

34704-955

08/07/2008

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**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

WASHINGTON, D.C. 20460

OFFICE OF  
PREVENTION, PESTICIDES  
AND TOXIC SUBSTANCES

August 7, 2008

Kristie Raymond  
Loveland Products, Inc.  
P.O. Box 1286  
Greeley, Colorado 80632-1286

Subject: Amendment – Add Imported Fire Ant Quarantine Treatment/CRP and Updating  
Disposal Statement  
Bifenthrin SC  
EPA Reg. No. 34704-955  
Your submissions dated March 6, 2008 and March 18, 2008

Dear Ms. Raymond:

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended, is acceptable subject to the comments listed below. Two (2) copies of the finished labeling must be submitted prior to releasing the product for shipment. A stamped copy of the label is enclosed for your records.

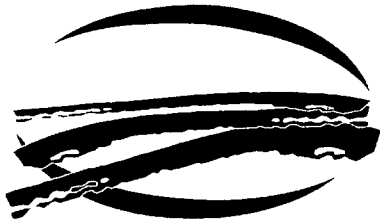
1. Replace the *Storage and Disposal* statement submitted on the March 18, 2008 label with the statement submitted on March 6, 2008. Also, add "If recycling is not available puncture or dispose of in a sanitary landfill or incineration or if allowed by state and local authorities by burning. If burned stay out of smoke" after the statement "Triple rinse or pressure rinse container (or equivalent) promptly after emptying" under Container Disposal section.

If you have any questions regarding this action, please contact BeWanda Alexander of my team at (703) 305-7460.

Sincerely,

A handwritten signature in black ink that reads "BeWanda Alexander for".

George T. LaRocca  
Product Manager (13)  
Insecticide Branch  
Registration Division (7505P)



# BIFENTHRIN SC

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**ACCEPTED  
with COMMENTS  
In EPA Letter Dated  
AUG 7 2008**

Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 34704-955

**EPA REG. NO. 34704-955  
EPA EST. NO. 34704-MS-1  
NET CONTENTS 1 GAL. (3.78 L)**

IHT

EXP 03/08

*[Optional marketing statements -  
Broad Spectrum Insecticide,  
Termiticide/Insecticide  
Insecticide*

*Mixes Readily with Water  
Controls a Wide Range of Insects and Mites on Trees, Shrubs, Flowering Plants,  
Non-Bearing Fruit and Nut Trees, and Flowers  
To Control Pests Indoors and Outdoors on Residential, Institutional, Public,  
Commercial, and Industrial Buildings, and Lawns, Ornamentals, Parks,  
Recreational Areas and Athletic Fields  
For Use in Interiorscapes including Hotels, Shopping Malls, and Office Buildings  
For Use in Outdoor Plantscapes including Residential Dwellings, Parks,  
Institutional Buildings, Recreational Areas, Athletic Fields, and Home Lawns  
Prevents and Controls Termites [In] [and] [Around] [Structures] [and]  
[Constructions]  
Prevents and Controls Ticks (including ticks that may transmit Lyme Disease and  
Rocky Mountain Spotted Fever)  
For the Control of Deer ticks (Ixodes spp.)*

**When used as a Termiticide, Individuals/ Firms must be licensed by the State to apply termiticide products. States may have more restrictive requirements regarding qualifications of persons using this product. Consult the pest control regulatory agency of your State prior to use of this product.**

<b>ACTIVE INGREDIENT:</b>	<b>BY WT.</b>
Bifenthrin* .....	7.9%
<b>INERT INGREDIENTS:</b> .....	<b>92.1%</b>
<b>TOTAL</b>	<b>100.0%</b>

Contains 2/3 pound active ingredient per gallon.  
\*Cis isomers 97% minimum, trans isomers 3% maximum.

## KEEP OUT OF REACH OF CHILDREN CAUTION

<b>FIRST AID</b>	
<b>If swallowed:</b>	<ul style="list-style-type: none"> <li>• Call a poison control center or doctor immediately for treatment advice.</li> <li>• Have person sip a glass of water if able to swallow.</li> <li>• Do not induce vomiting unless told to do so by the poison control center or doctor.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>
<b>If inhaled:</b>	<ul style="list-style-type: none"> <li>• Move person to fresh air.</li> <li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth if possible.</li> <li>• Call a poison control center or doctor for further 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>
<b>If in eyes:</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water 15-20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continuing rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<p>Have the product container or label with you when calling a poison control center or doctor, or going for treatment. <b>FOR A MEDICAL EMERGENCY INVOLVING THIS PRODUCT CALL: 1-800-301-7976.</b></p> <p><b>Note to Physician</b> - This product is a pyrethroid. If large amounts have been ingested, the stomach and intestine should be evacuated. Treatment is symptomatic and supportive. Digestible fats, oils, or alcohol may increase absorption and so should be avoided.</p>	

### PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**CAUTION** - Harmful if swallowed, inhaled, or absorbed through skin. Avoid contact with skin, eyes or clothing. Avoid breathing spray mist. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Remove contaminated clothing and wash before reuse.

All pesticide handlers (mixers, loaders, and applicators) must wear long-sleeved shirt and long pants, socks, shoes, and chemical-resistant gloves. After the product is diluted in accordance with label directions for use, and/or when mixing and loading using a closed spray tank transfer system, or an in-line injector system, shirt, pants, socks, shoes, and waterproof gloves are sufficient. In addition, all pesticide handlers must wear a respiratory protection device when working in a non-ventilated space (one of the following NIOSH approved respirator with any R, P or HE filter or a NIOSH approved respirator with an organic vapor (OV) cartridge or canister with any R,P or HE prefilter). All pesticide handlers must wear protective eyewear when working in non-ventilated space or when applying termiticide by drilling or sub-slab injection.

When treating adjacent to an existing structure, the applicator must check the area to be treated, and immediately adjacent areas of the structure, for visible and accessible cracks and holes to prevent any leaks or significant exposures to persons occupying the structure. People present or residing in the structure during application must be advised to remove their pets and themselves from the structure if they see any signs of leakage. After application, the applicator is required to check for leaks. All leaks resulting in the deposition of termiticide in locations other than those prescribed on this label must be cleaned up prior to leaving the applications site. Do not allow people or pets to contact contaminated areas or to reoccupy contaminated areas of the structure until the clean-up is completed.

### ENVIRONMENTAL HAZARDS

This pesticide is extremely toxic to fish and aquatic invertebrates. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Drift and run-off from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment washwaters. Care should be used when spraying to avoid fish and reptile pets in/around ornamental ponds.

This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow to drift to blooming crops if bees are visiting the treatment area.

### PHYSICAL AND CHEMICAL HAZARDS

Do not apply water-based dilutions of Bifenthrin SC to electrical conduits, motor housings, junction boxes, switch boxes or other electrical equipment because of possible shock hazard.

### DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Do not apply a broadcast application to interior surfaces of homes.  
Do not apply by air.  
Do not apply in greenhouses or nurseries.  
Do not apply this product through any kind of irrigation system.  
Not for use on sod farm turf, golf course turf, or grass grown for seed.

Not for use on plants being grown for sale or other commercial use, or for commercial seed production, or for research purposes. For use on plants intended only for aesthetic purposes or climatic modifications and being grown in interior plantscapes, ornamental gardens or parks, or lawns and grounds.

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**STORAGE AND DISPOSAL**

**PROHIBITIONS:** Do not contaminate water, food, or feed by storage or disposal.  
**PESTICIDE STORAGE:** Keep out of reach of children and animals. Store in a cool, dry place and avoid excess heat. Carefully open containers. After partial use replace lids and close tightly. Do not put concentrate or dilute material into food or drink container.

**In case of spill, avoid contact, isolate area and keep out animals and unprotected persons. Confine spills.**

**TO CONFINE SPILL:** If liquid, dike surrounding area or absorb with sand, cat litter, or commercial clay. If dry material, cover to prevent dispersal. Place damaged package in a holding container. Identify contents.

In the event of a major spill call 1-800-424-9300 (CHEMTREC).

**PESTICIDE DISPOSAL:** Pesticide wastes are toxic. Do not contaminate water, food, or feed by storage or disposal. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. Dispose of excess or waste pesticide by use according to label directions, or contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

**CONTAINER DISPOSAL: Plastic Container:** Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

**Returnable/ Refillable Sealed Container:** Do not rinse container. Do not empty remaining formulated product. Do not break seals. Return intact to point of purchase.

**[Use Directions for Tip-N-Measure Container]**

1. Remove the measuring chamber cap and induction seal. Replace the cap and securely tighten. Tip container until liquid fills measuring chamber.
2. Return container to level position. No adjustment is needed.
3. Remove measuring chamber cap and dispense into proper application equipment.

For multiple dose measuring, remove fill chamber cap and dispense according to markings on side of bottle.]

**[Use Directions for Squeeze-N-Measure Container]**

1. Remove the measuring chamber cap and induction seal.
2. Replace cap loosely on measuring chamber to allow venting.
3. Squeeze container gently until liquid fills measuring chamber.
4. Remove measuring chamber cap and dispense into proper application equipment.
5. Replace cap onto measuring chamber and tighten]

**SUBTERRANEAN TERMITE CONTROL**

**General Information**

The use of this product prevents and controls termite infestations in and around structures and constructions.

The dilute insecticidal emulsion must be adequately dispersed in the soil to establish a barrier between the wood and the termites in the soil. As a good practice: 1) remove all non-essential wood and cellulose containing materials from around foundation walls, crawl spaces, and porches; 2) Repair faulty plumbing and/or construction grade to eliminate termite access to moisture. Soil around untreated structural wood in contact with soil should be treated as described below.

To establish an effective insecticidal barrier with this product the service technician must be familiar with current termite control practices such as: trenching, rodding, sub-slab injection, coarse fan spraying of soil surfaces, crack and crevice (void) injection, excavated soil treatment, and brush or spray applications to infested or susceptible wood. These techniques must be correctly employed to prevent or control infestations by Subterranean Termites such as: *Coptotermes*, *Heterotermes*, *Reticulitermes* and *Zootermopsis*. The biology and behavior of the species involved should be considered by the service technician in determining which control practices to use to eliminate or prevent the termite infestation.

Choice of appropriate procedures should include consideration of such variable factors as the design of the structure, location of heating, ventilation, and air conditioning (HVAC) systems, water table, soil type, soil compaction, grade conditions, and location and type of domestic water supplies and utilities.

For advice concerning current control practices with relation to specific local conditions, consult resources in structural pest control and state cooperative extension and regulatory agencies.

**Directions for Use**

**Important:** Contamination of public and private water supplies must be avoided by following these precautions: Use anti-backflow equipment or procedures to prevent siphonage of insecticide into water supplies. Do not contaminate cisterns or wells. Do not treat soil that is water saturated or frozen or in any conditions where runoff or movement from the treatment area (site) is likely to occur. Consult state and local specifications for recommended distances of wells from treated areas, or if such regulations do not exist, refer to Federal Housing Administration Specifications (H.U.D.) for guidance.

**Note:** Crawl spaces are to be considered inside of the structure.

**Critical Areas:** Critical areas include areas where the foundation is penetrated by the utility services, cracks and expansion joints, bath traps and areas where

cement constructions have been poured adjacent to the foundation such as stairs, patios and slab additions.

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**Structures with Wells/ Cisterns Inside Foundations**

Structures that contain wells or cisterns within the foundation of a structure can only be treated using the following techniques:

1. Do not treat soil while it is beneath or within the foundation or along the exterior perimeter of a structure that contains a well or cistern. The treated backfill method must be used if soil is removed and treated outside/away from the foundation. The treated backfill technique is described as follows:
  - a) Trench and remove soil to be treated onto heavy plastic sheeting or similar material or into a wheelbarrow.
  - b) Treat the soil at the rate of 4 gallons of dilute emulsion per 10 linear feet per foot of depth of the trench, or 1 gallon per 1.0 cubic feet of soil. See "Mixing Directions" section of this label. Mix thoroughly into the soil taking care to contain the liquid and prevent runoff or spillage.
  - c) After the treated soil has absorbed the diluted emulsion, replace the soil into the trench.
2. Treat infested and/or damaged wood in place using an injection technique such as described in the "Control of Wood Infesting Insects" section of this label.

**Structures with Adjacent Wells/ Cisterns and/or Other Water Bodies**

Applicators must inspect all structures with nearby water sources such as wells, cisterns, surface ponds, streams, and other bodies of water and evaluate, at a minimum, the treatment recommendations listed below prior to making an application.

1. Prior to treatment, if feasible, expose the water pipe(s) coming from the well to the structure, if the pipe(s) enter the structure within 3 feet of grade.
2. Prior to treatment, applicators are advised to take precautions to limit the risk of applying the termiticide into subsurface drains that could empty into any bodies of water. These precautions include evaluating whether application of the termiticide to the top of the footer may result in contamination of the subsurface drain. Factors such as depth to the drain system and soil type and degree of compaction should be taken into account in determining the depth of the treatment.
3. When appropriate (i.e., on the water side of the structure), the treated backfill technique (described above) can also be used to minimize off-site movement of termiticide.

Prior to using this technique near wells or cisterns, consult state, local or federal agencies for information regarding approved treatment practices in your area.

**Application Rate:**

Use a 0.06% emulsion for subterranean termites. For other pests on the label use specific listed rates.

**Mixing Directions:** Mix the termiticide use dilution in the following manner:

1. Fill tank 1/4 to 1/3 full.
2. Start pump to begin by-pass agitation and place end of treating tool in tank to allow circulation through hose.
3. Add appropriate amount of Bifenthrin SC.
4. Add remaining amount of water.
5. Let pump run and allow recirculation through the hose for 2 to 3 minutes.

Bifenthrin SC may also be mixed into full tanks of water, but requires substantial agitation to insure uniformity of the emulsion.

To prepare a 0.06% water emulsion, ready to use, dilute 3 quarts of Bifenthrin SC with 99.25 gallons of water.

**Mixing:**

For the desired application rate, use the chart below to determine the amount of Bifenthrin SC for a given volume of finished emulsion:

**AMOUNT OF BIFENTHRIN SC  
(Gallons except where noted)**

Emulsion Concentrate	Amount of Bifenthrin SC	Amount of Water	Desired Gallons of Finished Emulsion
0.06%	1 oz.	127 oz.	1
	5 oz.	4.9	5
	10 oz.	9.9	10
	25 oz.	24.8	25
	1.5 qt.	49.6	50
	2.25 qt.	74.4	75
	3 qt.	99.25	100
	4.5 qt.	148.8	150
0.12%*	6 qt.	198.5	200
	2 oz.	126 oz.	1
	10 oz.	4.9	5
	19.5 oz.	9.8	10
	1.5 qt.	24.6	25
	3 qt.	49.2	50
	4.5 qt.	73.8	75
	6 qt.	98.5	100
	9 qt.	147.7	150
	3	197	200

\*For Termite applications, only use this rate in conjunction with the application volume adjustments as listed in the section below or in the foam or underground service application sections.

Common units of measure:

1 pint = 16 fluid ounces (oz.)

1 quart = 2 pints = 4 cups = 32 fluid ounces (oz.)

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**Application Volume:** To provide maximum control and protection against termite infestation apply the specified volume of the finished water emulsion and active ingredient as set forth in the directions for use section of this label. If soil will not accept the labeled application volume, the volume may be reduced provided there is a corresponding increase in concentration so that the amount of active ingredient applied to the soil remains the same.

**Note:** Large reductions of application volume reduce the ability to obtain a continuous barrier. Variance is allowed when volume and concentration are consistent with the label directed rates and a continuous barrier can still be achieved.

Where desirable for pre and post construction treatments, the volume of the 0.12% emulsion may be reduced by 1/2 the labeled volume. See Volume adjustment chart below.

**Note:** When volume is reduced, the hole spacing for subslab injection and soil rodding may require similar adjustment to account for lower volume dispersal of the termiticide in the soil.

**VOLUME ADJUSTMENT CHART**

Rate (% emulsion)	0.06%	0.12%
Volume allowed		
Horizontal (gallons emulsion/10 ft <sup>2</sup> )	1.0 Gallons	0.5 gallons
Vertical (gallons emulsion/10 linear ft.)	4.0 gallons	2.0 gallons

**After treatment:** All holes in commonly occupied areas into which Bifenthrin SC has been applied must be plugged. Plugs must be of a non-cellulose material or covered by an impervious, non-cellulose material.

### Pre-Construction Subterranean Termite Treatment

**Pre-Construction Treatment:** Do not apply at a lower dosage and/or concentration than specified on this label for applications prior to the installation of the finished grade.

When treating foundations deeper than 4 feet, apply the termiticide as the backfill is being replaced, or if the construction contractor fails to notify the applicator to permit this, treat the foundation to a minimum depth of 4 feet after the backfill has been installed. The applicator must trench and rod into the trench or trench along the foundation walls and around pillars and other foundation elements, at the rate prescribed from grade to a minimum depth of 4 feet. When the top of the footing is exposed, the applicator must treat the soil adjacent to the footing to a depth not to exceed the bottom of the footing. However, in no case should a structure be treated below the footing.

Effective pre-construction subterranean termite control is achieved by the establishment of vertical and/or horizontal insecticidal barriers using 0.06% emulsion of Bifenthrin SC. To meet termite proofing requirements, follow the procedures in the latest edition of the Housing and Urban Development Minimum Property Standards.

#### Horizontal Barriers

Create a horizontal barrier wherever treated soil will be covered by a slab, such as footing trenches, slab floors, carports, and the soil beneath stairs and crawl spaces.

For a 0.06% rate apply 1 gallon of dilution per 10 square feet, or use 1 fluid ounce of Bifenthrin SC per 10 square feet in sufficient water (no less than 1/2 gallon or more than 2 gallons) to provide thorough and continuous coverage of the area being treated.

If the fill is washed gravel or other coarse material, it is important that a sufficient amount of dilution be used to reach the soil substrate beneath the coarse fill.

Applications shall be made by a low-pressure spray (less than 50 p.s.i.) using a coarse spray nozzle. If slab will not be poured the same day as treatment, cover treated soil with a water-proof barrier such as polyethylene sheeting. This is not necessary if foundation walls have been installed around the treated soil.

#### Vertical Barriers

Vertical barriers must be established in areas such as around the base of foundations, plumbing, utility entrances, back-filled soil against foundation walls and other critical areas.

For a 0.06% rate, apply 4 gallons of dilution per 10 linear feet per foot of depth or 4 fluid ounces of Bifenthrin SC per 10 linear feet per foot of depth from grade to top of footing in sufficient water (not less than 2 gallons or more than 8 gallons) to ensure complete coverage.

- When trenching and rodding into the trench, or trenching, it is important that emulsion reaches the top of the footing. Rod holes must be spaced so as to achieve a continuous termiticide barrier, but in no case more than 12 inches apart.
- Care should be taken to avoid soil wash-out around the footing.
- Trenches need not be wider than 6 inches. Emulsion should be mixed with the soil as it is being replaced in the trench.
- For a monolithic slab, an inside vertical barrier may not be required.

Hollow block voids may be treated at a rate of 2 gallons of emulsion per 10 linear feet so that the emulsion will reach the top of the footing.

Prior to each application, applicators must notify the general contractor, construction superintendent, or similar responsible party, of the intended termiticide application and intended sites of application and instruct the responsible person to notify construction workers and other individuals to leave the area to be treated during application and until the termiticide is absorbed into the soil.

### Post Construction Subterranean Termite Treatment

Use a 0.06% emulsion for post-construction treatment. Post-construction soil applications shall be made by injection, trenching and rodding into the trench or trenching, or coarse fan spray with pressures not exceeding 25 p.s.i at the nozzle. Care should be taken to avoid soil wash-out around the footing.

Do not apply emulsion until location of wells, radiant heat pipes, water and sewer lines and electrical conduits are known and identified. Caution must be taken to avoid puncturing and injection into these elements.

### Foundations

For applications made after the final grade is installed, the applicator must trench and rod into the trench or trench along the foundation walls and around pillars and other foundation elements, at the rate prescribed from grade to the top of the footing. When the footing is more than four (4) feet below grade, the applicator must trench and rod into the trench or trench along the foundation walls at the rate prescribed to a minimum depth of four feet. The actual depth of treatment will vary depending on soil type, degree of compaction, and location of termite activity. When the top of the footing is exposed, the applicator must treat the soil adjacent to the footing to a depth not to exceed the bottom of the footing. However, in no case should a structure be treated below the footing.

### Slabs

Vertical barriers may be established by sub-slab injection within the structure and trenching and rodding into the trench or trenching outside at the rate of 4 gallons of emulsion per 10 linear feet per foot of depth. Special care must be taken to distribute the treatment evenly. Treatment should not extend below the bottom of the footing.

Treat along the outside of the foundation and where necessary beneath the slab on the inside of foundation walls. Treatment may also be required beneath the slab along both sides of interior footing-supported walls, one side of interior partitions and along all cracks and expansion joints. Horizontal barriers may be established where necessary by long-rodding or by grid pattern injection vertically through the slab.

- Drill holes in the slab and/or foundation to allow for the application of a continuous insecticidal barrier.
- For shallow foundations (1 foot or less) dig a narrow trench approximately 6 inches wide along the outside of the foundation walls. Do not dig below the bottom of the footing. The emulsion should be applied to the trench and soil at 4 gallons of emulsion per 10 linear feet per foot of depth as the soil is replaced in the trench.
- For foundations deeper than 1 foot follow rates for basement.
- Exposed soil and wood in bath traps may be treated with a 0.06% emulsion.

### Basements

Where the footing is greater than 1 foot of depth from grade to the bottom of the foundation, application must be made by trenching and rodding into the trench, or trenching at the rate of 4 gallons of emulsion per 10 linear feet per foot of depth. When the footer is more than four feet below grade, the applicator may trench and rod into the trench, or trench along foundation walls at the rate prescribed for four feet of depth. Rod holes must be spaced to provide a continuous insecticidal barrier, but in no case more than 12 inches apart. The actual depth of treatment will vary depending on soil type, degree of compaction, and location of termite activity. However, in no case should a structure be treated below the footer. Sub-slab injection may be necessary along the inside of foundation walls, along cracks and partition walls, around pipes, conduits, piers, and along both sides of interior footing-supported walls.

**Accessible Crawl Spaces:** For crawl spaces, apply vertical termiticide barriers at the rate of 4 gallons of emulsion per 10 linear feet per foot of depth from grade to the top of the footing, or if the footing is more than 4 feet below grade, to a minimum depth of 4 feet. Apply by trenching and rodding into the trench, or trenching. Treat both sides of foundation and around all piers and pipes. Where physical obstructions such as concrete walkways adjacent to foundation elements prevent trenching, treatment may be made by rodding alone. When soil type and/or conditions make trenching prohibitive, rodding may be used. When the top of the footing is exposed, the applicator must treat the soil adjacent to the footing to a depth not to exceed the bottom of the footing. Read and follow the mixing and use direction section of the label if situations are encountered where the soil will not accept the full application volume.

- Rod holes and trenches must not extend below the bottom of the footing.
- Rod holes must be spaced so as to achieve a continuous termiticide barrier but in no case more than 12 inches apart.
- Trenches must be a minimum of 6 inches deep or to the bottom of the footing, whichever is less, and need not be wider than 6 inches. When trenching in sloping (tiered) soil, the trench must be stepped to ensure adequate distribution and prevent termiticide from running off. The emulsion must be mixed with the soil as it is replaced in the trench.
- When treating plenums or crawl spaces, turn off the air circulation system of the structure until application has been completed and all termiticide has been absorbed by the soil.

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**Inaccessible Crawl Spaces:** For inaccessible interior areas, such as areas where there is insufficient clearance between floor joists and ground surfaces to allow operator access, excavate if possible, and treat according to the instruction for accessible crawl spaces. Otherwise, apply one or a combination of the following two methods.

1. To establish a horizontal barrier, apply to the soil surface, 1 gallon of emulsion per 10 square feet overall using a nozzle pressure of less than 25 p.s.i. and a coarse application nozzle (e.g., Delavan Type RD Raindrop®, RD-7 or larger, or Spraying Systems Co. 8010LP TeeJet® or comparable nozzle). For an area that cannot be reached with the application wand, use one or more extension rods to make the application to the soil. Do not broadcast or powerspray with higher pressures.
2. To establish a horizontal barrier, drill through the foundation wall or through the floor above and treat the soil perimeter at a rate of 1 gallon of emulsion per 10 square feet. Drill spacing must be at intervals not to exceed 16 inches. Many states have smaller intervals, so check State regulations which may apply.

When treating plenums and crawl spaces, turn off the air circulation systems of the structure until application has been completed and all termiticide has been absorbed by the soil.

**Masonry Voids:** Drill and treat voids in multiple masonry elements of the structure extending from the structure to the soil in order to create a continuous treatment barrier in the area to be treated. Apply at a rate of 2 gallons of emulsion per 10 linear feet of footing, using a nozzle pressure of less than 25 p.s.i. When using this treatment, access holes must be drilled below the sill plate and should be as close as possible to the footing as is practical. Treatment of voids in block or rubble foundation walls must be closely examined: Applicators must inspect areas of possible runoff as a precaution against application leakage in the treated areas. Some areas may not be treatable or may require mechanical alteration prior to treatment.

All leaks resulting in the deposition of termiticide in locations other than those prescribed on this label must be cleaned up prior to leaving the application site. Do not allow people or pets to contact contaminated areas or to reoccupy the contaminated areas of the structure until the clean-up is completed.

**Note:** When treating behind veneer care should be taken not to drill beyond the veneer. If concrete blocks are behind the veneer, both the blocks and the veneer may be drilled and treated at the same time.

Not for use in voids insulated with rigid foam insulation.

**Excavation Technique:** If treatment must be made in difficult situations, along fieldstone or rubble walls, along faulty foundation walls, and around pipes and utility lines which lead downward from the structure to a well or pond, application may be made in the following manner:

1. Trench and remove soil to be treated onto heavy plastic sheeting or similar material.
2. Treat the soil at the rate of 4 gallons of emulsion per 10 linear feet per foot of depth of the trench. Mix the emulsion thoroughly into the soil taking care to prevent liquid from running off the liner.
3. After the treated soil has absorbed the liquid emulsion, replace the soil in the trench.

**Attention:** When applying Bifenthrin SC in a confined area, the user must wear unvented goggles and a respirator approved by NIOSH during application.

### Foam Applications

Bifenthrin SC emulsion, from 0.06 to 0.12% may be converted to foam with expansion characteristics from 2 to 40 times.

### Localized Application

**Foam Applications:** The emulsion may be converted to foam and the foam used to control or prevent termite infestations.

Depending on the circumstances, foam applications may be used alone or in combination with liquid emulsion applications. Applications may be made behind veneers, piers, chimney bases, into rubble foundations, into block voids or structural voids, under slabs, stoops, porches, or to the soil in crawlspaces, and other similar voids.

Foam and liquid application must be consistent with volume and active ingredient instructions in order to insure proper application has been made. The volume and amount of active ingredient are essential to an effective treatment. At least 75% of the labeled liquid emulsion volume of product must be applied, with the remaining percent delivered to appropriate areas using foam application. Refer to label and use recommendations of the foam manufacturer and the foaming equipment manufacturer.

Foam applications are generally a good supplement to liquid treatments in difficult areas, but may be used alone in difficult spots.

### Application Under Slabs or to Soil in Crawlspaces to Prevent or Control Termites

Application may be made using Bifenthrin SC foam alone or in combination with liquid emulsion. The equivalent of at least 4 gallons (4 ounces of Bifenthrin SC concentrate) of 0.06% emulsion per 10 linear feet (vertical barrier), or at least 1 gallon (1 ounce of Bifenthrin SC concentrate) of 0.06% emulsion per 10 square feet (hor-

zontal barrier) must be applied either as emulsion, foam, or a combination of both. For a foam only application, apply Bifenthrin SC concentrate in sufficient foam concentration and foam volume to deposit 4 ounces of concentrate per 10 linear feet or 1 ounce of concentrate per 10 square feet. For example, 2 gallons of 0.12% emulsion generated as foam to cover 10 linear feet is equal to the application of 4 gallons of 0.06% emulsion per 10 linear feet. 5/11

### Sand Barrier Installation and Treatment

Termites can build mud tubes over treated surfaces as long as they have access to untreated soil and do not have to move Bifenthrin SC treated soil. Fill in cracks and spaces with builders or play box sand and treat the sand with Bifenthrin SC. The sand should be treated as soil following the termiticide rate listed on the Bifenthrin SC label.

Retreatment for subterranean termites can only be performed if there is clear evidence of reinfestation or disruption of the barrier due to construction, excavation, or landscaping and/or evidence of the breakdown of the termiticide barrier in the soil. These vulnerable or reinfested areas may be retreated in accordance with application techniques described in this product's labeling. The timing and type of these retreatments will vary depending on factors such as termite pressure, soil types, soil conditions and other factors which may reduce the effectiveness of the barrier.

**Annual retreatment of the structure is prohibited unless there is clear evidence that reinfestation or barrier disruption has occurred.**

### APPLICATION IN CONJUNCTION WITH THE USE OF FIRSTLINE® TERMITE BAITS

As part of an IPM (integrated pest management) program for termite control, Bifenthrin SC may be applied to areas of the structure with known or suspected infestations such as plumbing, utility entry sites, bath traps, expansion joints, and foundation cracks at a rate of 0.06% as a spot treatment or complete barrier treatment. Applications may be made as described in the Postconstruction treatment section of this label.

### Specific Pest Control Applications

**Underground Services such as:** wires, cables, utility lines, pipes, conduits, etc. Services may be within structures, in right-of-ways or to protect long range (miles) of installations of services.

Soil treatment may be made using 0.06 to 0.12% Bifenthrin SC emulsion to prevent attack by termites and ants.

Apply 2 gallons of emulsion per 10 linear feet to the bottom of the trench and allow to soak into the soil. Lay services on the treated soil and cover with approximately 2 inches of fill soil. Apply another 2 gallons per 10 linear feet over the soil surface to complete the treatment barrier. In wide trenches, only treat the soil in the area near the services. It is important to establish a continuous barrier of treated soil surrounding the services.

Where soil will not accept the above-labeled volume, 1 gallon of 0.12% Bifenthrin SC may be used per 10 linear feet of trench both to the bottom of the trench and over the soil on top of the services.

Finish filling the trench with treated fill soil. The soil where each service protrudes from the ground may be treated by trenching/rodding of not more than 1 to 2 gallons of emulsion into the soil.

**Precautions:** Do not treat electrically active underground services.

### Posts, Poles, and Other Constructions

Create an insecticidal barrier in the soil around wooden constructions such as signs, fences and landscape ornamentation by applying a 0.06% emulsion.

Previously installed poles and posts and may be treated by sub-surface injection or treated by gravity-flow through holes made from the bottom of a trench around the pole or post. Treat on all sides to create a continuous insecticidal barrier around the pole. Use 1 gallon of emulsion per foot of depth for poles and posts less than six inches in diameter. For larger poles, use 1.5 gallons of emulsion per foot of depth. Apply to a depth of 6 inches below the bottom of the wood. For larger constructions, use 4 gallons per 10 linear feet per foot of depth.

**Treatment of Wood-in-Place for Control of Wood-Infesting Insects:** (Localized Areas in Structure) For the control of insects such as Termites, Ants, Carpenter Ants, and wood-infesting beetles such as Old House Borer and Powder Post in localized areas of infested wood in and around structures, apply a 0.06% emulsion to voids and galleries in damaged wood and in spaces between wooden members of a structure and between wood and foundations where wood is vulnerable. Paint on or fan spray applications may also be used. Plastic sheeting must be placed immediately below overhead areas that are spot treated except for soil surfaces in crawl spaces. Application may be made to inaccessible areas by drilling, and then injecting emulsion with a crack and crevice injector into the damaged wood or void spaces. This type of application is not intended to be a substitute for soil treatment, mechanical alteration or fumigation to control extensive infestation of wood-infesting insects.

Termite carton nests in trees or building voids may be injected with 0.06% emulsion. Multiple injection points to varying depths may be necessary. It is desirable to physically remove carton nest material from building voids when such nests are found.

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**Control of Bees and Wasps Indoors:** To control Bees, Wasp, Hornets, and Yellow-Jackets apply a 0.06% emulsion. Application should be made in the late evening when insects are at rest. Spray liberally into hiding and breeding places, especially under attic rafters, contacting as many insects as possible. Retreatment may be necessary to achieve and/or maintain control during periods of high pest pressure. Repeat application is necessary only if there are signs of renewed insect activity.

**Important:** Do not apply emulsion until location of heat pipes, ducts, water and sewer lines and electrical conduits are known and identified. Caution must be taken to avoid puncturing and injection into these structural elements. Do not apply into electrical fixtures, switches, or sockets.

In the home, all food processing surfaces and utensils in the treatment area should be covered during treatment or thoroughly washed before re-use. Remove pets, birds, and cover aquariums before spraying. Do not permit humans or pets to contact treated surfaces until the spray has dried.

During any overhead applications to overhead interior areas of structures, cover surfaces below with plastic sheeting or similar materials.

Wear protective clothing, unvented goggles, gloves and respirator, when applying to overhead areas or in poorly ventilated areas. Avoid touching sprayed surfaces until spray has completely dried.

**Broadcast Treatment of Wood for the Control of Wood-infesting Insects and Nuisance Pests Outside of Structure:** Apply a 0.06% emulsion with a fan spray using a maximum pressure of 25 psi. Treatment should be made just to the point of run-off.

To control wood-infesting insects active inside trees, utility poles and/or fence posts, drill to find the interior infested cavity and inject a 0.06% emulsion. To control Bees, Wasps, Hornets, and Yellow-Jackets, apply in late evening when insects are at rest. Aim spray at nest openings in ground, bushes and in cracks and crevices which may harbor nests, saturating nest openings and contacting as many insects as possible.

**Pests Under Slabs**

Infestations of Arthropods, such as Ants, Cockroaches and Scorpions inhabiting under slab area may be controlled by drilling and injecting or horizontal rodding and then injecting 1 gallon of a 0.06% to 0.12% emulsion per 10 square feet or 2 gallons of emulsion per 10 linear feet.

**Formula for Determining the Active Ingredient Content of the Finished Spray Mixture:**

The following formula may be used to determine the percent active ingredient that is in the spray tank after mixing Bifenthrin SC:

$$\frac{(7.9)(\text{fl. oz. of Bifenthrin SC added to tank})}{(\text{Gallons of finished spray mix})(128)} = \text{Percent Active Ingredient of spray mix}$$

**LAWNS AND ORNAMENTALS**

**General Application Instructions**

Bifenthrin SC formulation mixes readily with water and other aqueous carriers, and controls a wide spectrum of insects and mites on trees, shrubs, foliage plants, non-bearing fruit and nut trees, and flowers in interiorscapes including hotels, shopping malls, office buildings, etc., and outdoor plantscapes, such as around residential dwellings, parks, institutional buildings, recreational areas, athletic fields and home lawns. Non-bearing crops are perennial crops that will not produce a harvestable raw agricultural commodity, during the season of application.

Bifenthrin SC may be tank-mixed with other pesticides, including insect growth regulators. When tank mixing Bifenthrin termiticide/insecticide with other pesticides, observe all precautions and limitations on each separate product label. The physical compatibility of Bifenthrin termiticide/insecticide may vary with different sources of pesticide products, and local cultural practices. Any tank mixture which has not been previously tested should be prepared on a small scale (pint or quart jar), using the proper proportions of pesticides and water to ensure the physical compatibility of the mixture.

DO NOT apply when wind speed favors drift beyond the target area.

The following procedure is recommended for preparation of a new tank mix, unless specified otherwise in label directions:

1. Add wettable powders to tank water
2. Agitate
3. Add liquids and flowables
4. Agitate
5. Add emulsifiable concentrates
6. Agitate

If a mixture is found to be incompatible following this order of addition, try reversing the order of addition, or increase the volume of water.

**Note:** If the tank-mixture is found to be compatible after increasing the amount of water, then the sprayer will need to be recalibrated for a higher volume application. Do not allow tank mix to stand overnight.

**Resistance:** Some insects may develop resistance to products used repeatedly for control. Because the development of resistance cannot be predicted, the use of this product should conform to resistance management strategies established for the use area. Consult your local or state pest management authorities for details.

If resistance to this product develops in your area, this product, or other products with similar mode of action, may not provide adequate control. If poor performance cannot be attributed to improper application or extreme weather conditions, a resistant strain of insect may be present. If you experience difficulty with control and suspect that resistance is a reasonable cause, immediately consult your local company representative or pest management advisor for the best alternative method of control in your area.

**Lawn Application Recommendations**

Apply Bifenthrin SC as a broadcast treatment. Use application volumes of up to 10 gallons per 1,000 square feet to get a uniform control when treating dense grass foliage.

For low volume applications, less than 2 gallons per 1,000 square feet, immediate irrigation of treated area with at least 0.25 inches of water following application to ensure efficacy of sub-surface pests such as, but not limited to, Mole Crickets, is recommended.

**Application Rates**

The application rates listed in the following table will provide excellent control of the respective pests under typical conditions. However, at the discretion of the applicator, Bifenthrin SC may be applied at up to 1 fl. oz. per 1000 square feet to control each of the pests listed in the table below. The higher application rates should be used when maximum residual control is desired.

Pest	Application Rate	Application Instructions
Armyworms Cutworms Sod Webworm	0.18 - 0.25 fl. oz. per 1000 sq. ft.	For optimum control, delay watering (irrigation) or mowing for 24 hours after application. If the grass area is being maintained at a mowing height of greater than 1 inch, then higher application rates (up to 1 fluid oz. per 1000 square feet) may be required during periods of high pest pressure.
Annual Bluegrass Weevil (Hyperodes)(Adult) Banks Grass Mite Billbugs (Adult) Black Turfgrass Ataenius Adult Centipedes Chinch Bugs Crickets Earwigs Fleas (Adult) Grasshoppers Leafhoppers Mealybugs Millipedes Mites Pillbugs Sowbugs	0.25 - 0.5 fl. oz. per 1000 sq. ft.	<b>Annual Bluegrass Weevil (Hyperodes) adults:</b> Applications should be timed to control adult weevils as they leave their overwintering sites and move into grass areas. This movement generally begins when Forsythia is in full bloom and concludes when flowering dogwood ( <i>Cornus florida</i> ) is in full bloom. Consult your State Cooperative Extension Service for more specific information regarding application timing. <b>Billbug adults:</b> Applications should be made when adult billbugs are first observed during April and May. Degree day models have been developed to optimize application timing. Consult your State Cooperative Extension Service for information specific to your region. In temperate regions, spring applications targeting billbug adults will also provide control of over-wintered chinch bugs. <b>Black Turfgrass Ataenius adults:</b> Applications should be made during May and July to control the first and second generation of black turfgrass ataenius adults, respectively. The May application should be timed to coincide with the full bloom stage of Vanhoutte spiraea ( <i>Spiraea vanhoutte</i> ) and horse chestnut ( <i>Aesculus hippocastanum</i> ). The July application should be timed to coincide with the blooming Rose of Sharon ( <i>Hibiscus syriacus</i> ). <b>Chinch Bugs:</b> Chinch bugs infest the base of grass plants and are often found in the thatch layer. Irrigation of the grass area before treatment will optimize the penetration of the insecticide to the area where the chinch bugs are located. Use higher volume applications if the thatch layer is excessive or if a relatively long mowing height is being maintained. Chinch bugs can be one of the most difficult pests to control in grasses and the higher application rates (Up to 1 fluid oz. per 1000 square feet) may be required to control populations that contain both nymphs and adults during the middle of the summer. <b>Mites:</b> To ensure optimal control of eriophyid mites, apply in combination with the labeled application rate of a surfactant. A second application, five to seven days after the first, may be necessary to achieve acceptable control.

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Pest	Application Rate	Application Instructions
Ants Fleas (Larvae) Imported Fire Ants Japanese Beetle (Adult) Mole Cricket (Adult) Mole Cricket (Nymph) Ticks	0.5 - 1.0 fl. oz. per 1000 sq. ft.	<p><b>Flea larvae:</b> Flea larvae develop in the soil of shaded areas that are accessible to pets or other animals. Use a higher volume application when treating these areas to ensure penetration of the insecticide into the soil. <b>Note:</b> If the lawn area is being treated with Bifenthrin SC at 0.25 fluid ounces per 1000 square feet for adult flea control, then the larval application rate may be achieved by increasing the application volume two- to four-fold.</p> <p><b>Imported Fire Ants:</b> Control will be optimized by combining broadcast applications that will control foraging workers and newly mated fly-in queens with mound drenches that will control existing colonies. If the soil is not moist, then it is important to irrigate before application or use a high volume application. Broadcast treatments should apply 1 fluid oz. per 1,000 square feet. Mounds should be treated by diluting 1 teaspoon of Bifenthrin SC per gallon of water and applying 1 to 2 gallons of finished spray per mound. The mounds should be treated with sufficient force to break their apex and allow the insecticide solution to flow into the ant tunnels. A four foot diameter circle around the mound should also be treated. For best results, apply in cool weather (65-80°F) or in early morning or late evening hours. <b>Note:</b> A spray rig that is calibrated to apply 1 fluid oz. per 1,000 square feet of Bifenthrin SC in 5 gallons per 1,000 square feet contains the approximate dilution (1 teaspoon per gallon) that is required for fire ant mound drenches in the spray tank.</p> <p><b>Mole Cricket adults:</b> Achieving acceptable control of adult mole crickets is difficult because preferred grass areas are subject to continuous invasion during the early spring by this extremely active stage. Applications should be made as late in the day as possible and should be watered in with up to 0.5 inches of water immediately after treatment. If the soil is not moist, then it is important to irrigate before application to bring the mole crickets closer to the soil surface where contact with the insecticide will be maximized. Grass areas that receive pressure from adult mole crickets should be treated at peak egg hatch to ensure optimum control of subsequent nymph populations (see below).</p> <p><b>Mole Cricket nymphs:</b> Grass areas that received intense adult mole cricket pressure in the spring should be treated immediately prior to peak egg hatch. Optimal control is achieved at this time because young nymphs are more susceptible to insecticides and they are located near the soil surface where the insecticide is most concentrated. Control of larger, more damaging, nymphs later in the year may require both higher application rates and more frequent applications to maintain acceptable control. Application should be made as late in the day as possible and should be watered in with up to 0.5 inches of water immediately after treatment. If the soil is not moist, then it is important to irrigate before application to bring the mole crickets closer to the soil surface where contact with the insecticide will be maximized.</p> <p><b>Ticks (including ticks that may transmit Lyme Disease and Rocky Mountain Spotted Fever):</b> Do not make spot application. Treat the entire area where exposure to ticks may occur. Use higher spray volumes when treating areas with dense ground cover or heavy leaf litter.</p>

Pest	Application Rate	Application Instructions
Ants Fleas (Larvae) Imported Fire Ants Japanese Beetle (Adult) Mole Cricket (Adult) Mole Cricket (Nymph) Ticks cont'd.	0.5 - 1.0 fl. oz. per 1000 sq. ft.	<p>Ticks may be reintroduced from surrounding areas on host animals. Retreatment may be necessary to achieve and/or maintain control during periods of high pest pressure. Repeat application is necessary only if there are signs of renewed activity. Repeat application should be limited to no more than once per seven days.</p> <p><b>Deer ticks (<i>Ixodes sp.</i>)</b> have a complicated life cycle that ranges over a two year period and involves four life stages. Applications should be made in the late fall and/or early spring to control adult ticks that are usually located on brush or grass above the soil surface and in mid to late spring to control larvae and nymphs that reside in the soil and leaf litter.</p> <p><b>American dog ticks</b> may be a considerable nuisance in suburban settings, particularly where homes are built on land that was previously field or forest. These ticks commonly congregate along paths or roadways where humans are likely to be encountered. Applications should be made as necessary from mid-spring to early fall to control American dog tick larvae, nymphs and adults.</p>

**In New York State:**

- This product may not be applied to any grass or turf area within 100 feet of a water body (lake, pond, river, stream, wetland, or drainage ditch).
- A single repeat application of Bifenthrin SC may be made if there are signs of renewed insect activity, but not sooner than two weeks after the first application.

**Calculating Dilution Rates:** The following steps should be taken to determine the appropriate dilution of Bifenthrin SC that is required to control specific pests:

- Identify the pest requiring the highest application rate for control in the **Application Rates** chart.
- Select an application rate in terms of fluid oz. of Bifenthrin.
- Identify your application volume and how much spray mix you want to prepare in the **Dilution Chart**.
- Use the **Dilution Chart** to determine the appropriate volume of Bifenthrin SC that must be mixed in your desired volume of water.

For example, to control ticks the Application Rates table shows that 0.5 to 1.0 fluid ounces of Bifenthrin SC should be applied per 1,000 square feet. You select an application rate of 1.0 fluid oz. per 1,000 square feet because maximum residual control is desired. Your application volume is approximately 10 gallons per 1,000 sq. ft. Consulting the Lawn Dilution Chart reveals that you should dilute 1.0 fluid oz. of Bifenthrin SC in 10 gallons of water.

**Lawn Application Dilution Chart**

Application Volume: Gallons Per 1,000 Sq. Ft.	Application Rate: Fluid Ounces Per 1,000 Sq. Ft.	Fluid Ounces* of Bifenthrin SC Diluted to these Volumes of Finished Spray			
		1 gallon	5 gallons	10 gallons	100 gallons
1.0	0.18	0.18	0.90	1.8	18.0
1.0	0.25	0.25	1.25	2.5	25.0
1.0	0.5	0.5	2.5	5.0	50.0
1.0	1.0	1.0	5.0	10.0	100.0
2.0	0.18	-	0.45	0.90	9.0
2.0	0.25	0.13	0.63	1.25	12.5
2.0	0.5	0.25	1.25	2.5	25.0
2.0	1.0	0.5	2.5	5.0	50.0
3.0	0.18	-	0.30	0.60	6.0
3.0	0.25	-	0.42	0.83	8.3
3.0	0.5	0.17	0.83	1.67	16.7
3.0	1.0	0.33	1.67	3.33	33.3
4.0	0.18	-	0.23	0.45	4.5
4.0	0.25	-	0.31	0.63	6.3
4.0	0.5	0.13	0.63	1.25	12.5
4.0	1.0	0.25	1.25	2.5	25.0
5.0	0.18	-	0.18	0.36	3.6
5.0	0.25	-	0.25	0.5	5.0
5.0	0.5	0.1	0.5	1.0	10.0
5.0	1.0	0.2	1.0	2.0	20.0
10.0	0.18	-	-	0.18	1.8
10.0	0.25	-	0.13	0.25	2.5
10.0	0.5	-	0.25	0.5	5.0
10.0	1.0	0.1	0.5	1.0	10.0

\*To convert to millimeters, multiply by 29.57

1 fluid ounce = 29.57 ml = 2 tablespoons

Do not use household utensils to measure Bifenthrin SC.

**Ornamentals and Trees Application Recommendations**

For ornamental applications (including but not limited to trees, shrubs, ground covers, bedding plants, and foliage plants) apply 0.125 to 1.0 fl. oz. of Bifenthrin SC per 1,000 square feet or 5.4 to 43.5 fl. oz. per 100 gallons. Bifenthrin SC may be diluted and applied in various volumes of water providing that the maximum label rate

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(1.0 fluid oz. per 1,000 square feet or 43.5 fl. oz. per 100 gallons.) is not exceeded. Bifenthrin SC may be applied through low volume application equipment by dilution with water or other carriers and providing that the maximum label rate (1.0 fluid oz. per 1,000 square feet or 43.5 fl. oz. per 100 gallons) is not exceeded.

Apply the specified application rate as a full coverage foliar spray. Repeat treatment as necessary to achieve control using higher application rates as pest pressure & foliage increases. Repeat application should be limited to no more than once per seven days.

Certain cultivars may be sensitive to the final spray solution. A small number of plants should be treated and observed for one week prior to application to the entire planting.

Use of an alternate class of chemistry in a treatment program is recommended to prevent or delay pest resistance.

**Application Rates**

The application rates listed in the following table will provide excellent control of the respective pests under typical conditions. However, at the discretion of the applicator, the Bifenthrin SC may be applied at up to 1 fluid oz. per 1,000 square feet. (43.5 fl. oz. per 100 gallons) to control each of the pests listed in this table. The higher application rates should be used when maximum residual control is desired.

Pest	Application Rate	Application Instructions		
Bagworms	0.125 - 0.25 fl. oz. per 1,000 sq. ft. (5.4 - 10.8 fl. oz. per 100 gal.)	<b>Bagworms:</b> Apply when larvae begin to hatch and spray larvae directly. Applications when larvae are young will be most effective.		
Cutworms				
Elm Leaf Beetles				
Fall Webworms				
Gypsy Moth Caterpillars				
Lace Bugs				
Leaf Feeding Caterpillars				
Tent Caterpillars				
Adelgids†			0.25 - 0.5 fl. oz. per 1,000 sq. ft. (10.8 - 21.7 fl. oz. per 100 gal.)	<b>Beetles, Scale Crawlers, Twig Borers, and Weevils:</b> Treat trunks, stems and twigs in addition to plant foliage.
Ants				
Aphids				
Bees				
Beet Armyworm				
Beetles †				
Black Vine Weevil (Adults)				
Brown Soft Scales				
Broad Mites				
Budworms				
California Red Scale (Crawlers)				
Centipedes				
Cicada†				
Citrus Thrips				
Clover Mites				
Crickets				
Diaprepes (Adults)				
Earwigs				
European Red Mite				
Flea Beetles				
Fungus Gnats (Adults)				
Grasshoppers				
Japanese Beetle (Adult)†				
Leafhoppers				
Leafrollers				
Mealybugs				
Millipedes				
Mites				
Mosquitoes				
Orchid Weevil				
Pillbugs				
Pine Needle Scales (Crawlers)				
Plant Bugs (Including <i>Lygus</i> spp.)				
Psyllid†				
San Jose Scales (Crawlers)				
Scorpions				
Sowbugs				
Spider Mites				
Spiders				
Spittlebug†				
Thrips				
Tip Moths				
Treehopper†				
Twig Borers				
Wasps				
Weevils				
Whiteflies				

Pest	Application Rate	Application Instructions
Imported Fire Ants**	0.5 - 1.0 fl. oz. per 1,000 sq. ft. (21.7 - 43.5 fl. oz. per 100 gal.)	<b>Spider Mites:</b> Bifenthrin SC provides optimal twospotted spider mite control when applied during spring to mid-summer. Higher application rates and/or more frequent treatments may be required for acceptable twospotted spider mite control during mid- to late-summer. The addition of a surfactant or horticultural oil may increase the effectiveness of Bifenthrin SC. Combinations of Bifenthrin SC with other registered miticides have also proven effective. Alternately, Bifenthrin SC applications may be rotated with those of other products that have different modes of action in control programs that are designed to manage resistance by twospotted spider mites. Consult your local Cooperative Extension Service for resistance management recommendations in your region.
Leafminers		
Pecan Leaf Scorch Mite		
Pine Shoot Beetle (Adults)		
Spider Mites		

\*\*For foraging ants.  
†Not for use in California

**Calculating Dilution Rates:** The following steps should be taken to determine the appropriate dilution of Bifenthrin SC that is required to control specific pests:

1. Identify the pest requiring the highest application rate for control in the **Application Rates** chart.
2. Select an application rate in terms of fluid oz. of Bifenthrin.
3. Identify your application volume and how much spray mix you want to prepare in the **Dilution Chart**.
4. Use the **Dilution Chart** to determine the appropriate volume of Bifenthrin SC that must be mixed in your desired volume of water.

For example, to control black vine weevil adults on rhododendron, the Application Rates table shows that 0.25 to 0.5 fluid ounces of Bifenthrin SC should be applied per 1,000 square feet. You select an application rate of 0.5 fluid oz. per 1,000 square feet because maximum residual control is desired. Your application volume is approximately 300 gallons per acre, which is equivalent to 6.9 gallons per 1,000 square feet. Consulting the Ornamental Dilution Chart reveals that you should dilute 0.72 fluid oz. of Bifenthrin SC in 10 gallons of water.

**Ornamental Application Dilution Chart**

Application Volume:		Application Rate: fl. oz. per 1,000 sq. ft.	Fluid Ounces* of Bifenthrin SC Diluted to these Volumes of Finished Spray			
Gallons Per	Acre		1 gallon	5 gallons	10 gallons	100 gallons
1,000 sq. ft.						
2.3	100	0.125	-	0.27	0.54	5.4
2.3	100	0.25	0.11	0.54	1.08	10.8
2.3	100	0.5	0.22	1.09	2.17	21.7
2.3	100	1.0	0.44	2.17	4.35	43.5
4.6	200	0.125	-	0.14	0.27	2.7
4.6	200	0.25	-	0.27	0.54	5.4
4.6	200	0.5	0.11	0.54	1.09	10.9
4.6	200	1.0	0.22	1.09	2.17	21.7
6.9	300	0.125	-	-	0.18	1.8
6.9	300	0.25	-	0.18	0.36	3.6
6.9	300	0.5	-	0.36	0.72	7.2
6.9	300	1.0	0.15	0.72	1.45	14.5

\*To convert to millimeters, multiply by 29.57  
300 gallons per acre is a typical application volume for landscape ornamental applications.  
1 fluid ounce = 29.57 ml = 2 tablespoons = 6 teaspoons  
**Do not use household utensils to measure Bifenthrin SC.**

**Pest Control on Outside Surfaces and Around Buildings**

Pests Controlled		
Ants	Dichondra Flea Beetles	Roaches (including Cockroaches)
Carpenter Ants	Earwigs	Scorpions
Fire Ants	Elm Leaf Beetles	Silverfish
Armyworms	Firebrats	Sod Webworms
Bees	Fleas	Sowbugs (Pillbugs)
Beetles	Flies	Spider Mites
Biting Flies	Gnats	Spiders (including Black Widow Spiders)
Boxelder Bugs	Grasshoppers	Springtails
Centipedes	Hornets	Ticks (including Brown Dog Ticks)
Chiggers	Japanese Beetles†	Wasps
Chinch Bugs	Midges	
Clover Mites	Millipedes	
Crickets	Mosquitoes	
Cutworms	Moths	

†Not for use in California.

**Application Recommendations**

Apply Bifenthrin SC using a 0.02 to 0.06% suspension as a residual spray to

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outside surfaces of buildings including, but not limited to, exterior siding, foundations, porches, window frames, eaves, patios, garages, refuse dumps, lawns such as grass areas adjacent to or around private homes, duplexes, townhouses, condominiums, house trailers, apartment complexes, carports, garages, fence lines, storage sheds, barns, and other residential and non-commercial structures, soil, trunks of woody ornamentals and other areas where pests congregate or have been seen. Use a spray volume of up to 10 gallons of emulsion per 1,000 square feet. Higher application volumes may be used to obtain the desired coverage of dense vegetation or landscaping materials.

**Mixing Directions:** For 0.02% suspension, mix 0.33 fluid oz. of Bifenthrin SC per gallon of water. For 0.06% suspension, mix 1 fluid oz. Bifenthrin SC per gallon of water (1 fluid oz. = 2 tablespoons). Do not use household utensils to measure Bifenthrin SC. Use the higher rates for heavy pest infestation, quicker knockdown or longer residual control. Retreatment may be necessary to achieve and/or maintain control during periods of high pest pressure. Repeat application is necessary only if there are signs of renewed insect activity. Repeat application should be limited to no more than once per seven days.

**Perimeter Treatment:** Apply to a band of soil and vegetation 6 to 10 feet wide around and adjacent to the structure. Also, treat the foundation of the structure to a height of 2 to 3 feet. Apply 0.33 to 1.0 fluid oz. of Bifenthrin SC per 1,000 square feet in sufficient water to provide adequate coverage (refer to Perimeter Application Dilution Chart).

**For Ant and Fire Ant Mounds use Bifenthrin SC 0.06% emulsion as Drench Method:** Apply 1-2 gallons of emulsion to each mound area by sprinkling the mound until it is wet and treat a 4 foot diameter circle around the mound. Use the higher volume for mounds larger than 12". For best results, apply in cool weather, such as in early morning or late evening hours, but not in the heat of the day.

**Mosquito Control:** Dilute 0.33 to 1.0 fl. oz. of Bifenthrin SC per gallon of water and apply at the rate of one gallon of dilution per 1,000 square feet as a general spray around landscapes, lawn and buildings to control mosquitoes. For higher volume applications, Bifenthrin SC may be diluted at lower concentrations and applied at greater volumes to deliver the desired amount of product per area (refer to the Ornamental or Perimeter Application Dilution Charts).

**Calculating Dilution Rates:** The following steps should be taken to determine the appropriate dilution of Bifenthrin SC that is required to control specific pests:

1. Select an application rate in terms of fluid oz. of Bifenthrin.
2. Identify your application volume and how much spray mix you want to prepare in the Dilution Chart.
3. Use the **Dilution Chart** to determine the appropriate volume of Bifenthrin SC that must be mixed in your desired volume of water.

**Perimeter Application Dilution Chart**

Application Volume: Gallons Per 1,000 Sq. Ft.	Application Rate: Fluid Ounces Per 1,000 sq. ft.	Fluid Ounces* of Bifenthrin SC Diluted to these Volumes of Finished Spray			
		1 gallon	5 gallons	10 gallons	100 gallons
1	0.33	0.33	1.67	3.33	33.3
1	0.5	0.5	2.5	5.0	50.0
1	0.67	0.67	3.33	6.67	66.7
1	0.75	0.75	3.75	7.5	75.0
1	1.0	1.0	5.0	10.0	100.0
2	0.33	0.17	0.83	1.65	16.5
2	0.5	0.25	1.25	2.5	25.0
2	0.67	0.33	1.67	3.35	33.5
2	0.75	0.38	1.88	3.75	37.5
2	1.0	0.5	2.5	5.0	50.0
3	0.33	0.11	0.55	1.10	11.0
3	0.5	0.17	0.83	1.67	16.7
3	0.67	0.22	1.11	2.23	22.3
3	0.75	0.25	1.25	2.5	25.0
3	1.0	0.33	1.67	3.33	33.3
4	0.33	-	0.41	0.83	8.3
4	0.5	0.13	0.63	1.25	12.5
4	0.67	0.17	0.84	1.67	16.7
4	0.75	0.19	0.94	1.88	18.8
4	1.0	0.25	1.25	2.5	25.0
5	0.33	-	0.33	0.67	6.7
5	0.5	0.1	0.5	1.0	10.0
5	0.67	0.13	0.67	1.33	13.3
5	0.75	0.15	0.75	1.5	15.0
5	1.0	0.2	1.0	2.0	20.0
10	0.33	-	0.17	0.33	3.3
10	0.5	-	0.25	0.5	5.0
10	0.67	-	0.33	0.67	6.7
10	0.75	-	0.38	0.75	7.5
10	1.0	0.1	0.5	1.0	10.0

\*To convert to milliliters, multiply by 29.57

1 fluid oz. = 29.57 ml = 2 tablespoons = 6 teaspoons

Do not use household utensils to measure Bifenthrin SC.

### TERMITE CONTROL (ABOVE GROUND ONLY)

The purpose of the applications described below is to kill termite workers or winged

reproductives that may be present at the time of treatment. These applications are intended as supplements to, and not substitutes for, mechanical alteration, soil treatment or foundation treatment.

To control exposed workers and winged reproductive termites in localized areas, dilute 1.0 fluid ounce of Bifenthrin SC per gallon of water and apply as a course fan spray at the rate of one gallon per 1,000 square feet to attics, crawl spaces, unfinished basements and other void areas. Treat swarming termites as well as the areas in which they congregate.

To control above-ground termites in localized areas of infested wood, dilute 1.0 fluid oz. of Bifenthrin SC per gallon of water and apply as a liquid or foam to voids and galleries in damaged wood as well as to spaces between wooden structural members and between the sill plate and foundation where wood is vulnerable to attack. Applications may be made to inaccessible areas by drilling and then injecting the dilution or foam, with a suitable directional injector, into damaged wood or wall voids. All treatment holes drilled in construction elements in commonly occupied areas of structures should be securely plugged after treatment.

To control termite carton nests in building voids, dilute 1.0 fluid oz. of Bifenthrin SC per gallon of water and apply as liquid or foam using a pointed injection tool. Multiple injection points and varying depths of injection may be necessary to achieve control. When possible, the carton nest material should be removed from the building void after treatment.

### ANT CONTROL

**Nuisance Ants Indoors:** For best results, locate and treat ant nests. Dilute 0.5 to 1.0 fluid oz. of Bifenthrin SC per gallon of water and apply at the rate of one gallon of dilution per 1,000 square feet as a general surface, crack and crevice or spot treatment to areas where ants have been observed or are expected to forage. These areas include, but not limited to, baseboards, in and behind cabinets, under and behind dishwashers, furnaces, refrigerators, sinks and stoves, around pipes, cracks and crevices and in corners. Particular attention should be given to treating entry points into the home or premises such as around doors and windows. When using Bifenthrin SC in combination with baits, apply Bifenthrin SC as instructed above, and use baits in other areas that have not been treated with Bifenthrin SC.

**Nuisance Ants Outdoors:** For best results, locate and treat ant nests. Apply Bifenthrin SC to ant trails around doors and windows and other places where ants have been observed or are expected to forage. Apply a perimeter treatment using either low or high volume applications described in the "Pest Control on Outside Surfaces and Around Buildings" section of this label. The higher dilutions and/or application volumes, as well as more frequent applications, may be necessary when treating concrete surfaces for ant control. Maximum control is generally achieved using the following procedure:

1. Treat non-porous surfaces with low volume applications using 0.5 to 1.0 fluid oz. of Bifenthrin SC per gallon of water and applying this dilution at the rate of one gallon per 1,000 square feet.
2. Treat porous surfaces and vegetation with high volume applications using dilutions that are calculated to deliver 0.5 to 1.0 fluid oz. of Bifenthrin SC per 1,000 square feet (refer to the Ornamental and Perimeter Application Dilution Charts).
3. For maximum residual control, dilute 0.5 to 1.0 fluid oz. of Bifenthrin SC per gallon of water and apply at a rate of up to 10 gallons of dilution per 1,000 square feet.

**Carpenter Ants Indoors:** Dilute 0.5 to 1.0 fluid oz. of Bifenthrin SC per gallon of water and apply at the rate of one gallon of dilution per 1,000 square feet as a general surface, crack and crevice or spot treatment to areas where carpenter ants have been observed or are expected to forage. These areas include, but are not limited to, baseboards, in and behind cabinets, under and behind dishwashers, furnaces, refrigerators, sinks, and stoves, around pipes, cracks and crevices, and in corners. Particular attention should be given to treating entry points into the home or premises such as around doors and windows. Spray or foam into cracks, into crevices or drill holes and spray, mist or foam into voids where carpenter ants or their nests are present. When using Bifenthrin SC in combination with baits, apply Bifenthrin SC as instructed above, and use baits in other areas that have not been treated with Bifenthrin SC.

**Carpenter Ants Outdoors:** Apply Bifenthrin SC to carpenter ant trails around doors and windows and other places where carpenter ants have been observed or are expected to forage. For best results, locate and treat carpenter ant nests. Apply a perimeter treatment using either low or high volume applications described in the "Pest Control on Outside Surfaces and Around Buildings" section of this label. The higher dilutions and/or application volumes, as well as more frequent applications, may be necessary when treating concrete surfaces for carpenter ant control. Maximum control is generally achieved using the following procedure:

1. Treat non-porous surfaces with low volume applications using 0.5 to 1.0 fluid oz. of Bifenthrin SC per gallon of water and applying this dilution at the rate of one gallon per 1,000 square feet.
2. Treat the trunks of trees that have carpenter ant trails, or upon which carpenter ants are foraging, using 0.5 to 1.0 fl. oz. of Bifenthrin SC per gallon of water and applying this dilution to thoroughly wet the bark from the base of the tree to as high as possible on the trunk
3. Treat porous surfaces and vegetation with high volume applications using dilutions that are calculated to deliver 0.5 to 1.0 fluid oz. of Bifenthrin SC per 1,000 square feet (refer to the **Ornamental and Perimeter Application Dilution Charts**).
4. For maximum residual control, dilute 0.5 to 1.0 fluid oz. of Bifenthrin SC per gallon of water and apply at a rate of up to 10 gallons of dilution per 1,000.

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To control carpenter ants inside trees, utility poles, fencing or deck materials and similar structural members, drill to locate the interior infested cavity and inject or foam a 0.06% dilution (1.0 fl. oz. of Bifenthrin SC per gallon of water) into the cavity using a sufficient volume and an appropriate treatment tool with a splash-back guard.

To control carpenter ants that are tunneling in the soil, dilute 0.5 to 1.0 fluid ounces of Bifenthrin SC per gallon of water and apply as a drench or inject the dilution or foam at intervals of 8 to 12 inches. Establish a uniform vertical barrier at the edges of walls, driveways or other hard surfaces where ants are tunneling beneath the surfaces.

For wood piles and stored lumber apply a 0.06% emulsion. Use a hose-end sprayer or sprinkling can to deliver a coarse drenching spray. Treated wood can be burned or used for lumber one month after treatment. Do not use in structures.

To protect firewood from carpenter ants, dilute 1.0 fluid oz. of Bifenthrin SC per gallon of water and apply to the soil beneath where the firewood will be stacked at the rate of one gallon of dilution per 8 square feet. DO NOT treat firewood with this product.

**Imported Fire Ant Quarantine Treatment**

Against Imported Fire Ants (IFA) in Potting Media (including balled and containerized nursery grown ornamental trees, shrubs, plants, flowers, conifers, bushes, Christmas trees, and non-bearing fruit and nut trees), this product is approved and can be used in accordance with the USDA Imported Fire Ant Quarantine Program. This product may be applied either soil incorporated, as a topical application, or as a high volume drench treatment.

**Soil Incorporation:** Incorporate the appropriate volume of this product (see table below) per cubic yard of potting media by diluting it in water (typically 1 quart to 1 gallon per cubic yard of media) and sprinkling or spraying it onto the media. The applications are based on the dry bulk density of the potting media. When used in accordance with USDA guidelines, this application will provide a 6 month certification period.

**Recommended Soil Incorporation Rate of Bifenthrin SC  
for Control of IFA in Potting Media**

Potting Media Bulk Density (lbs per cubic yard)	Fluid Ounces of Bifenthrin SC in One Cubic Yard
200	1.9
400	3.8
600	5.7
800	7.6
1000	9.5
1200	11.4
1400	13.3

Use proportional amounts of this product for potting media with bulk densities not listed.

**Topical Application:** Mix this product in 1,000 ounces of water based on container size and bulk density of the potting media (see table on following page). Apply one (1) ounce of the mix to each container evenly distributed over the surface of the potting media. Irrigate all treated containers with 1.5 inches of water following application. When used in accordance with USDA guidelines, this application will provide a 6 month certification period.

**Recommended Topical Drench Application Rate of Bifenthrin SC  
for Control of IFA in Potting Media**

Potting Media Bulk Density (lbs per cubic yard)	Fluid Ounces of Bifenthrin SC per 1,000 Ounces of Water	
	3 Qt Container	4 Qt Container
200	3.6	5.2
400	7.2	10.4
600	10.8	15.6
800	14.4	20.8
1000	18.0	26.0
1200	21.6	31.2
1400	25.2	36.4

Use proportional amounts of this product for potting media with bulk densities not listed.

**High Volume Drench:** Apply this product as a high volume drench by mixing the appropriate amount of product based on the bulk density in 100 gallons of water (see table below). Apply mix to individual containers to the point of saturation. The amount of mix used for each plant is generally 1/5 the volume of the container. When used in accordance with USDA guidelines, this application will provide a 6 month certification period.

**Recommended High Drench Application Rate of Bifenthrin SC  
for Control of IFA in Potting Media**

Potting Media Bulk Density (lbs per cubic yard)	Fluid Ounces of Bifenthrin SC in 100 Gallons
200	2.4
400	4.8
600	7.2
800	9.6
1000	12.0
1200	14.4
1400	16.8

Use proportional amounts of this product for potting media with bulk densities not listed.

**INDOOR USE**

Bifenthrin SC may be used for residual pest control in buildings and structures and on modes of transport.

In the home, all food processing surfaces and utensils should be covered during treatment or thoroughly washed before reuse. Exposed food should be covered or removed.

Remove pets and cover fish aquariums before using.

**Application Recommendations**

Apply either as a crack and crevice, pinstream, spot, coarse, low-pressure spray (25 psi or less) or with a paint brush. Apply to areas where pests hide, such as baseboards, corners, storage areas, closets, around water pipes, doors and windows, attics and eaves, behind and under refrigerators, cabinets, sinks, furnaces, stoves, the underside of shelves, drawers and similar areas. Do not use as a space spray. Pay particular attention to cracks and crevices.

Bifenthrin SC is to be diluted with water for spray or brush application. Fill sprayer with the desired volume of water and add Bifenthrin SC. Close and shake before use in order to insure proper mixing. Mix only the amount of solution needed for the application. Retreatment may be necessary to achieve and/or maintain control during periods of high pest pressure. Repeat application is necessary only if there are signs of renewed insect activity. Repeat application should be limited to no more than once per seven days.

**Mixing Directions:** For 0.02% suspension, mix 0.33 fluid oz. of Bifenthrin SC per gallon of water. For 0.06% suspension, mix 1 fluid oz. Bifenthrin SC per gallon of water (1 fluid oz. = 2 tablespoons). Do not use household utensils to measure Bifenthrin SC. Use the higher rates for heavy pest infestation, quicker knockdown or longer residual control.

Pest	Application Rate	Application Instructions
Ants	0.33 - 1.0 fl. oz. per gallon of water (0.02% - 0.06% suspension)	<b>Ants:</b> Apply to any trails, around doors and windows and other places where ants may be found.
Bedbugs		<b>Bedbugs:</b> To aid in the control of Bedbugs, a thorough application should be made to crack and crevices where evidence of bedbugs occurs. This includes bed frames, box springs, inside empty dressers and clothes closets, carpet edges, wall moldings (high and low), and wallpaper edges. Do not use this product on bed linens, pillows, mattresses, or clothes. Remove all clothes and other articles from dressers or clothes closets before application. Allow all treated areas to thoroughly dry before use. Not recommended for use as sole protection against bedbugs. If evidence of bedbugs is found in/on mattresses, use a product approved for this use.
Bees		<b>Bees and Wasps:</b> Application to nests should be made late in the evening when insects are at rest. Thoroughly spray nest and entrance and surrounding areas where insects alight.
Beetles		<b>Boxelder Bugs, Centipedes, Earwigs, Beetles, Millipedes, Pillbugs, and Sowbugs:</b> Apply around doors and windows and other places where these pests may be found or where they may enter premises. Spray baseboards, storage areas and other locations.
Boxelder bugs		<b>Cockroaches, Crickets, Firebrats, Scorpions, Silverfish, Spiders, and Ticks:</b> Apply as a coarse, low pressure spray to areas where these pests hide, such as baseboards, corners, storage areas, closets, around water pipes, doors and windows, attics and eaves, behind and under refrigerators, cabinets, sinks, furnaces, and stoves, the underside of shelves, drawers, and similar areas. Pay particular attention to cracks and crevices.
Carpet beetles		
Centipedes		
Clothes moths		
Cockroaches		
Crickets		
Earwigs		
Firebrats		
Flies		
Gnats		
Midges		
Millipedes		
Pillbugs		
Scorpions		
Silverfish		
Sowbugs		
Spiders		
Ticks		
Wasps		

**Food Handling Establishments**

Applications of this product are permitted in both food/feed and nonfood/ areas of food/feed handling establishments as a general surface, spot, or crack and crevice treatment.

Food/feed handling establishments are defined as places other than private residences in which exposed food/feed is held, processed, prepared or served. Included also are areas for receiving, storing, packing (canning, bottling, wrapping, boxing), preparing, edible waste storage and enclosed processing systems (mills, dairies, edible oils, syrups) of food. Serving areas where food is exposed and the facility is in operation are also considered food areas.

Permitted non-food areas of use include garbage rooms, lavatories, floor drains (to sewers), entries and vestibules, offices, locker rooms, machine rooms, garages, mop closets and storage (after canning or bottling).

Permitted use sites include, but are not limited to: Aircraft (do not use in aircraft cabins), apartment buildings; bakeries, bottling facilities, breweries, buses, cafeterias, candy plants, canneries, dairy product processing plants, food manufacturing

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plants, food processing plants, food service establishments, granaries, grain mills, hospitals, hotels, industrial buildings, laboratories, meat/poultry/egg processing plants, mobile/motor homes, nursing homes, offices, railcars, restaurants, schools, ships, trailers, trucks, vessels, warehouses and wineries.

**General Surface Application:** Do not use this application method in food/feed handling establishments when the facility is in operation or foods/feeds are exposed. Do not apply directly to food products. Cover or remove all food processing and/or handling equipment during application. After application in food processing plants, bakeries, cafeterias and similar facilities, wash all equipment, benches, shelving and other surfaces which food will contact. Clean food handling or processing equipment and thoroughly rinse with clean, fresh water.

**Spot, Crack and Crevice Application:** Spot or crack and crevice applications may be made while the facility is in operation; however, food should be covered or removed from area being treated. Do not apply directly to food.

**Foam Applications:** Bifenthrin SC may be converted to foam and used to treat structural voids. Dilute 0.33 to 1.0 fluid oz. of Bifenthrin SC per gallon of water and add the manufacturers recommended volume of foaming agent to produce a 0.02 to 0.06 percent foam concentration. Verify before treatment that the foaming agent is compatible with Bifenthrin SC.

### Attention

Do not apply a broadcast application to interior surfaces of homes.  
Do not apply to pets, crops, or sources of electricity.  
Firewood is not to be treated.  
Use only in well-ventilated areas.  
During any application to overhead areas of structure, cover surface below with plastic sheeting or similar material except for soil surfaces in crawlspaces.  
Do not allow spray to contact food, foodstuffs, food-contacting surfaces or food utensils or water supplies.  
Thoroughly wash dishes and food handling utensils with soap and water if they become contaminated by application of this product.  
Do not treat areas where food is exposed.  
During indoor surface applications do not allow dripping or runoff occur.  
Do not allow people or pets on treated surfaces until spray has dried.  
Let surfaces dry before allowing people and pets to contact surface.  
Bifenthrin SC will not stain, or damage any surface that water alone will not stain or damage.  
Do not apply this product in patient rooms or in any rooms while occupied by the elderly or infirm.  
Do not apply in classrooms when in use.  
Do not apply when occupants are present in the immediate area in institutions such as libraries, sports facilities, etc.  
Do not apply this product in livestock buildings (barns).  
Application equipment that delivers low volume treatments, such as Micro-Injector® or Actisol® applicators, may also be used to make crack and crevice, deep harborage, spot and general surface treatments of Bifenthrin SC.

**CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY BEFORE BUYING OR USING THIS PRODUCT,** read the entire Directions for Use and the following Conditions of Sale and Limitation of Warranty and Liability. By buying or using this product, the buyer or user accepts the following Conditions of Sale and Limitation of Warranty and Liability, which no employee or agent of LOVELAND PRODUCTS, INC. or the seller is authorized to vary in any way.

Follow the Directions for Use of this product carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop or other plant injury, ineffectiveness, or other unintended consequences may result from such risks as weather or crop conditions, mixture with other chemicals not specifically identified in this product's label, or use of this product contrary to the label instructions, all of which are beyond the control of LOVELAND PRODUCTS, INC. and the seller. The buyer or user of this product assumes all such inherent risks.

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