51036-392 09/08/2005 1/23

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

SEP 8 2005

Mr. Bill Washburn
Micro Flo Company LLC
530 Oak Court Drive, Suite 100
Memphis, TN 38117

Subject: Amendment - Paraphrased Labeling
Bifenthrin 7.9% FL TC
EPA Reg. No. 51036-392
Your submission dated May 2, 2005

Dear Mr. Washburn:

The application referred to above, submitted in connection with registration under Federal Insecticide, Fungicide, and Rodenticide Act, 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 label is enclosed for your records.

1. Reinstate the front panel referral statement, "See other panels for additional precautionary statements".

2. Delete "this" in the second paragraph under General Information.

3. On page 4 under Use Recommendations for Subterranean termite control reinstate, "Note: Crawl spaces are to be considered inside the structure".

If you have any question in regard to this letter please feel free to contact me at 703-305-6100.

Sincerely,

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

Enclosure

2/22

BIFENTHRIN 7.9% FL TC

This product may be used as a termiticide. When this product is 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 structural pest control regulatory agency of your State prior to use of this product.

For control of crawling, flying and wood-infesting insect pests for indoor and outdoor surfaces, as well as insect pests of landscape ornamentals and residential and commercial turf.

ACTIVE INGREDIENT:	By Wt.
Bifenthrin*	7.9%
INERT INGREDIENTS	92.1%
TOTAL:	100.0%

BIFENTHRIN 7.9% FL TC contains 2/3 pound active ingredient per gallon.
*Cis isomers 97% minimum, trans isomers 3% maximum.

ACCEPTED
with COMMENTS
In EPA Letter Dated:
SEP 8 2005
Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 51036-392

KEEP OUT OF REACH OF CHILDREN

CAUTION

FIRST AID

IF SWALLOWED: Call a physician or 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 a poison control center or doctor.
IF INHALED: Remove person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth. Call a poison control center or doctor for further treatment advice.
IF ON SKIN OR CLOTHING Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
IF IN EYES: Hold eyes open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing. Call a poison control center or doctor for treatment advice.
NOTE TO PHYSICIAN: 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.

Have the product container or label with you when calling a poison control center or doctor or going for treatment.

EPA Reg. No. 51036-392 **EPA Est. No. 51036-GA-001**
AD xxxxxx
NET CONTENTS: _____

Manufactured By:
MICRO FLO COMPANY LLC
P.O. BOX 772099
MEMPHIS, TN 38117

3/23

EMERGENCY TELEPHONE NUMBERS:
(800) 424-9300 (CHEMTREC, transportation and spills)
(800) 832-HELP (1-800-832-4357)(human health)
(800) 345-4735 (ASPCA, animal health)

PRECAUTIONARY STATEMENTS
Hazards to Humans (and Domestic Animals)

CAUTION. Harmful if swallowed, inhaled or absorbed through skin. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Avoid breathing spray mist. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

All pesticide handlers (mixers, loaders and applicators) must wear:
1. Long sleeved shirt and long pants
2. Shoes plus socks
3. 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 (such as U-Turn®), 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[1] when working in a non-ventilated space. All pesticide handlers must wear protective eyewear when working in a non-ventilated space or when applying termiticide by rodding or sub-slab injection.

[1]Use one of the following Mine Safety and Health Administration (MSHA) /National Institute for Occupational Safety and Health (NIOSH) air purifying respirator types with approval number prefixes such as:
- TC-23C, TC-21C, TC-19C, TC-13F and TC-14G.
- Or a 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.

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 application 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 drift to blooming crops if bees are visiting the treatment area.

DIRECTIONS FOR USE

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

PROHIBITIONS:

Do not apply this product through any type of irrigation system.
Do not apply this product by air.
Do not apply this product in greenhouses.
Do not apply this product in nurseries.
Do not apply this product on grass grown for seed.
Do not apply this product on golf course turf.
Do not apply this product on sod farm turf.

STORAGE AND DISPOSAL

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

Pesticide Storage: Open dumping is prohibited. Do not store this product near fertilizers, seeds, or other pesticides.

Keep this product out of reach of children and animals at all times. Store this product in a cool, dry place in its original container only. Do not expose the product to excessive heat. Open the product container carefully and, after use, replace the container lid by thoroughly tightening the screw cap. Keep product containers tightly closed when not in use. Damaged or leaking containers should be discarded. Do not put concentrated or diluted product into containers that are used for food or drink.

For safety and prevention of unauthorized use, all pesticides should be stored in locked facilities. To prevent accidental misuse, different pesticides should be stored in separate areas with enough distance between the pesticides to provide clear identification.

To Contain a Spill: If the product is a liquid, surround the spill with a barrier and then absorb liquid by covering it with cat litter, sand or a commercial clay. If the product is dry material, cover the spilled product to prevent the material from spreading. If the product container is damaged, place the entire container along with the product in a secure receptacle and clearly label the contents. For any type of product spill, avoid contact with the spilled product and evacuate the area, keeping all unprotected persons and animals at a safe distance.

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 by 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.

GENERAL INFORMATION

This product is for the prevention and control of termite infestations in and around buildings and new construction. Do not use this product on plants grown for sale, for research purposes, for commercial seed production or for any other commercial use. This product is intended for use only on plants grown for aesthetics uses or for climatic alteration such as plants in interior plantscapes, ornamental gardens, parks and lawns.

In order to protect the wood from the termites in the soil, the product must be dispersed in the soil as a dilute emulsion. To improve results, it is recommended that all stray wood and other debris containing cellulose be removed from areas around the wall foundations including porches and crawl spaces. Reducing termite access to water is also recommended (e.g., fix any leaking plumbing fixtures and check for proper construction grade). Applicators should treat soil that this is in contact with untreated structural wood (instructions below)..

Effective use of this product requires knowledge of standard termite control techniques including: trenching, rodding, subslab injection, coarse fan spray of soil surfaces, crack and crevice injection, void treatments, excavated soil treatment and brush or spray applications to wood. The above techniques must be performed correctly in order for use of the product to be effective against subterranean termites. The applicator using the product should determine which subterranean termite is present (e.g., *Coptotermes*, *Heterotermes*, etc.) in order to select the most effective termite control technique. In addition, the applicator should consider applicable water table, grade and soil type and soil compaction. Other factors to consider include structure design and the location of air conditioning, heating, ventilation, water supplies and utilities. Consult resources for structural pest control and state cooperative extension service and/or regulatory agencies, for current control practices with relation to specific local conditions.

5/23

Contact the applicable state structural pest control agency, cooperative extension agency and/or regulatory agency for information about specific local conditions affecting termite control.

USE RECOMMENDATIONS FOR SUBTERRANEAN TERMITE CONTROL

NOTICE: Prevent the contamination of water supplies by following these instructions: Do not treat soil that is water saturated or frozen. Do not treat soil if runoff or seepage of the product to other areas is likely to occur. Do not contaminate wells or cisterns. Follow any state and local guidelines providing recommended minimum distances of product application from wells. Use anti-backflow devices or an established air-gap to prevent contamination of water sources when filling water holding tanks. The Federal Housing Administration Specification (H.U.D.) can also provide recommendations for the prevention of water contamination.

Areas that are highly important for treatment include: locations where utility services enter the structure, cracks, expansion joints, bath traps and places where cement structures contact the foundation (e.g., stairs, patios and slabs).

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 the label. Mix thoroughly into the soil taking care to contain the liquid and prevent run-off or spillage.

    c. After the treated soil has absorbed the diluted emulsion, replace the treated 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 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 offsite movement of termiticide.

Do not use this product near wells or cisterns without first determining the permitted treatment practices for the applicable location from state, local or federal government agencies.

Subterranean Termite Application Rates: 0.06% or 0.12% emulsion.
Use the specific rates listed on this label for other pests.

6/23

Mixing Directions: Mix the termiticide use dilution in the following manner: Fill tank 1/4 to 1/3 full. Start pump to begin by-pass agitation and place end of treating tool in tank to allow circulation through hose. Add appropriate amount of BIFENTHRIN 7.9% FL TC. Add remaining amount of water. Let pump run and allow recirculation through the hose for 2 to 3 minutes.

This product can also be mixed into full tanks of water, however, this will require extensive and thorough mixing in order to create a uniform emulsion.

To prepare a water emulsion of 0.06%, dilute 3 quarts of product (BIFENTHRIN 7.9% FL TC) in 99.25 gallons of water.

Use the following chart to determine the amount of product and water needed to create a given volume of emulsion.

BIFENTHRIN 7.9% FL TC			
Emulsion Concentration	**Quantity of BIFENTHRIN 7.9% FL TC**	**Quantity Of Water**	**Gallons Desired of Finished Emulsion**
0.06%	1 fl. oz.	127 fl. oz.	1 gal.
	5 fl. oz.	4.9 gal.	5 gal.
	10 fl. oz.	9.9 gal.	10 gal.
	25 fl. oz.	24.8 gal.	25 gal.
	1.5 qts.	49.6 gal.	50 gal.
	2.25 qts.	74.4 gal.	75 gal.
	3 qts.	99.25 gal.	100 gal.
	4.5 qts.	148.8 gal.	150 gal.
	6 qts.	198.5 gal.	200 gal.
0.12%*	2 fl.oz.	126 oz.	1 gal.
	10 fl.oz.	4.9 gal.	5 gal.
	19.5 fl. oz.	9.8 gal.	10 gal.
	1.5 qts.	24.6 gal.	25 gal.
	3 qts.	49.2 gal.	50 gal.
	4.5 qts.	73.8 gal.	75 gal.
	6 qts.	98.5 gal.	100 gal.
	9 qts.	147.7 gal.	150 gal.
	3 gal.	197 gal.	200 gal.

Common units of measure:
1 pint = 16 fluid ounces (oz.)
1 quart = 2 pints = 4 cups = 32 fluid ounces (fl. oz.)

*Termite applications: Use this rate only in conjunction with the application volume adjustments as listed below, in the subterranean section or the foam application section.

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 label directed rates and a continuous barrier can still be achieved.

The volume of the 0.12% emulsion may, if desired, be reduced by ½ the labeled volume for pre and post construction applications. (See the Volume Adjustment Chart below.)

Note: When reducing the volume, the hole spacing for subslab injection and soil rodding may require proportional adjustment.

Volume Adjustment Chart		
Rate - % emulsion	**0.06%**	**0.12%**
Allowable volume		
Horizontal (gals. emulsion/10 ft^2)	1.0 gals	0.5 gals
Vertical (gals. emulsion/10 linear ft.)	4.0 gals	2.0 gals

After Treatment: All holes in commonly occupied areas into which BIFENTHRIN 7.9% FL TC 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.

For pre-construction subterranean termite control, establish a vertical and/or horizontal barrier using the 0.06% emulsion. Follow the procedures in the most recent edition of the Housing and Urban Development Minimum Property Standards (ex: refer to U.S.D.A. Home and Garden Bulletin No. 64).

Barriers - Horizontal
Wherever treated soil will be covered by a concrete slab (such as slab floors, and carports) or soil bounded by crawl space foundations, create a horizontal barrier.

Apply 1 gallon of dilution (0.06%) per 10 square feet, or use 1 fl. oz. of this product per 10 sq. ft. To allow a thorough coverage of the treatment area, dilute the product in no less than 1/2 gallon of water and not more than 2 gallons of water.

If the soil substrate is covered by coarse fill, use a sufficient amount of dilution so that it penetrates the fill and reaches the soil.

Apply the dilution using a coarse spray nozzle and a low-pressure spray (less than 50 psi). If the slab is not scheduled to be poured on the treated area the same day of treatment (and the area is not surrounded by foundation walls), cover the treated area with waterproof sheeting.

Barriers - Vertical

For soil that is back-filled against foundation walls or is otherwise proximal to the base of a foundation, a vertical barrier must be established. You must also establish vertical barriers at such critical areas as plumbing and utility entrances.

Apply 4 gallons (0.06% AI) of dilution per 10 linear feet per foot of depth or 4 fl. oz. this product per 10 linear feet per foot of depth from grade to top of footing. To provide thorough treatment, dilute the product in no less than 2 gallons of water and no more than 8 gallons of water.

When applying the product by trenching and rodding, apply the emulsion so that it reaches the top of the footing. Space the rod holes evenly, and no more than 12" apart. Do not apply the product in a manner that causes soil wash-out around the footing. Trenches should not be more than 6 inches wide. Mix the product emulsion with the soil as it is replaced in the trench.

An inside vertical barrier may not be needed for monolithic slabs.

Treat hollow block voids at a rate of 2 gals of emulsion (0.06%) per 10 linear feet so that the emulsion reaches 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.

8/23

POST CONSTRUCTION SUBTERRANEAN TERMITE TREATMENT

For post-construction treatment, apply a 0.06% emulsion by injection, trenching and rodding into the trench, trenching, or coarse fan spray (maximum of 25 psi at the nozzle). Avoid soil wash-out around the footing.

Before application of the emulsion, locate and identify wells, radiant heat pipes, water, sewer and electrical lines. When treating the area, use care to avoid puncturing these items.

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.

Slab Applications

Create vertical barriers outside a structure by trenching and rodding into the trench. Vertical barriers inside a structure may be created by sub-slab injection techniques. Use 4 gallons of emulsion per 10 linear feet per foot of depth. It is important to distribute the treatment evenly. Do not extend the treatment below the bottom of the footing.

Apply the 0.06% emulsion into the trench along the outside of the foundation. If necessary, also apply the emulsion under the slab on the inside of the foundation walls, under the slab along both sides of interior footing-supported walls, one side of interior partitions and along cracks and expansion joints. Horizontal barriers may be created by long-rod application or by grid pattern injection through the slab.

Drill holes in the foundation or slab should be evenly spaced, but no more than 12" apart.

If the foundation is less than 1 foot deep, dig an approximate 6-inch wide trench along each of the foundation walls. Do not dig the trench below the bottom of the footing. Apply the emulsion to the trench and soil as the soil is replaced at a rate of 4 gallons of emulsion per 10 linear feet per foot of depth.

If the foundation is deeper than 1 foot, use the application rate listed for basement treatments.

Apply a 0.06% emulsion on exposed soil and wood in bath traps.

Basement Applications

If the footing is greater than 1 foot deep, measuring from grade to the bottom of the foundation, apply the product by trenching and rodding into the trench or trenching. Apply the product at a rate of 4 gallons of emulsion per 10 linear feet per foot of depth.

If the footer is more than 4 feet below grade, apply the product by trenching and rodding into the trench or by trenching along the foundation walls. Apply the product at a rate of 4 gallons of emulsion per 10 linear feet for a minimum of four feet of depth.

Space the rod holes evenly, but no more than 12 inches apart. Although treatment depth may vary depending on the soil type and condition and the location of termites, never apply the product below the footer. The product also may be applied by sub-slab injection along the inside of the foundation walls, along both sides of the interior footing-supported walls, interior partition walls, along cracks, and around conduits, piers and pipes.

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.

1. Rod holes and trenches must not extend below the bottom of the footing.

2. Rod holes must be spaced so as to achieve a continuous termiticide barrier but in no case more than 12" apart.

3. 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 to prevent termiticide from flowing out of the trench. The emulsion must be mixed with the soil as it is replaced in the trench.

4. 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.

Inaccessible Crawl Spaces: For inaccessible interior areas, such as areas where there is insufficient clearance between floor joists and ground surfaces to allow applicator access, excavate if possible, and treat according to the instructions for accessible crawl spaces. Otherwise, apply one or a combination of the following 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 psi 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 system 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 the rate of 2 gallons of emulsion per 10 linear feet of footing, using a nozzle pressure of less than 25 psi. 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.

Notice: For treatments behind veneer, do not to drill through structural elements that are located behind the veneer. However, if the veneer is located in front of concrete hollow blocks, it is acceptable to drill and treat behind the veneer and into the concrete blocks at the same time.

Not for use in voids insulated with rigid foam insulation.

Excavation Method: When application is needed in hard-to-treat areas (e.g., around pipes and utility lines that lead downward from the structure to a well or pond, along faulty foundation walls, along fieldstone or rubble walls) use the following techniques:

1. Trench and remove the soil requiring treatment; place it onto a heavy plastic liner or sheeting or a wheelbarrow.

2. Apply the emulsion to the soil at a rate of 4 gallons emulsion per 10 linear feet per foot of depth of the trench. Thoroughly mix the emulsion into the soil, allowing the soil to absorb all of the emulsion. Do not allow the emulsion to spill or seep off the plastic liner/sheeting or out of the wheelbarrow.

3. Replace the treated soil back into the trench after the dilution has absorbed onto the soil.

Notice: Whenever applying the product in a confined or unventilated area, wear goggles (unvented) and a respirator (see "Precautionary Statements" section of this label).

10/23

FOAM

From 0.06 to 0.12% emulsion of this product can be converted to a foam with expansion characteristics from 2 to 40 times.

Localized Application

Foam Applications: The 0.06% Or 0.12% 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.

To ensure that proper application has been made, foam and liquid applications must be consistent with volume and percent active ingredient instructions. The amount of active ingredient and volume of water carrier must be appropriate for an effective treatment. In areas where soil or footer/soil access is below the void, no less than 75% must be applied of the labeled liquid emulsion volume of product and the remaining 25% applied to appropriate areas using foam application. See the use recommendations on the label of the foam manufacturers and the foaming equipment manufacturer.

Generally, foam applications should be used as a supplement to liquid treatments in hard-to-treat areas, especially into voids with soil or footer/soil access below the foam treatment. However, foam-only treatments can be made in areas where concurrent liquid applications are undesirable (indoor voids, etc). It is recommended to use a dry-foam in these cases to limit off-target applications.

Use Recommendation To Soil In Crawl Spaces And Under Slabs For The Prevention Or Control Of Termites
BIFENTHRIN 7.9% FL TC can be applied using foam alone or with a liquid emulsion. Apply either as emulsion, foam, or combination of both using the equivalent of at least 4 gallons (4 fl oz of BIFENTHRIN 7.9% FL TC concentrate) of 0.06% emulsion per 10 linear feet (vertical barrier), or at least 1 gallon (1 fl oz BIFENTHRIN 7.9% FL TC concentrate) of 0.06% emulsion per 10 sq. ft. (horizontal barrier). For a foam only application, apply BIFENTHRIN 7.9% FL TC in sufficient concentration and volume to apply 4 fl oz of concentrate per 10 linear feet or 1 fl oz of concentrate per 10 sq. ft. For example: 4 gals. of 0.06% liquid emulsion per 10 linear feet is equal to 2 gallons of 0.12% emulsion used to generate foam to treat 10 linear feet.

SAND BARRIER TREATMENT AND INSTALLATION

If termites have access to untreated soil they can build mud tubes over treated surfaces. To cut off access to untreated soil, the applicator may fill in cracks and spaces with sand (play sand or builder's sand). Then treat the sand as soil with BIFENTHRIN 7.9% FL TC using the rate listed on this label.

INSTRUCTIONS FOR RETREATMENTS

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 ahd 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.

USE WITH TERMITE BAITS

BIFENTHRIN 7.9% FL TC can be applied to crucial and vulnerable areas of the structure at a rate of 0.06% as a complete, partial or spot barrier treatment. Such areas include: plumbing and utility entry sites, bath traps, expansion joins, foundation cracks and areas with known or suspected infestations.

SPECIFIC PEST CONTROL USE RECOMMENDATIONS

BIFENTHRIN 7.9% FL TC can be applied to underground services (e.g., underground wires, cables, conduits, pipes, etc.) that are located in and outside of structures, in right-of-ways, or for the protection of long range (miles) of installation services to protect against termites and ants.

Use a soil treatment of 0.06% - 0.12% emulsion. Apply 2 gallons of emulsion per 10 linear feet to the bottom of the trench. Allow the emulsion to soak into the soil. Place the services on the treated soil then cover with about 2 inches of fill soil. Next, apply 2 gallons per 10 linear feet of emulsion over the soil surface. For wide trenches, apply the emulsion only to the soil that is located near the services. Effective application requires surrounding the services with a continuous barrier of treated soil.

If the soil will not absorb 2 gallons of emulsion per 10 linear feet (as described above) then use 1 gallon of 0.12% BIFENTHRIN 7.9% FLTC per 10 linear feet of trench. Apply to the bottom of the trench and to the soil covering the services.

Completely fill the trench with treated soil. If necessary, treat the soil surrounding the location at which the service emerges from the ground by trenching/rodding 1 - 2 gallons (maximum) of emulsion into the soil.

Warning: Never treat electrically active underground services.

USE RECOMMENDATIONS FOR POLES, POSTS AND OTHER CONSTRUCTIONS

Applicators may apply a 0.06% emulsion to the soil around fences, landscape ornamentation, signs and other wooden structures to protect against termites.

Poles and posts that have been installed can be treated by sub-surface injection. In addition, treatment can be made by gravity-flow through holes made from the bottom of a trench around the pole or post. Treat the construction on all sides to ensure a continuous barrier. For poles less than 6 inches in diameter, use 1 gallon of emulsion per foot of depth. For poles greater than 6 inches in diameter, use 1.5 gallons of emulsion per foot of depth. For larger wooden structures, use 4 gallons of emulsion per 10 linear feet per foot of depth. In each case, apply the emulsion 6 inches below the bottom of the pole/structure.

USE RECOMMENDATION FOR TREATMENT OF WOOD-IN-PLACE FOR WOOD-INFESTING INSECTS CONTROL

Localized Areas in Structure: **Ants, Carpenter Ants, Termites, and Wood-Infesting beetles such as Old House Borer and Powder Post:** Treat voids and galleries in damaged wood and in spaces between wooden members of a structure and between wood and foundations with a 0.06% emulsion. Apply by fan spray or paint on. Place plastic sheeting directly below overhead areas while spot treating (except in crawl spaces). For difficult areas, the applicator may drill and apply the emulsion into the damaged wood or void spaces using a crack and crevice injector. Do not substitute this treatment for soil treatment, mechanical alternation or fumigation in cases of extensive infestation.

Inject termite carton nests in trees or building voids with 0.06% emulsion. It may be necessary to apply multiple injection points to varying depths. Foam techniques may also be used when treating these carton nests.

INDOOR STINGING INSECT CONTROL

For indoor control of stinging insects such as bees, wasps, hornets and yellow-jackets use a 0.06% emulsion. Apply in the late evening (insects are at rest) by spraying the emulsion liberally into hiding and breeding places (e.g., attic rafters). Contact as many insects as possible with the emulsion. Repeat treatment if insect activity reappears or starts to increase.

NOTICE Before treatment, locate and identify heat pipes, water, sewer and electrical lines. When treating the area, avoid puncturing these items. Never apply the product into electrical fixtures, sockets or switches.

Application inside of Homes: Cover all surfaces and utensils used for food preparation during indoor treatments and/or thoroughly wash surfaces and utensils before use. Do not spray indoor areas with birds and pets; remove all birds and pets from the area before starting the indoor treatments. Remove or cover aquariums before starting the treatment. Prevent people and animals from coming into contact with treated surfaces until the emulsion is fully dried.

When treating overhead interior areas, cover all surfaces below the treatment area with plastic sheeting, liners or similar materials.

When treating overhead areas or applying in poorly ventilated areas, wear protective clothing, goggles (unvented), gloves and a respirator. Do not contact treated surfaces until the emulsion has fully dried.

Do not use in food/feed areas of food/feed handling establishments, restaurants or other areas where food/feed is commercially prepared or processed. Do not use in serving areas while food is exposed or facility is in operation. Serving areas are areas where prepared foods are served such as dining rooms but excluding areas where food may be prepared or held.

In the home, cover all food handling surfaces and cover or remove all food and cooking utensils, or wash thoroughly after treatment. Nonfood/feed areas of food/feed areas are areas such as garbage rooms, lavatories, floor drains (to sewers) entries and vestibules, offices, locker rooms, machine rooms, boiler rooms, garages, mop closets and storage (after bottling or canning).

Not for use in Federally Inspected Meat and Poultry Plants.

Use Recommendation for 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. Use a maximum pressure of 25 psi. Apply the emulsion to the point of run-off.

This product may be used to control wood-infesting insects inside trees, utility poles and fence posts and similar wooden structures. Drill into the wood to locate the infested cavity. Inject a 0.06% emulsion into the cavity.

This product may be used to control bees, wasps, hornets, and yellow-jackets. Make the treatment in the late evening (insects are at rest). Apply the emulsion to nest openings in bushes, and cracks, crevices and ground openings that may contain nests. Saturate these areas with emulsion. Contact as many wasps, hornets, and yellow-jackets as possible.

USE RECOMMENDATIONS FOR PESTS UNDER SLABS

This product may be used to treat infestations of Arthropods (e.g., ants, cockroaches, scorpions) living under slab areas. To treat, drill and inject or by horizontal rodding, inject 1 gallon of a 0.06% to 0.12% emulsion per 10 square feet or 2 gallons of emulsion per 10 linear feet.

Determining the Active Ingredient Content Formula of Finished Spray Mixture:

Use the following formula to determine the percent A.I. (Active Ingredient) that is in the spray tank after mixing BIFENTHRIN 7.9% FL TC:

$$\frac{\text{(Fluid Ounces BIFENTHRIN 7.9\% FL TC added to tank) (7.9)}}{\text{(Gals. finished spray mix) (128)}} = \text{Spray Mix Percent Active Ingredient}$$

GENERAL APPLICATIONS RECOMMENDATIONS AND INSTRUCTIONS

BIFENTHRIN 7.9% FL TC formulation is effective for controlling many kinds of insects. It also is effective for controlling mites on trees and other plants, non-bearing fruit and nut trees (i.e., perennial crops that do not produce a harvestable agricultural commodity during the season of treatment), plants and flowers in interior plantings, athletic fields, and home lawns. This product mixes readily with water.

BIFENTHRIN 7.9% FL TC can be tank-mixed with insect growth regulators and other pesticides. Always observe all precautions and limitation on each product's label when tank mixing. BIFENTHRIN 7.9% FL TC's physical compatibility can vary with different sources of pesticide products and local cultural practices. When considering a tank mixture which has not previously been tested, test the mixtures on a small scale using the intended proportions of products and water to determine the physical compatibility of the mixture.

Unless specified otherwise in the label direction, the following procedure is recommended for preparation of a new tank mix:

a. Add wettable powders to tank water
b. Agitate mixture
c. Add flowables and liquids
d. Re-agitate
e. Add emulsifiable concentrates
f. Agitate again.

Try reversing the order of addition or increase the volume of water, should the mixture be found to be incompatible following the above order of addition.

Notice: Recalibrate the sprayer if additional water is needed in the mixture. Do not let the tank mix stand overnight.

USE RECOMMENDATIONS

LAWNS: Apply the product as a broadcast treatment. To obtain uniform coverage when treating dense grass it may be necessary to apply up to 10 gallons per 1000 sq. ft.

If less than 2 gallons/1000 square feet are applied in the treatment, water the treated area with a minimum of 0.25 inches of water. This is necessary to effectively treat subterranean pests.

LAWN USE APPLICATION RATES

The following table provides recommended application rates of this product for control of the respective pests under normal conditions. However, if desired for maximum residual control, this product can be applied at up to 1 fl. oz. per 1000 sq. ft. to control each of the pests listed in the following table. Use the higher application rates listed in the table for maximum residual control.

Lawn Application Rates
Table 1:

Pests	BIFENTHRIN 7.9% FL TC Application Rate
Armworm[1] Cutworm[1] Sod Webworm[1]	0.18 - 0.25 fl. oz. per 1000 sq. ft.
Annual Bluegrass Weevil (Hyperodes) (Adult)[2] Banks Grass Mite[6] Billbug (Adult)[3] Black Turfgrass Ataenius (Adult)[4] Centipede Chinch Bug[5] Cricket Earwig Flea (Adult) Grasshopper Leafhopper Mealybug Millipede Mite[6] Pillbug Sowbug	0.25 - 0.5 fl. oz. per 1000 sq. ft.
Ant Flea (Larvae)[7] Imported Fire Ant[8] Japanese Beetle (Adult) Mole Cricket (Adult)[9] Mole Cricket (Nymph)[10]	0.5 - 1.0 fl. oz. per 1000 sq. ft.

[1] **Armyworms, Cutworm, and Sod Webworm** – Do not water or mow for 24 hours after application. For grass maintained greater than 1 inch mowing height, higher application rates (up to 1 fl. oz. per 1000 sq. ft.) may be required during high pest pressure.

[2]**Annual Bluegrass Weevil (*Hyperodes*) (adult)**: Time applications to control adult insects as they move from over-wintering sites and to grass areas. Movement generally starts when *Forsythia* is in full bloom and ends when flowering dogwood is in full bloom. Consult your State Cooperative Extension Service for more information.

[3]**Billbug (adult)**: Apply when adult insects are first observed (April and May). Degree-day models are available to determine best application timing. Spring applications will also control over-wintered chinch bugs in temperate regions. Consult your State Cooperative Extension Service for information.

[4]**Black Turfgrass Ataenius (adult)**: Apply during May and July for control of the first and second generation of insects. Apply in May when Vanhoutte spiraea and horse chestnut are blooming. Apply in July when Rose of Sharon is blooming.

[5]**Chinch Bug**: To optimize treatment of the base of grass plants and the thatch area, where the insects are often located, irrigate the grass area before treatment. Higher volume applications should be used if the thatch layer is excessive or if grass height is relatively high. Chinch bugs are difficult pests to control in grasses, thus, higher application rates (up to 1 fluid oz. per 1000 sq. ft) may be required during the middle of the summer.

[6]**Mite**: For best results, apply the labeled application rate in combination with the labeled application rate of a surfactant. A second application may be necessary to achieve acceptable control, five to seven days after the first.

[7]**Flea larvae**: A higher application volume should be used when treating the soil of shaded areas that are accessible to pets and other animals to ensure penetration of the product into the soil. If the lawn area is being treated at the rate of 0.25 fl. oz. per 1000 sq. ft. for adult flea control, the larval application rate should be two- to four-fold of this application volume.

[8]**Imported Fire Ant**: For best results, combine broadcast applications (to control foraging workers and newly mated fly-in queens) with mound drenches (to eliminate existing colonies). If the soil is dry, water before application or use a high volume application. For broadcast treatments, apply 1 fl. oz. per 1,000 sq. ft. Treat mounds by diluting 1 teaspoon of product per gallon of water and applying 1 to 2 gallons of finished spray per mound. A spray rig calibrated to apply 1 fl. oz. per 1,000 square feet of product in 5 gallons per 1,000 sq. ft contains this approximate dilution (1 teaspoon per gallon) in the spray tank. Spray with sufficient force to break the mound apex and allow the insecticide solution to flow into the ant tunnels. In addition, treat the four foot diameter circle surrounding each mound. For optimal control, treat in cool weather (65 - 80°F) or in early morning or late evening hours.

[9]**Mole Cricket (adult)**: Apply as late in the day as possible. If the soil is dry, irrigate before application to bring the insects closer to the soil surface (maximizing contact with the product). Immediately after application, water in with up to 0.5 inches of water. Treat grassy areas that receive pressure from adult mole crickets at peak egg hatch for best control of subsequent nymph populations (see below).

[10]**Mole Cricket Nymph**: Apply as late in the day as possible. If the soil is dry, irrigate before application to bring the insects closer to the soil surface (maximizing contact with the product). Immediately after application, water in with up to 0.5 inches of water. Treat grassy areas that received intense adult mole cricket pressure in the spring immediately prior to peak egg hatch. Higher application rates and more frequent applications may be required to control larger nymphs later in the year.

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).
In New York State, do make a single repeat application of Bifenthrin 7.9% FL TC if there are signs of renewed insect activity, but do not sooner than two weeks after the first application.

BIFENTHRIN 7.9% FL TC LAWN DILUTION CHART

Table 2:

Application Volume	Rate:	Fl Oz* of BIFENTHRIN 7.9% FL TC Diluted to these Volumes of Finished Spray			
Gals Per 1,000 sq. ft.	Fl. Oz per 1,000 sq. ft.	1 Gal	5 Gal	10 Gal	100 Gal
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

Application Volume	Rate:	Fl Oz* of BIFENTHRIN 7.9% FL TC Diluted to these Volumes of Finished Spray			
Gals Per 1,000 sq. ft.	Fl. Oz per 1,000 sq. ft.	1 Gal	5 Gal	10 Gal	100 Gal
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

Multiply by 29.57 to convert to milliliters.

1 fluid ounce = 29.57 ml = 2 tablespoons = 6 teaspoons

Never use household utensils to measure BIFENTHRIN 7.9% FL TC.

USE RECOMMENDATIONS FOR ORNAMENTALS AND TREES

Ornamental applications (e.g., trees, shrubs, ground covers, bedding and foliage plants): Apply 0.125 to 1.0 fl. oz. of product per 1,000 sq. ft. or, alternatively, apply 5.4 to 43.5 fl. oz. per 100 gallons. This product may be diluted and applied in different volumes of water, however, do not exceed the maximum label rate of 1.0 fl. oz. per 1,000 sq. ft. or 43.5 fl. oz per 100 gallons. This product also may be applied through low volume application equipment by dilution with water or other carriers, however, do not exceed the maximum label rate of 1.0 fl oz. per 1,000 sq. ft. or 43.5 fl. oz. per 100 gallons.

Apply as a full coverage foliar spray using the specified rate of application. Repeat the treatment as necessary, but treat no more than once every 7 days. Use higher application rates as necessary due to pest pressure and increases in foliage.

Because certain cultivars may be sensitive to the product, treat and monitor a small number of plants for one week prior to treating the entire planting.

To prevent or delay pest resistance to the product, use an alternate class of chemistry in the treatment program.

BIFENTHRIN 7.9% FL TC ORNAMENTAL USE DILUTION CHART

Application Volume:		Rate:	Fl Oz* of BIFENTHRIN 7.9% FL TC Diluted to these Volumes of Finished Spray			
Gals Per 1000 sq.ft.	Acre	Fl. oz. per 1000 sq. ft.	1 Gal	5 Gals	10 Gals	100 Gals
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

* Multiply by 29.57 to convert to milliliters.

A typical application volume for landscape ornamental applications is 300 gallons per acre.

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

Never use household utensils to measure BIFENTHRIN 7.9% FL TC.

Using the Ornamental Application Rates Table and the BIFENTHRIN 7.9% FL TC Ornamental Dilution Chart to Calculate Dilution Rates: To determine the appropriate dilution of BIFENTHRIN 7.9% FL TC required to control specific pests, follow these steps:

1. Identify the pest requiring the highest rate of application for effective control.

2. Select an application rate (fl. oz. of product).

3. Determine application volume and desired amount of spray mix.

4. Refer to the Ornamental Use Dilution Chart determine the required volume of product that corresponds to the selected volume of water.

Example: You need to control black vine weevil adults on rhododendron. The Application Rates – Ornamental table below indicates that 0.25 to 0.5 fl oz. of product is applied per 1,000 sq ft. Assuming a maximum residual control is desired, select an application rate of 0.5 fl oz. per 1,000 sq ft. The application volume is approximately 300 gals per acre (6.9 gals per 1,000 sq ft.). The Ornamental Dilution Use Chart states that 0.72 fl. oz. of product should be diluted in 10 gallons of water.

APPLICATION RATES - ORNAMENTAL

The following table provides recommended application rates of this product for control of the respective pests under normal conditions. However, if desired for maximum residual control, this product can be applied at up to 1 fl. oz. per 1,000 sq. ft (43.5 fl. oz. per 100 gals) to control each of the pests listed in the table. Use the higher application rates listed in the table for maximum residual control.

17/03

PEST	BIFENTHRIN 7.9% FL TC Application Rate	
	Fl. Oz. per 1,000 sq. Ft.	Fl. Oz. per 100 gals.
Bagworm[11] Cutworm Elm Leaf Beetle Fall Webworm Gypsy Moth Caterpillar Lace Bug Leaf Feeding Caterpillar Tent Caterpillar	0.125 - 0.25	5.4 - 10.8
Adelgid Ant Aphid Bee Beet Armyworm Beetle[12] Black Vine Weevil (Adult) Brown Soft Scale Broad Mite Budworm California Red Scale (Crawler)[12] Centipede Cicada Citrus Thrip Clover Mite Cricket Diaprepes (Adult) Earwig European Red Mite Flea Beetle Fungus Gnat (Adult) Grasshopper Japanese Beetle (Adult) Leafhopper Leafroller Mealybug Millipede Mite Mosquito Orchid Weevil Pillbug Pine Needle Scale (Crawlers)[12] Plant Bug (including *Lygus spp.)* Psyllid San Jose Scale (Crawlers)[12] Scorpion Sowbug Spider Mite[13] Spider Spittlebug Thrip Tip Moth	0.25 - 0.5	10.8 - 21.7

PEST	BIFENTHRIN 7.9% FL TC Application Rate	
	Fl. Oz. per 1,000 sq. Ft.	Fl. Oz. per 100 gals.
Treehopper Twig Borer[12] Wasp Weevil[12] Whitefly		
Imported Fire Ant** Leafminer Pecan Leaf Scorch Mite Pine Shoot Beetle (Adult) Spider Mite[13]	0.5 - 1.0	21.7 - 43.5

[11]Bagworm: Spray larvae directly at the time they begin to hatch. When larvae are young applications are most effective.
[12]Beetle, Scale Crawler, Twig Borer, and Weevil: In addition to plant foliage, treat trunks, stems and twigs.
[13]Spider Mite: Apply during spring to mid-summer for optimal two-spotted spider mite residual control. For control during mid- to late-summer, more frequent treatments and/or higher application rates may be necessary. Adding a surfactant or agricultural oil could increase effectiveness. In addition, combinations of this product with other registered miticides have shown to be effective. Applications of this product can be rotated with other insecticides in order to reduce or delay resistance. Consult your local Cooperative Extension Service for more information.
**For foraging ants.

PEST CONTROL - OUTSIDE SURFACES AND AROUND BUILDINGS

To control: **Ant, Carpenter Ant, Fire Ant, Armyworm, Bee, Beetle, Biting Fly, Boxelder Bug, Centipede, Chigger, Chinch Bug, Clover Mite, Cricket, Cutworm, Dichondra Flea Beetle, Earwig, Elm Leaf Beetle, Firebrat, Flea, Fly, Grasshopper, Hornet, Japanese Beetle, Millipede, Mosquito, Moth, Roaches (including Cockroach), Scorpion, Silverfish, Sod Webworm, Sowbug (Pillbug), Spider (including Black Widow Spider), Springtail, and Wasp.**

Apply as a residual spray to outside surfaces of buildings, lawns, patios, porches, refuse dumps, soil, trunks of woody ornamentals, window frames, and other areas where pests gather or have been observed. Apply BIFENTHRIN 7.9% FL TC to these areas using a 0.02 to 0.06% suspension as a residual spray.

Mixing:

0.06% suspension - mix 1 fl oz. BIFENTHRIN 7.9% FL TC per gal of water (1 fl oz equals 2 tablespoons).
0.02% suspension - mix 0.33 fl. oz of BIFENTHRIN 7.9% FL TC per gal of water.

Never use household utensils to measure BIFENTHRIN 7.9% FL TC. For heavy pest infestation, quicker knockdown or longer residual control, use the higher rate. For control during periods of high pest pressure, retreatment could be necessary. Repeat application only if there are signs of new or increased insect activity. Repeat application no more than once every 7 days.

For Perimeter Treatment: Apply the suspension to the soil and vegetation surrounding the structure in a radius of 6 to 10 feet wide. In addition, apply the suspension to the foundation of the structure to a height of 2 to 3 feet. Apply 0.33 to 1.0 fluid oz. of BIFENTHRIN 7.9% FL TC per 1000 sq. ft. Dilute in sufficient water to provide adequate coverage (See the Perimeter Use Dilution Chart).

BIFENTHRIN 7.9% FL TC PERIMETER USE DILUTION CHART

Application Volume:	Rate:	Fl. Oz.* of BIFENTHRIN 7.9% FL TC Diluted to these Volumes of Finished Spray			
Gals Per 1,000 sq. ft.	Fl Oz per 1,000 sq. ft.	1 Gal	5 Gals	10 Gals	100 Gals
1.0	0.33	0.33	1.67	3.33	33.33
1.0	0.5	0.5	2.5	5.0	50.0
1.0	0.67	0.67	3.33	6.67	66.7
1.0	0.75	0.75	3.75	7.5	75.0
1.0	1.0	1.0	5.0	10.0	100.0
2.0	0.33	0.17	0.83	1.65	16.5
2.0	0.5	0.25	1.25	2.5	25.0
2.0	0.67	0.33	1.67	3.35	33.5
2.0	0.75	0.38	1.88	3.75	37.5
2.0	1.0	0.5	2.5	5.0	50.0
3.0	0.33	0.11	0.55	1.10	11.0
3.0	0.5	0.17	0.83	1.67	16.7
3.0	0.67	0.22	1.11	2.23	22.3
3.0	0.75	0.25	1.25	2.5	25.0
3.0	1.0	0.33	1.67	3.33	33.3
4.0	0.33	-	0.41	0.83	8.3
4.0	0.5	0.13	0.63	1.25	12.5
4.0	0.67	0.17	0.84	1.67	16.7
4.0	0.75	0.19	0.94	1.88	18.8
4.0	1.0	0.25	1.25	2.5	25.0
5.0	0.33	-	0.33	0.67	6.7
5.0	0.5	0.1	0.5	1.0	10.0
5.0	0.67	0.13	0.67	1.33	13.3
5.0	0.75	0.15	0.75	1.5	15.0
5.0	1.0	0.2	1.0	2.0	20.0
10.0	0.33	-	0.17	0.33	3.3
10.0	0.5	-	0.25	0.5	5.0
10.0	0.67	-	0.33	0.67	6.7
10.0	0.75	-	0.38	0.75	7.5
10.0	1.0	0.1	0.5	1.0	10.0

Multiply by 29.57 to convert to milliliters.
1 fl. oz. = 29.57 ml = 2 tablespoons = 6 teaspoons
Never use household utensils to measure BIFENTHRIN 7.9% FL TC.

Ant and Fire Ant Mounds: Drench Method - Use BIFENTHRIN 7.9% FL TC 0.06% emulsion: Treat using 1-2 gallons of emulsion for each mound area. Sprinkle each mound until wet. Also treat the 4 foot diameter circle around each mound. For mounds larger than 12 inches, use the higher volume. Apply when cool in the early morning or late evening, not mid-day.

Mosquito: As a general spray around landscapes, lawn and buildings to control mosquitoes, dilute 0.33 to 1.0 fluid oz. of BIFENTHRIN 7.9% FL TC per gallon of water. Apply at a rate of one gallon of dilution per 1,000 sq. ft. For higher volume applications, dilute BIFENTHRIN 7.9% FL TC to a lower concentration and apply it in greater volumes (See the Ornamental or Perimeter Use Dilution Charts).

INDOOR USE RECOMMENDATIONS

Do not use in food/feed areas of food/feed handling establishments, restaurants or other areas where food is commercially prepared or processed. Do not use in serving areas while food/feed is exposed or facility is in operation. Serving areas are areas where prepared foods are served, such as dining rooms, but excluding areas where food may be prepared or held. For home use, cover all food surfaces and utensils use for food preparation prior to treatment and/or wash thoroughly after treatment. Cover or remove exposed food.

Broadcast application to interior surfaces of homes is prohibited.

Not for use in Federally Inspected Meat and Poultry Plants.

ANT, BEE, BEETLE, BOXELDER BUG, CENTIPEDE, COCKROACH, CRICKET, EARWIG, FLY, MILLIPEDE, PILLBUG, SCORPION, SILVERFISH, SOWBUG, SPIDER, AND WASP CONTROL:
For residual pest control in buildings, other structures and on modes of transport, use a 0.02% to 0.06% suspension (0.33 to 1 fl. oz. per gal. of water). [Apply either as a crack and crevice, coarse, low pressure spray (25 psi or less), pinstream, spot, or with a paintbrush.]

Indoor Treatments: Make application as a coarse, low pressure, crack and crevice or spot spray to areas where pests hide, with particular attention to cracks and crevices. These pests frequently hide in the following locations: baseboards, closets. corners, storage areas, around water pipes, doors and windows, attics and eaves, behind and under refrigerators, cabinets, furnaces, sinks, stoves, the underside of shelves and drawers. Never use as a space spray.

Mixing:
See mixing directions in the section of this label titled "OUTSIDE SURFACES AND AROUND BUILDINGS PEST CONTROL ."
Dilute BIFENTHRIN 7.9% FL TC with water for spray or brush application. Add BIFENTHRIN 7.9% FL TC to sprayer and fill with the desired volume of water. In order to insure proper mixing, close and shake the sprayer before use. Prepare no more than the amount of solution needed for a single application. For control during periods of high pest pressure, retreatment could be necessary. Repeat application only if there are signs of new or increased insect activity. Repeat application no more than once every 7 days.

Cockroach, Cricket, Firebrat, Scorpion, Silverfish, and Spider: Make application as a coarse, low pressure spray to areas where pests hide, with particular attention to cracks and crevices. These pests frequently hide in the following locations: baseboards, cabinets, closets, corners, furnaces, storage areas, around water pipes, doors and windows, attics and eaves, behind and under refrigerators, sinks, stoves, the underside of shelves and drawers.

ANT: Apply to ant trails, around doors and windows and to other locations that ants usually gather.

BEE AND WASP: Apply to nests late in the evening (insects are at rest). Spray the nest and entrance as well as surrounding areas where the insects may land.

BEETLE, BOXELDER BUG, CENTIPEDE, EARWIG, MILLIPEDE, PILLBUG, AND SOWBUG: Apply to locations that these insects are found or tend to gather including the following areas: around doors and windows, entrances to a structure, baseboards and storage areas.

FOOD HANDLING ESTABLISHMENTS: Places other than private residences in which food is held, processed, prepared or served.

NONFOOD AREAS: Areas where use is permitted include industrial buildings, houses, apartment buildings, laboratories, buses, and the nonfood/feed areas of stores, warehouses, vessels, railcars, trucks, trailers, aircraft (Use prohibited in aircraft cabins), schools, nursing homes, hospitals, restaurants, hotels, food manufacturing, processing and service establishments. Nonfood/feed areas where use is permitted are areas such as garbage rooms, lavatories, floor drains (to sewers), entries and vestibules, offices, locker rooms, machine rooms, garages, mop closets and storage (after canning or bottling). BIFENTHRIN 7.9% FL TC may be used as a general spot, crack and crevice treatment in nonfood areas. All areas where insects hide or through which insects may enter should be treated.

FOAM APPLICATION RECOMMENDATIONS

For application in structural voids, BIFENTHRIN 7.9% FL TC can be converted to foam with a foaming agent. Select a foaming agent that is compatible with BIFENTHRIN 7.9% FL TC (test compatibility before using the foam). To make a 0.02 to 0.06 percent concentration of foam, dilute 0.33 to 1.0 fluid oz. of BIFENTHRIN 7.9% FL TC per gallon of water then add foaming agent in the amount indicated by the manufacturer's instructions.

ABOVE GROUND TERMITE CONTROL

The following applications are designed kill termite workers or winged reproductives that are present at the time of treatment. These applications are supplemental; they are not an adequate substitution for mechanical alteration, soil treatment or foundation treatment.

Exposed workers and winged reproductive termites in localized areas: Dilute one (1.0) fl. oz. of BIFENTHRIN 7.9% FL TC per gal of water. Apply as a coarse fan spray at the rate of one gal per 1,000 sq. ft. Apply to swarming termites as well as the areas in which they congregate (e.g., attics, crawl spaces, unfinished basements and other void areas).

Above-ground termites in localized areas of infested wood: Dilute one (1.0) fl. oz. of BIFENTHRIN 7.9% FL TC per gallon of water. Apply as a liquid or foam to voids and galleries in damaged wood, spaces between wooden structural members, between the sill plate and foundation and other areas where wood is vulnerable. For applications to inaccessible areas drill into damaged wood or wall voids and then inject (using an appropriate directional injector) the dilution or foam. After treatment, plug any holes drilled in commonly occupied areas of the structure.

Termite carton nests in building voids: Dilute one (1.0) fl. oz. of BIFENTHRIN 7.9% FL TC per gal of water. Apply as a liquid or foam using a pointed injector. Apply at multiple injection points and/or at multiple depths as necessary. Remove the carton nest material from the building void after treatment if possible.

ANT CONTROL RECOMMENDATIONS

Nuisance Ants- Indoors: Dilute 0.5 to one (1.0) fl. oz. of BIFENTHRIN 7.9% FL TC per gallon of water. Apply at the rate of one gal of dilution per 1,000 sq. ft. Apply to ant nests. Also use as a general surface, crack and crevice or spot treatment to areas where ants have been seen or are likely to be found. These include the following areas: around doors and windows, baseboards, in and behind cabinets, cracks and crevices and in corners, under and behind dishwashers, furnaces, around pipes, refrigerators, sinks and stoves. When using ant baits, use the baits in areas that have not been treated with BIFENTHRIN 7.9% FL TC.

Nuisance Ants - Outdoors: Apply BIFENTHRIN 7.9% FL TC to ant nests, ant trails, around doors and windows and other areas where ants have been seen or are likely to be found. In addition, apply a perimeter treatment using one of the volume applications listed in the section of this label titled "Pest Control - Outside Surfaces and Around Buildings." For treatment of concrete surfaces, higher dilutions, application volumes or more frequent applications may be required. Use the following procedures for best results:

1) Treat non-porous surfaces using low volume applications. Use 0.5 to 1.0 fl. oz. of BIFENTHRIN 7.9% FL TC per gallon of water at the rate of one gallon per 1,000 sq. ft.

2) Treat porous surfaces and surfaces with vegetation using high volume applications. Use 0.5 to 1.0 fl. oz. of BIFENTHRIN 7.9% FL TC per 1,000 sq. ft (see the Ornamental and Perimeter Use Dilution Charts for the appropriate dilution).

3) Maximum residual control: Dilute 0.5 to 1.0 fl. oz. of BIFENTHRIN 7.9% FL TC per gallon of water. Apply at up to a maximum rate of 10 gallons per 1,000 sq. ft.

Carpenter Ants - Indoors: Dilute 0.5 to 1.0 fl. oz. of BIFENTHRIN 7.9% FL TC per gallon of water. Apply at the rate of one gallon of dilution per 1,000 sq. ft. Apply as a general surface, crack and crevice or spot treatment to areas where carpenter ants have been seen or are likely to be found. These include the following areas: around doors and windows, baseboards, in and behind cabinets, under and behind dishwashers, cracks and crevices and in corners, furnaces, around pipes, refrigerators, sinks, and stoves. Treat carpenter ants and their nests by spraying into cracks and crevices and by drilling and spraying into holes and voids. When using carpenter ant baits, use the baits in areas that have not been treated with BIFENTHRIN 7.9% FL TC.

Carpenter Ants - Outdoors: Apply BIFENTHRIN 7.9% FL TC to carpenter ant nests, trails, around doors and windows and other places where carpenter ants have been seen or are likely to be found. In addition, apply a perimeter treatment using one of the volume applications listed in the section of this label titled "Pest Control - Outside Surfaces and Around Buildings." For treatment of concrete surfaces, higher dilutions, application volumes or more frequent applications may be required. Use the following procedures for best results:

1) Treat non-porous surfaces with low volume applications. Use 0.5 to 1.0 fl. oz. of BIFENTHRIN 7.9% FL TC per gallon of water at the rate of one gallon per 1,000 sq. ft.

2) Treat the trunks of infested trees (trees with ant trails or foraging ants). Use 0.5 to 1.0 fl. oz. of BIFENTHRIN 7.9% FL TC per gallon of water. Apply by wetting the bark from the base to as high as possible on the tree trunk.

3) Treat porous surfaces and surfaces with vegetation using high volume applications. Use 0.5 to 1.0 fl. oz. of BIFENTHRIN 7.9% FL TC per 1,000 sq. ft. (see the Ornamental and Perimeter Use Dilution Charts for the appropriate dilution).

4) For maximum residual control: Dilute 0.5 to 1.0 fl. oz. of BIFENTHRIN 7.9% FL TC per gallon of water. Apply up to a maximum rate of 10 gallons per 1,000 sq. ft.

For control of carpenter ants inside trees, utility poles, fencing and similar structural materials: Dilute 1.0 fl. oz. BIFENTHRIN 7.9% FL TC per gal of water (0.06 dilution). Drill to locate the infested cavity. Inject or foam the dilution into the cavity. Use a sufficient volume of foam or liquid. Use an appropriate treatment tool and a splashback guard.

For control of carpenter ants tunneling in the soil: Dilute 0.5 to 1.0 fl. oz. of BIFENTHRIN 7.9% FL TC per gallon of water. Apply a drench or inject the as liquid or foam with spacing of 8 to 12 inches. Apply to create a uniform vertical barrier at the edges of hard surfaces (such as walls and driveways) under which ants are tunneling.

Treating wood and lumber piles (not stored in structures): Apply a 0.06% emulsion with a coarse drenching spray. Use a hose end sprayer or sprinkling can. Treated wood and lumber can only be used or burned one month following the date of treatment.

Protecting firewood from carpenter ants and termites: Dilute 1.0 fl. oz. of BIFENTHRIN 7.9% FL TC per gallon of water. Apply to the soil on which firewood will be stacked at the rate of one-gallon dilution per 8 sq. ft. DO NOT apply to firewood.

ATTENTION

Do not apply to pets, crops, or sources of electricity.

Do not apply to firewood.

Use only in well ventilated areas.

During any application to overhead areas of structure, cover surfaces below the application area with plastic sheeting or similar material.

Do not allow spray to contact food, foodstuffs, food contacting surfaces, food utensils or water supplies.

Thoroughly wash dishes and food handling utensils with soap and water if they come into contact with this product.

Do not treat areas where food is exposed.

During indoor surface applications do not allow the product to drip or run-off of the application area.

Do not allow people or pets on treated surfaces until spray has fully dried. Let surfaces dry before allowing people and pets to contact surfaces.

BIFENTHRIN 7.9% FL TC will not stain or damage any surface that water alone will not stain or damage.

Do not apply water-based dilution of BIFENTHRIN 7.9% FL TC to electric conduits, motor housings, junction boxes, switch boxes or other electrical equipment because of possible shock hazard.

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 treatment of BIFENTHRIN 7.9% FL TC.

Do not apply this product in any rooms that is occupied by a patient, 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 pesticide in livestock buildings (such as barns).

Distributors Should Sell in Original Packages Only.

CONDITIONS OF SALE AND WARRANTY

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

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

BASF MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR MERCHANTABILITY OR ANY OTHER EXPRESS OR IMPLIED WARRANTY. TO THE EXTENT PERMITTED BY LAW, BASF AND THE SELLER DISCLAIM ANY LIABILITY FOR CONSEQUENTIAL, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT. BASF and the Seller offer this product, and the Buyer and User accept it, subject to the foregoing **Conditions of Sale and Warranty** which may be varied only by agreement in writing signed by a duly authorized representative of BASF.