KEEP OUT OF REACH OF CHILDREN  
CAUTION/PRECAUCIÓN**

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 for complete **First Aid, Precautionary Statements, Directions For Use, and Conditions of Sale and Warranty.**

You may contact BASF Corporation for emergency medical treatment information at 1-800-832-HELP (4357).

**Net Contents:**

**Batch Code:** [Located on physical container]

Product of South Africa.

Manufactured for:  
BASF Corporation  
26 Davis Drive, Research Triangle Park, NC 27709

## 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.

## 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 1-800-832-HELP (4357) for emergency medical treatment information.

## Precautionary Statements

### Hazards to Humans and Domestic Animals

**CAUTION:** Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.

### Personal Protective Equipment (PPE)

#### Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Shoes plus socks
- Protective eyewear

Mixers/loaders and applicators must wear a minimum of a NIOSH-approved particulate filtering facepiece respirator with any R or P filter; OR a NIOSH-approved elastomeric particulate respirator with any R or P filter; OR a NIOSH-approved powered air-purifying respirator with an HE filter. Repeated exposures to high concentrations of microbial proteins can cause allergic sensitization.

Follow the manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. 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. As soon as possible, wash thoroughly and change into clean clothing.

### Environmental Hazards

**DO NOT** contaminate water when disposing of equipment washwater or rinsate.

This product is potentially pathogenic to beneficial insects and honey bees. **DO NOT** apply while bees or other pollinating insects are foraging the treatment area.

## Directions For Use

It is a violation of federal law to use this product in a manner inconsistent with its labeling. **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. For any requirements specific to your State or Tribe, consult the State or Tribal agency responsible for pesticide regulation.

## 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 (REI). The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

**DO NOT** enter or allow worker entry into treated areas during the restricted-entry interval of **12 hours**.

For early entry into 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, wear:

- Coveralls
- Barrier laminate, nitrile rubber, neoprene rubber, or **Viton**<sup>®</sup> gloves
- Shoes plus socks
- Protective eyewear

## In Case of Emergency

In case of large-scale spill of this product, call:

- CHEMTREC 1-800-424-9300
- BASF Corporation 1-800-832-HELP (4357)

In case of medical emergency regarding this product, call:

- Your local doctor for immediate treatment
- Your local poison control center (hospital)
- BASF Corporation 1-800-832-HELP (4357)

## Product Information

**Velifer**<sup>™</sup> is a broad spectrum biological insecticide/miticide used for biological control of aphids,

mealybugs, mites, thrips, and whiteflies on ornamentals, fruits, vegetables, herbs, and spices grown in enclosed commercial greenhouses. This includes commercial production of fruit, vegetable, herb, and spice transplants for the consumer market.

**Velifer™** is an oil dispersion spore concentrate of *Beauveria bassiana* strain PPRI 5339 and is a contact insecticide/miticide. For optimal results, apply **Velifer** when the target pests are first observed, and follow instructions and precautions on this label. To maximize activity against target pests, apply **Velifer** on a regularly scheduled interval as part of an integrated pest management (IPM) program.

Use Sites:

- Enclosed commercial greenhouses

**Velifer** is formulated as a spore suspension. Following application, the spores in **Velifer** make contact with the pest, germinate and begin secreting enzymes that degrade the cuticle, allowing for fungal entry into the body of the pest. The fungus colonizes the pest and kills it. The pest does not need to consume the spores; physical contact is the main mode of infection.

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### Restrictions and Limitations

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- **Velifer** is for enclosed commercial greenhouse use only.
- **DO NOT** use thermal application equipment, such as heated foggers.

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### Mixing Instructions

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- Clean spray equipment thoroughly before and after applying this product.
- Remove scale, pesticide residues, and other foreign matter from the spray tank and entire injector system. Flush with clean water. Failure to provide a clean spray tank may reduce product efficacy.
- Calibrate equipment prior to use.
- Fill spray tank ½ to ¾ full of water and begin agitation.
- Determine the treatment rates as indicated in the **Velifer Pest Use Directions** table and make proper dilutions.
- In a smaller container, add **Velifer** to ½ gallon of water and mix thoroughly to create a slurry. Prepare only the amount of mixture needed for use within 12 hours of preparation.
- Allow product to hydrate in the slurry for 20 minutes, but no more than 2 hours.
- Add hydrated slurry to the spray tank and add the rest of the water.
- Maintain agitation throughout application.

The use of additives or spray adjuvants is not required when making an application of **Velifer**. Always test proposed tank mixes on a small group of representative plants prior to large-scale use.

When tank mixing **Velifer** with any other product, observe the most restrictive of the labelling limitations and precautions of all products used in mixtures.

**Velifer** is physically and biologically compatible with many other biological control products, insecticides, and fungicides. For compatibility information, consult your BASF representative.

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### Application Instructions and Pests Controlled

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**Velifer** can be applied as a foliar spray to ornamentals, fruits, vegetables, herbs, and spices grown in enclosed commercial greenhouses. This includes commercial production of fruit, vegetable, herb, and spice transplants for the consumer market.

Apply **Velifer** when target pests are first observed. **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. If necessary, use of a compatible spray adjuvant can improve spray coverage. **Velifer** may be used in an IPM program that includes other tools such as conventional insecticides, cultural practices, and mechanical controls. Include regular scouting as part of your IPM program and to ensure that applications can be made when pest pressure is low to moderate.

Shake container well before use.

#### Foliar Application Instructions

- Use prepared slurries within 12 hours.
- Avoid exposure of prepared slurries to direct sunlight.
- Recommended application timing is afternoon or evening.
- Apply **Velifer** to leaf wetness without runoff.
- Overhead irrigation within one day of treatment may wash spores off and reduce efficacy.

## Velifer™ Pest Use Directions

Use Sites	Pests	Product Use Rate
<b>Enclosed Commercial Greenhouses:</b> Ornamentals, Fruits, Vegetables, Herbs and Spices, including Commercial Production of Fruit, Vegetable, Herb, and Spice Transplants for the Consumer Market	Aphids Mealybugs Mites Thrips Whiteflies	3 – 13 fl oz <b>Velifer</b> /100 gal water
<b>Application Information:</b> <ul style="list-style-type: none"> <li>For best performance, apply at first sign of pest infestation.</li> <li>Apply <b>Velifer</b> with sufficient water volume for proper coverage for optimal performance.</li> <li>Make applications on 3- to 14-day intervals depending on pest pressure. Use the shorter interval when pest pressure is higher.</li> <li>The Pre-Harvest Interval (PHI) for <b>Velifer</b> is 0 days.</li> </ul>		

### Plant Tolerance

**Velifer** may be applied to ornamentals (annuals, perennials, woody trees and shrubs), fruits, vegetables, herbs, and spices. Not all species, varieties, and cultivars can be tested for tolerance to **Velifer**, possible tank mix combinations with **Velifer**, pesticide treatments preceding or following those with **Velifer**, and combinations of **Velifer** with surfactants or adjuvants. Because many cultivars within a plant species vary in tolerance to chemical applications and growing conditions, the grower must recognize these differences and test the product accordingly. At a minimum, always test a small group of representative plants for tolerance to **Velifer** under local growing conditions and prior to large-scale use.

Grower assumes responsibility for testing species suitability under local growing conditions by treating a small number of plants at the specified rate. At a minimum, this should include evaluating treated plants for several weeks following treatment for possible injury or other effects.

## CHEMIGATION

### Overall Instructions for All Chemigation Types

Applications made through irrigation systems must deliver rates of **Velifer** consistent with the rates specified in the **Velifer Pest Use Directions** table.

See the section on **Mixing Instructions** for directions on preparing liquid solutions.

Apply this product only through sprinkler or drip irrigation systems, including moving track sprayers. **DO NOT** apply this product through any other irrigation systems.

Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water. If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.

**DO NOT** connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place.

A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

For best results, time **Velifer** chemigation with the end of the irrigation water application. Time injection to apply **Velifer** in the minimum irrigation volume necessary to achieve uniform coverage immediately prior to shutting off irrigation water. Excessive irrigation during and after chemigation will wash active ingredient (spores) off foliage, reducing effectiveness. Maintain good agitation during the entire application period. Allow sufficient time for pesticide to be flushed through all lines and all nozzles before turning off irrigation water.

### Specific Instructions for Velifer Applications through Sprinkler Chemigation

- The system must contain a functional check valve, vacuum-relief valve, and low-pressure drain appropriately located on the irrigation pipeline to prevent water-source contamination from backflow.
- The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

- The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- The irrigation line or water pump must include a functional pressure switch that will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
- Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

**Specific Instructions for Velifer™ Applications Through Public Water Systems**

- Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.
- Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the flow outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.
- The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- The pesticide injection pipeline must contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.
- Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

**STORAGE AND DISPOSAL**

**DO NOT** contaminate water, food, or feed by storage or disposal.

**Pesticide Storage**

Store this product under refrigerated conditions (approximately 39.2°F (4°C)), in a dry area, out of direct sunlight, and away from heat sources. Keep container closed when not in use. **DO NOT** store near food or feed.

**Pesticide Disposal**

To avoid wastes, use all material in this container by application according to label directions. If wastes cannot be avoided, offer remaining product to a waste disposal facility or pesticide disposal program (often such programs are run by state or local governments or by industry).

**Container Handling**

**Nonrefillable Container. DO NOT reuse or refill this container.** Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 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. Do not burn, unless allowed by state and local ordinances. If burned, stay out of smoke.

**Container is not safe for food, feed or drinking water.**

## Conditions of Sale and Warranty

The **Directions For Use** of this product reflect the opinion of experts based on field use and tests. The directions are believed to be reliable and must be followed carefully. However, it is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as the presence of other materials, or use of the product in a manner inconsistent with its labeling, all of which are beyond the control of BASF CORPORATION ("BASF") or the Seller. To the extent consistent with applicable law, all such risks shall be assumed by the Buyer.

BASF warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the **Directions For Use**, subject to the inherent risks, referred to above.

**TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BASF MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR MERCHANTABILITY OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.**

**TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BUYER'S EXCLUSIVE REMEDY AND BASF'S EXCLUSIVE LIABILITY, WHETHER IN CONTRACT, TORT, NEGLIGENCE, STRICT LIABILITY, OR OTHERWISE, SHALL BE LIMITED TO REPAYMENT OF THE PURCHASE PRICE OF THIS PRODUCT.**

**TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BASF AND THE SELLER DISCLAIM ANY LIABILITY FOR CONSEQUENTIAL, EXEMPLARY, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT.**

BASF and the Seller offer this product, and the Buyer and User accept it, subject to the foregoing **Conditions of Sale and Warranty** that may be varied only by agreement in writing signed by a duly authorized representative of BASF.

*Velifer is a trademark of BASF.*

*Viton is a registered trademark of DuPont.*

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