

BIFENAZATE

GROUP

20D

ACARICIDE



FLORAMITE®



ORNAMENTAL MITICIDE

ACTIVE INGREDIENT:

Bifenazate: Hydrazine carboxylic acid, 2-(4-methoxy-[1,1'-biphenyl]-3-yl) 1-methylethyl ester... 22.6%

OTHER INGREDIENTS 77.4%

TOTAL 100.0%

Contains 2 lbs. bifenazate per gallon.

EPA Reg. No. 70506-537-101563

% BY WT.

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 booklet for additional Precautionary Statements, First Aid and complete Directions for Use.

2917481-A 240911AV1

MANUFACTURED FOR
Environmental Science U.S., LLC
5000 CentreGreen Way, Suite 400
Cary, NC 27513

FIRST AID	
IF SWALLOWED:	• Call poison control center 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 the poison control center or doctor. • Do not give anything by mouth to an unconscious person.
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. FOR 24 HOUR MEDICAL EMERGENCY ASSISTANCE CALL 1-800-424-9300.	

FOR 24-HOUR CHEMICAL EMERGENCY (Spill, leaks, fire, exposure or accident) CALL CHEMTREC: 1-800-424-9300 or +1-703-527-3887.

For Product Use Information Call 1-800-331-2867

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION Harmful if swallowed. Prolonged or frequently repeated skin contact may cause allergic reaction in some individuals.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and Other Handlers Must Wear:

- Long-sleeved shirt and long pants; and
- Shoes plus socks.

Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

USER SAFETY RECOMMENDATIONS

Users should:

- Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then, wash thoroughly and change into clean clothing.
- Remove PPE immediately after handling this product. As soon as possible, wash thoroughly and change clothing.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to birds, estuarine/marine invertebrates, and fish. 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 washwaters or rinsate.

This product is moderately toxic to bees and other pollinating insects exposed to direct treatment or to residues in/on blooming crops or weeds. Protect pollinating insects by following label directions intended to minimize drift and to reduce pesticide risk to these organisms. Do not apply this product while bees are foraging the treatment area.

PHYSICAL OR CHEMICAL HAZARDS

Do not use or store near heat or open flame.

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 through any type of irrigation system. 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 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), notification to workers and restricted-entry intervals. 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 12 hours**.

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
- Shoes plus socks
- Waterproof gloves

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries or greenhouses.

Keep unprotected persons out of treated areas until sprays have dried.

USE INFORMATION

FLORAMITE® is a selective miticide for the control of a variety of mite pests on the following plants:

- All ornamental plants, including bedding plants, flowering plants, foliage plants, ornamental bulb crops, perennials, trees and shrubs.
- All non-bearing fruit trees which will not bear fruit for a minimum of 12 months.
- Greenhouse tomatoes only. Do not apply this product to tomatoes that are not grown in greenhouses.

Except for applications to tomatoes, which are restricted to use in greenhouses only, **FLORAMITE** can be used in the following areas where these plants are grown and/or maintained in containers or in the ground:

- Greenhouses and shadehouses
- Nurseries, including Christmas tree/conifer plantations
- Landscapes
- Interiorscapes
- Residences
- Public, commercial, industrial and institutional areas
- Recreational sites, including campgrounds, golf courses, parks and athletic fields
- Rights of way and other easements

When used as directed and applied to the foliage, **FLORAMITE** provides knock-down through contact activity, and long residual control. Due to its carbazate chemistry, mode of action and selective nature, **FLORAMITE** is relatively inactive against beneficial/predacious mites and insects, and **FLORAMITE** therefore is compatible with IPM and resistance management programs.

FLORAMITE is not systemic in action; therefore complete coverage of both upper and lower leaf surfaces and of fruit is necessary for effective control.

MIXING INSTRUCTIONS

Fill the spray-tank with 1/2 the desired amount of water. Then add the required amount of **FLORAMITE** with agitation running to fully disperse the product. Then fill the tank with the remaining amount of required water.

Like many pesticides, **FLORAMITE** stability can be impacted by high pH and high temperature. Maintain spray-mixtures containing **FLORAMITE** within a range of pH 5.5 to 6.5.

Compatibility: To obtain broad-spectrum insect control, **FLORAMITE** can be tank-mixed with other insecticide products. However, due to variations in water quality, e.g., hardness and pH, it is required that users conduct small-scale trials under local conditions to ensure compatibility prior to any large-scale use.

Restrictions: Tank-mixtures are only permitted in States where all of the pesticide products used as tank-mix partners are registered. It is the pesticide user's responsibility to ensure that all products used in the tank-mix are registered for the intended use. Users must follow the most restrictive of all of the labeled use directions, precautionary language, and use limitations for the tank-mix partners.

MANDATORY SPRAY DRIFT MANAGEMENT

Ground Boom Applications:

- Apply with the nozzle height recommended by the manufacturer, but no more than 4 feet above the ground or crop canopy.
- Applicators are required to use Fine or coarser droplet size (ANSI/ASAE S572.3).
- Do not apply when wind speeds exceed 10 miles per hour at the application site.
- Do not apply during temperature inversions.

SPRAY DRIFT ADVISORIES

THE APPLICATOR IS RESPONSIBLE FOR AVOIDING OFF-SITE SPRAY DRIFT. BE AWARE OF NEARBY NON-TARGET SITES AND ENVIRONMENTAL CONDITIONS.

IMPORTANCE OF DROPLET SIZE

An effective way to reduce spray drift is to apply large droplets. Use the largest droplets that provide target pest control. While applying larger droplets will reduce spray drift, the potential for drift will be greater if applications are made improperly or under unfavorable environmental conditions.

Controlling Droplet Size – Ground Boom

- **Volume** - Increasing the spray volume so that larger droplets are produced will reduce spray drift. Use the highest practical spray volume for the application. If a greater spray volume is needed, consider using a nozzle with a higher flow rate.
- **Pressure** - Use the lowest spray pressure recommended for the nozzle to produce the target spray volume and droplet size.
- **Spray Nozzle** - Use a spray nozzle that is designed for the intended application. Consider using nozzles designed to reduce drift.

BOOM HEIGHT – Ground Boom

Use the lowest boom height that is compatible with the spray nozzles that will provide uniform coverage. For ground equipment, the boom should remain level with the crop and have minimal bounce.

SHIELDED SPRAYERS

Shielding the boom or individual nozzles can reduce spray drift. Consider using shielded sprayers. Verify that the shields are not interfering with the uniform deposition of the spray on the target area.

TEMPERATURE AND HUMIDITY

When making applications in hot and dry conditions, use larger droplets to reduce effects of evaporation.

TEMPERATURE INVERSIONS

Drift potential is high during a temperature inversion. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. The presence of an inversion can be indicated by ground fog or 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. Avoid applications during temperature inversions.

WIND

Drift potential generally increases with wind speed. AVOID APPLICATIONS DURING GUSTY WIND CONDITIONS. Applicators need to be familiar with local wind patterns and terrain that could affect spray drift.

USE RATES AND APPLICATION INFORMATION

Mix 4 - 8 fl. oz. **FLORAMITE** in 100 gal. of water (1/4 - 1/2 tsp./gal.) and apply as a full coverage spray to the foliage using a volume of 1 - 4 qts. of final solution per 100 sq. ft. (or 100 to 400 gal. per acre). Actual spray volume will vary depending on the size of plants being treated. Application should be made as soon as mites appear and will provide residual control for up to 28 days. Use 4 fl. oz. per 100 gal. of water for preventative applications or where mite infestations are light. Up to 8 fl. oz. per 100 gal. of water may be required for heavy infestations or for extended residual control. For optimum coverage of ornamentals with hard-to-wet foliage, an adjuvant can be added to the **FLORAMITE**/water solution. Those found to be effective are Silwet 77® or Sylgard 309® at 4 oz. per 100 gallons of water. Users should test safety and compatibility of all adjuvants prior to commercial use. Do not use adjuvants in solutions applied to greenhouse tomatoes.

When used as directed, **FLORAMITE** is effective for the control of a variety of mite species, especially spider mites, red mites and grass mites. NOTE: It is not effective against rust mites, broad mites and flat mites. **FLORAMITE** is primarily active on the motile stages of mites, but also has ovicidal activity against spider mites (*Tetranychus* species). Common mite species controlled by **FLORAMITE** include:

COMMON NAME	SCIENTIFIC NAME
Two spotted spider mite	<i>Tetranychus urticae</i> (Koch)
Pacific mite	<i>Tetranychus pacificus</i> (McGregor)
Strawberry mite	<i>Tetranychus turkestanii</i>
European red mite	<i>Panonychus ulmi</i> (Koch)
Citrus red mite	<i>Panonychus citri</i> (McGregor)
Clover mite	<i>Bryobia praetiosa</i> (Koch)
Southern red mite	<i>Oligonychus ilicis</i> (McGregor)
Spruce spider mite	<i>Oligonychus ununguis</i> (Jacobi)
Bamboo spider mite	<i>Schizotetranychus celarius</i> (Banks)
Lewis mite	<i>Eotetranychus lewisi</i>

RESTRICTIONS:

For greenhouse tomatoes, do not apply within 3 days of harvest.

Do not make more than two (2) applications of **FLORAMITE** per crop per year.

Do not apply more than 32 fl. oz. of this product per acre per year.

Apply **FLORAMITE** by the following types of ground equipment: compressed air sprayers, hydraulic sprayers, ground boom sprayers, air blast sprayers, hose-end sprayers. Do not apply by aerial application.

STRATEGIES FOR RESISTANCE MANAGEMENT

FLORAMITE, when used as directed, combines high activity on mites with selectivity to beneficial/predacious mites and insects. In addition, the carbazate chemistry of **FLORAMITE** provides a means of controlling mites which have developed resistance to more commonly used products. These properties can result in fewer miticide/insecticide applications as well as general reduction in the problems caused by resistance.

FLORAMITE has demonstrated no cross-resistance with other commercial miticides. **FLORAMITE** contains an active ingredient classified as a Group 20D acaricide. **FLORAMITE** is suitable to be used as a rotational partner with other miticides.

To reduce selection pressure which can lead to the development of resistance, **FLORAMITE** should be used in moderation. To help achieve this, the following strategies are recommended:

- Incorporate IPM techniques into your insect control program.
- Ensure thorough spray coverage to all foliage.
- Scout regularly and apply **FLORAMITE** as soon as infestations are observed. Do not wait until large populations have established.
- Always apply **FLORAMITE** at the required rates and according to label information.
- Apply only one application of **FLORAMITE** before rotating to products of an alternative chemical class.
- Use at least two alternative products between treatments of **FLORAMITE**.
- Use **FLORAMITE** in conjunction with biological control organisms available for mite control.

FLORAMITE when used as directed, does not adversely affect populations of beneficial/predacious mites and insects, including:

Predatory Mites	Beneficial Insects
<i>Phytoseiulus persimilis</i>	<i>Chrysoperla carnea</i> (common green lacewing)
<i>Neoseiulus</i> spp.	<i>Aphidius colemani</i>
<i>Typhlodromus</i> spp.	<i>Aphidoletes aphidomyza</i>
<i>Amblyseius</i> spp.	<i>Orius insidiosus</i> (insidious pirate bug)
<i>Zetzellia mali</i>	<i>Coccinella septempunctata</i>
<i>Iphiseius degenerans</i>	<i>Hippodamia convergens</i>
	<i>Stethorus punctum</i>
	<i>Diglyphus isaea</i>
	<i>Eretmocerus eremicus</i>
	<i>Cotesia marginiventris</i>

The use of these organisms in conjunction or alternation with **FLORAMITE** is encouraged as a means of reducing the number of chemical applications.

PLANT TOLERANCE

Neither the manufacturer nor the seller has determined whether or not **FLORAMITE** can be used safely on all ornamental plants. **FLORAMITE** has been tested on a variety of ornamental plants with no phytotoxicity observed at label rates. However, all plant species and their varieties and cultivars have not been tested with all possible tank-mix combinations, sequential pesticide treatments and adjuvants and surfactants. Therefore, prior to any large-scale application to ornamental plants, the user should determine the safety of **FLORAMITE** by testing a small number of the plant cultivar to be treated at the specified label rates to ensure that phytotoxic response will not occur. The end user assumes all risks arising from using this product in a manner inconsistent with its labeling.

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Store in a dry location.

PESTICIDE DISPOSAL: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

Nonrefillable 1-quart containers:

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 mix-tank and drain container for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake container for 10 seconds. Pour rinsate into application equipment or a mix-tank or store rinsate for later use or disposal. Drain container for 10 seconds after the flow begins to drip. Repeat this procedure two more times. If pressure rinsing: Empty the remaining contents into application equipment or a mix-tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix-tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip. Once container is cleaned (triple- or pressure-rinsed), recycle it (if available). Some agricultural pesticide containers can be taken to a container collection site or picked up for recycling. To find the nearest site, contact your chemical dealer or manufacturer, or Ag Container Recycling Council (ACRC) at 877-952-2272 or <http://www.acrecycle.org>. If recycling is not available, dispose of container in a sanitary landfill or by incineration if allowed by state and local ordinances.

CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

NOTICE: Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

The Directions for Use of this product reflect the opinion of experts based on field use and tests, and must be followed carefully. It is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of Environmental Science U.S., LLC or Seller. Handling, storage, and use of the product by Buyer or User are beyond the control of Environmental Science U.S., LLC and Seller. To the extent consistent with applicable law, all such risks shall be assumed by Buyer and User, and Buyer and User agree to hold Environmental Science U.S., LLC and Seller harmless for any claims relating to such factors.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, ENVIRONMENTAL SCIENCE U.S., LLC AND SELLER MAKE NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ON THIS LABEL.

To the extent consistent with applicable law, Environmental Science U.S., LLC or Seller shall not be liable for any incidental, consequential or special damages resulting from the use or handling of this product and THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF ENVIRONMENTAL SCIENCE U.S., LLC AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF ENVIRONMENTAL SCIENCE U.S., LLC OR SELLER, THE REPLACEMENT OF THE PRODUCT.

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NOTES

Specimen Label

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FLORAMITE® ORNAMENTAL MITICIDE

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STORAGE AND DISPOSAL

- Do not contaminate water, food or feed by storage or disposal. **PESTICIDE STORAGE:** Store in a dry location. **PESTICIDE DISPOSAL:** Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. **Nonrefillable 1-quart containers:** **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 mix-tank and drain container for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake container for 10 seconds. Pour rinsate into application equipment or a mix-tank or store rinsate for later use or disposal. Drain container for 10 seconds after the flow begins to drip. Repeat this procedure two more times. If pressure rinsing: Empty the remaining contents into application equipment or a mix-tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix-tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip. Once container is cleaned (triple- or pressure-rinsed), recycle it (if available). Some agricultural pesticide containers can be taken to a container collection site or picked up for recycling. To find the nearest site, contact your chemical dealer or manufacturer, or Ag Container Recycling Council (ACRC) at 877-952-2272 or <http://www.acrcycle.org>. If recycling is not available, dispose of container in a sanitary landfill or by incineration if allowed by state and local ordinances.

PEEL DOWN FOR DIRECTIONS >

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