



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION

July 24, 2017

K.T. Woodall  
Sharda USA LLC  
c/o Wagner Regulatory Associated, Inc.  
P.O. Box 640  
Hockessin, DE 19707

Subject: Label Amendment – Incorporate Requested CA State Revisions  
Product Name: SHARDA BIFENTHRIN 7.9SC  
EPA Registration Number: 83529-60  
Application Date: June 28, 2017  
Decision Number: 531153

Dear Kt Woodall:

The amended label referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act, as amended, is acceptable. This approval does not affect any conditions that were previously imposed on this registration. You continue to be subject to existing conditions on your registration and any deadlines connected with them.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one copy of the final printed labeling before you release the product for shipment with the new labeling. In accordance with 40 CFR 152.130(c), you may distribute or sell this product under the previously approved labeling for 18 months from the date of this letter. After 18 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR 152.3.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

Your release for shipment of the product constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance

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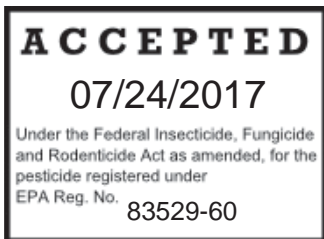
with FIFRA section 6. If you have any questions, please contact Maggie Rudick by phone at 703-347-0257, or via email at [rudick.maggie@epa.gov](mailto:rudick.maggie@epa.gov).

Sincerely,

A handwritten signature in black ink, appearing to read "Elizabeth Fertich". The signature is written in a cursive style with some loops and flourishes.

Elizabeth Fertich  
Acting Product Manager 03  
Invertebrate & Vertebrate Branch 1  
Registration Division (7505P)  
Office of Pesticide Programs

Enclosure



# Sharda Bifenthrin 7.9SC

## ABN: Bi-Dash Specialty

**Intended for Use and Storage by Commercial Applicators Only.**

Controls listed insect pests and mites indoors and in interiorscapes; outdoors on non-commercial ornamentals and lawns in landscaped areas around residential, institutional, public, commercial, and industrial buildings, parks, recreational areas, and athletic fields.

Prevents and controls termites, carpenter ants, and other pests of structures in and around homes, commercial and industrial buildings, recreational areas, athletic fields, lawns and ornamentals, and livestock/poultry houses.

For use as a termiticide: May only be used by individuals/firms 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 using this product.

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

Contains 3/4 pound active ingredient per gallon.  
 \*Cis isomers 97% minimum, trans isomers 3% maximum.

## KEEP OUT OF REACH OF CHILDREN CAUTION

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.  
 (If you do not understand the label, find someone to explain it to you in detail.)

FIRST AID	
<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 a poison control center or doctor.</li> <li>• Do not give anything 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 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 to 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 for 15 to 20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For 24-hour medical emergency assistance (human or animal) call <b>1-800-222-1222</b> . For chemical emergency assistance (spill, leak, fire, or accident) call: <b>CHEMTREC 1-800-424-9300</b> .	
<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.	

[Optional referral statements when booklets and container labels are used:  
 See Panel for First Aid Instructions and booklet for complete Precautionary Statements and Directions for Use.  
 See label booklet for complete Precautionary Statements, Directions For Use, and Storage and Disposal.  
 See label booklet for additional Precautionary Statements, Directions For Use, and Storage and Disposal.  
 See label booklet for complete Directions For Use.]

**EPA Reg. No. 83529-60**

**EPA Est. No.** \_\_\_\_\_

**Net Contents:** \_\_\_\_\_

## PRECAUTIONARY STATEMENTS

### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

#### CAUTION

Harmful if swallowed, inhaled or absorbed through skin. Causes moderate eye irritation. Avoid breathing vapor or spray mist. Avoid contact with skin, eyes, or clothing.

#### PERSONAL PROTECTION EQUIPMENT (PPE)

**Pesticide handlers (mixers, loaders, and applicators) must wear:**

- long sleeved shirt and long pants
- shoes and socks
- chemical-resistant gloves such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, polyvinyl chloride, and viton

After the product is diluted in accordance with label directions for use, and/or when mixing/loading using a closed spray tank transfer system, or an in-line injector system, shirt, pants, socks, shoes, and waterproof gloves are sufficient.

All pesticide handlers must wear protective eyewear when working in non-ventilated space or when applying termiticide by rodding or sub-slab injection.

When working in a non-ventilated space, all pesticide handlers must wear a NIOSH approved:

- Half face respirator (TC-84A) with organic vapor cartridges and R or P combination filters;
- Full face respirator (TC-84A) with organic vapor cartridges and any R or P combination filters;
- Gas mask (TC-14G) with an Organic Vapor Canister and HE Filter; or
- Powered air purifying respirator (TC-23C) with an organic vapor cartridge and HE filter.

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

#### USER SAFETY RECOMMENDATIONS

**Users should:**

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

#### ENVIRONMENTAL HAZARDS

This pesticide is extremely toxic to fish and aquatic invertebrates. Do not allow this product to enter or run off into storm drains, drainage ditches, or gutters. Apply this product in calm weather when rain is not predicted for 24 hours to ensure that wind or rain does not blow or wash pesticide off of the treatment area. Rinse application equipment over treated areas to avoid runoff to water bodies or drainage systems. Do not spray fish and/or reptile pets in/around ornamental ponds.

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.

Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other public waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

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 it to drift to blooming crops if bees are foraging the treatment area.

#### PHYSICAL AND CHEMICAL HAZARDS

Do not apply water-based dilutions of **Sharda Bifenthrin 7.9SC** to electrical conduits, motor housings, junction boxes, switch boxes, or other electrical equipment because of possible shock hazard. Do not mix or allow coming in contact with oxidizing agent. Hazardous chemical reaction may occur.

## DIRECTIONS FOR USE

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

### USE RESTRICTIONS

- Do not apply a broadcast application to interior surfaces of homes.
- Do not apply this product through any kind of irrigation system.
- Do not apply by air.
- Do not apply in greenhouses and nurseries.
- Not for use on sod farm turf, golf course turf, or grass grown for seed.
- Do not apply to pets, crops, or sources of electricity.
- Do not treat firewood.
- Do not use in aircraft cabins.
- Use only in well-ventilated areas.
- If applying to overhead structures, cover surface below with plastic sheeting or similar material except for soil surfaces in crawlspaces.
- Do not allow spray to contact food, foodstuffs, food-containing surfaces, 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 allow contact with treated surfaces by people or pets before spray has dried.
- Do not treat areas where food is exposed.
- Do not allow dripping or runoff to occur during indoor surface applications.
- Do not apply this product in patient rooms or any rooms while occupied by the elderly or infirm.
- Do not apply in classrooms, libraries, sports venues, or other institutional facilities when they are occupied.
- Do not use on plants grown for sale or other commercial use, or for commercial seed production, or for research purposes.
- Do not use on vegetation intended for sale or other commercial uses.
- Do not apply directly into sewers or drains, or to any area like a gutter where drainage to sewers, storm drains, water bodies, or aquatic habitat can occur.
- Do not allow product to enter any drain during or after application.

### Additional Application Restrictions for Residential Outdoor Surface and Space Sprays

All outdoor applications must be limited to spot and crack-and-crevice treatments only, except for the following permitted uses:

1. Applications to soil or vegetation around structure;
2. Applications to lawns, turf, and other vegetation;
3. Applications to building foundations, up to a maximum height of 3 feet above grade;
4. Applications to underside of eaves, soffits, doors, or windows permanently protected from rainfall by a covering, overhang, awning, or other structure;
5. Applications around potential pest entry points into buildings, when limited to a surface band not to exceed one inch in width;
6. Applications made through the use of a coarse, low pressure spray to only those portions of surfaces that are directly above bare soil, lawn, turf, mulch, or other vegetation, as listed on this label, and not over an impervious surface, drainage or other condition that could result in runoff into storm drains, drainage ditches, gutters, or surface waters, in order to control occasional invaders or aggregating pests.

Other than applications to building foundations, all outdoor applications to impervious surfaces such as sidewalks, driveways, patios, porches, and structural surfaces (such as windows, doors, and eaves) are limited to spot and crack-and-crevice applications only.

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.

**NON-AGRICULTURAL USE REQUIREMENTS**

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

Do not allow children or pets to enter treated areas until sprays have dried.

**APPLICATION INSTRUCTIONS**

**Sharda Bifenthrin 7.9SC** can be applied with low-volume application equipment, including Actisol® and Micro-Injector® for surface, spot, crack and crevice, and deep harborage treatments.

**Sharda Bifenthrin 7.9SC** can be applied on plants intended only for aesthetic purposes or climatic modifications and being grown in interior plantscapes, ornamental gardens or parks, or lawns and grounds.

**Sharda Bifenthrin 7.9SC** controls a wide range of listed pests on flowers, foliage plants, non-bearing fruit and nut trees, shrubs, and ornamental trees, in interior and exterior plantscapes, such as those in hotels, office buildings, shopping malls, and around athletic fields, homes, institutional buildings, parks, and recreational areas. Non-bearing fruit and nut trees are those that will not produce a harvestable crop during the season of application.

**Sharda Bifenthrin 7.9SC** prevents and controls termite infestations in and around structures and building construction.

To institute a barrier between the wood and the termites in the soil, the chemical emulsion must be effectively dispersed in the soil. It is important to remove unnecessary materials that contain cellulose and wood from around foundation walls, crawl spaces (inside of structure), and porches, and fix damaged plumbing and construction grade in order to deny termite access to moisture.

To ensure effective use of **Sharda Bifenthrin 7.9SC**, the service technician must be familiar with current control practices including trenching, rodding, sub-slab injection, low-pressure spray applications, coarse fan spraying of soil surfaces, crack and crevice (void) injection, excavated soil treatment and brush and spray applications to infested or susceptible wood. Using these techniques correctly is essential to prevent or control infestations by subterranean termite species of genera *Reticulitermes*, *Zootermopsis*, *Coptotermes*, and *Heterotermes*. When determining what procedures to follow, the service technician should consider species biology and behavior, structure design, heating, ventilation, air-conditioning (HVAC) systems, water tables, soil type and compactions, grade conditions, and the location and type of domestic water supplies and utilities.

For information concerning the most up-to-date control practices in a given region or locale, consult the local resources for structural pest control, state cooperative extensions or regulatory agencies.

**Sharda Bifenthrin 7.9SC** can be tank-mixed with other pesticides, including insect growth regulators. When tank mixing **Sharda Bifenthrin 7.9SC** with other pesticides, follow the most restrictive precautions and limitations on each separate product label. The physical compatibility of **Sharda Bifenthrin 7.9SC** may vary with different sources of pesticide products, and local cultural practices. If any tank mixture which has not been previously tested, it should be tested on a small scale (pint or quart jar), using the proper proportions of pesticides and water to ensure the physical compatibility of the mixture.

Follow this procedure for preparing a new tank mix, unless specified otherwise in label directions:

- 1) Add wettable powder to tank water, maintain agitation.
- 2) Add liquids and flowables, maintain agitation.
- 3) Add emulsifiable concentrates, maintain agitation.

If a mixture is incompatible following this order of addition, try reversing the order of addition, or increase the volume of water. **Note:** If the tank-mixture is 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.

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

Use the following formula to determine the percent active ingredient that is in the spray tank after mixing **Sharda Bifenthrin 7.9SC**:

$$\frac{(7.9)(\text{Fl. Oz. of Sharda Bifenthrin 7.9SC added to tank})}{(\text{Gallons of Finished Spray Mix})(128)} = \text{Percent Active Ingredient of Spray Mix}$$

## SUBTERRANEAN TERMITE CONTROL USE DIRECTIONS

### Use Precautions:

- Use anti-backflow equipment and procedures to prevent insecticide from being siphoned into water supplies.
- Consult local and state specifications for recommended treatment practices in your area.
- If local or state specifications do not exist, consult the Federal Housing Administration (H.U.D.) guidance documents.

### Use Restrictions:

- Do not contaminate cisterns, wells, or other water tanks by treating the soil beneath these structures.
- Do not treat soil where runoff may occur.
- Do not treat soil water-saturated or frozen.

**Note:** Crawl spaces are defined as being on the inside of the structure.

### Critical Areas

Points at which the foundation is penetrated or abuts another structure are Critical Areas, including bath traps, crack and expansion joints, utility entry points, and adjacent structures such as patios, slab additions, and stairs.

### 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 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 in Wood**" 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 sub-surface 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 sub-surface 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.

Before these techniques are used close to cisterns, wells, or other bodies of water, seek advice from local, state, or federal agencies for information on treatment practices that are accepted in your area.

**Application Rate:** Use a 0.06% emulsion for subterranean termites. For other pests on the label, use specified rates.

**Mixing Directions:** Mix the termiticide use dilution as follows:

- 1) Fill tank  $\frac{1}{4}$  to  $\frac{1}{3}$  full.
- 2) Start pump to begin by-pass agitation and place end of treating tool into tank to allow circulation through hose.
- 3) Add appropriate amount of **Sharda Bifenthrin 7.9SC**.
- 4) Add remaining amount of water.
- 5) Let pump run and allow recirculation through the hose for 2-3 minutes.

**Sharda Bifenthrin 7.9SC** can also be combined into full tanks of water. If combined into full tanks of water, allow sufficient time for agitation and/or recirculation to ensure consistency of the dilution.

To prepare a 0.06% water emulsion, ready to use, dilute 3 quarts of **Sharda Bifenthrin 7.9SC** with 99.25 gals. of water.

**Mixing:** Using the chart below, determine the volume of **Sharda Bifenthrin 7.9SC** and water required to produce the desired volume of finished emulsion.

Amount of Sharda Bifenthrin 7.9SC			
Emulsion Concentrate	Amount of Sharda Bifenthrin 7.9SC	Amount of Water	Desired of Finished Emulsion (Gallons)
0.06%	1 oz.	127 oz.	1 gal.
	5 oz.	4.9 gals.	5 gals.
	10 oz.	9.9 gals.	10 gals.
	25 oz.	24.8 gals.	25 gals.
	1.5 qts.	49.6 gals.	50 gals.
	2.25 qts.	74.4 gals.	75 gals.
	3.0 qts.	99.25 gals.	100 gals.
	4.5 qts.	148.8 gals.	150 gals.
	6 qts.	198.5 gals.	200 gals.
0.12%*	2 oz.	126 oz.	1 gal.
	10 oz.	4.9 gals.	5 gals.
	19.5 oz.	9.8 gals.	10 gals.
	1.5 qts.	24.6 gals.	25 gals.
	3.0 qts.	49.2 gals.	50 gals.
	4.5 qts.	73.8 gals.	75 gals.
	6.0 qts.	98.5 gals.	100 gals.
	9.0 qts.	147.7 gals.	150 gals.
	3 gals.	197 gals.	200 gals.

\*When treating for termites use this rate only in conjunction with volume adjustments, foam applications, or underground service applications.  
1 pint = 16 fluid ounces (fl. oz.)      1 quart = 2 pints = 4 cups = 32 fluid ounces (fl. oz.)

### 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 specified label rates and a continuous barrier can still be achieved.

The volume of the 0.12% emulsion may be reduced by ½ the labeled volume where desirable for pre- and post-construction applications. When the volume is reduced, the hole spacing for sub-slab injection and soil rodding may also need to be adjusted to account for lower volume dispersal of the termiticide in the soil. Consult the following **Volume Adjustment Chart** for details.

Volume Adjustment Chart		
Rate (% Emulsion)	0.06%	0.12%
<b>Volume allowed:</b>		
Horizontal (gals. emulsion/10 ft. <sup>2</sup> )	1.0 gal.	0.5 gal.
Vertical (gals. emulsion/10 linear ft.)	4.0 gals.	2.0 gals.

**After Treatment:** Plug all holes in commonly occupied areas into which material has been applied. Plugs must be non-cellulose or covered by an impervious, non-cellulose material.

**Foam Applications:** **Sharda Bifenthrin 7.9SC** dilution of 0.06-0.12% may be converted to foam with 2X - 40X expansion characteristics and 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**

When making applications, **Sharda Bifenthrin 7.9SC** foam can be used alone or in combination with liquid dilution. Whether applied as a dilution, foam or some of both, the equivalent of at least 4 gals. of 0.06% dilution (4 oz. of **Sharda Bifenthrin 7.9SC** concentrate) per 10 linear feet must be applied for a vertical barrier, or at least 1 gal. of 0.06% dilution (1 oz. of **Sharda Bifenthrin 7.9SC** concentrate) per 10 sq. ft. must be applied for a horizontal barrier. For a foam only application, apply **Sharda Bifenthrin 7.9SC** concentrate in sufficient concentration and volume to equal 4 ounces of concentrate per 10 linear feet or 1 ounce of concentrate per 10 sq. ft. For example, 2 gals. of 0.12% dilution converted to foam and used to cover 10 linear feet is the equivalent of 4 gals. of 0.06% dilution per 10 linear feet.

#### **Sand Barrier Installation and Treatment**

As long as termites have access to soil that has not been treated and can avoid soil that has been treated with **Sharda Bifenthrin 7.9SC**, they can build mud tubes over surfaces that have been treated. Cracks and spaces should be filled with play box or builder's sand and then treated in the same manner as soil. Follow the rates listed on the **Sharda Bifenthrin 7.9SC** 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.

### **PRE-CONSTRUCTION SUBTERRANEAN TERMITE 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 ft., 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 ft. 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 ft. 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.

To produce effective pre-construction subterranean termite control, create vertical and/or horizontal chemically treated zones of protection using 0.06% emulsion of **Sharda Bifenthrin 7.9SC**. Follow the current edition of the Housing and Urban Development Minimum Property Standards to assure that F.H.A. termite-proofing requirements are met.

#### **Horizontal Barriers**

Establish a horizontal chemical barrier wherever treated soil will be covered by a slab, such as basement floors, carports, entrance platforms, footing trenches, and slab floors.

Apply 1 gal. of 0.06% dilution per 10 sq. ft., or use 1 fl. oz. of **Sharda Bifenthrin 7.9SC** per 10 sq. ft. in sufficient water (no less than ½ gal. or more than 2 gals.) to provide a uniform treated barrier for the area being treated.

If the fill is coarse aggregate, such as washed gravel, a sufficient volume of dilution must be applied to allow it to reach the soil beneath the coarse fill.

Make applications with a low-pressure spray (less than 50 PSI), using a coarse spray nozzle. If foundation walls have not been installed around the treated soil and the slab will not be poured the same day as treatment, the treated soil must be covered with a water-proof barrier. Polyethylene sheeting may be used for this purpose.

### **Vertical Barriers**

Establish vertical barrier in Critical Areas, such as along the inside of foundation walls, plumbing, bath traps, utility services and other features that will penetrate the slab.

Using a 0.06% dilution, apply 4 gals. of dilution per 10 linear feet per foot of depth or 4 fl. oz. of **Sharda Bifenthrin 7.9SC** per 10 linear feet per foot of depth from grade level to the top of the footing in sufficient water to provide a uniform treated barrier. Use not less than 2 gals. to not more than 8 gals. of water per 10 linear feet.

When trenching and rodding into the trench, or trenching, take care to ensure that the dilution reaches the top of the footing. Space the rod holes so that a continuous treated barrier is created by not exceeding 12" (inches) apart. Avoid washing-out the soil around the footing. Trenches should be about 6" wide and 6" deep. Mix the chemical dilution with the soil as it is being replaced in the trench. Inside vertical barriers may not be required for monolithic slabs.

When treating hollow block voids, use 2 gals. of dilution per 10 linear feet to assure that the dilution 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.

### **Post-Construction Subterranean Termite Treatment**

For post-construction treatment, use a 0.06% dilution. Post-construction treatments shall be made by sub-slab injection, trenching, and rodding into the trench or trenching using low-pressure spray not exceeding 25 PSI at the nozzle. Proper precautions should be taken to avoid soil wash-out around the footing.

Locate, identify, and mark wells, electrical conduits, water and sewer lines, and radiant heat pipes prior to application of **Sharda Bifenthrin 7.9SC**. Do not puncture or inject **Sharda Bifenthrin 7.9SC** into such structures.

### **Basements**

Treatment must be made by trenching and rodding into the trench, or trenching at the rate of 4 gals. of dilution per 10 linear feet per foot of depth wherever the footing, from grade to the bottom of the foundation, is greater than 1 foot of depth. When the footer is greater than four feet below grade, the applicator may trench and rod into the trench, or trench beside foundation walls at the rate designated for four feet of depth. Space rod holes to create a continuous insecticidal barrier, but in no case more than 12" apart. Depending on the type of soil, degree of compaction, and location of termite activity, the actual depth of treatment will differ. However, a structure should never be treated below the footer. Sub-slab injection may be needed beside the inside of foundation walls, around conduits, piers, and pipes, beside both sides of interior footing-supported walls, and beside cracks and partition walls.

### **Crawl Spaces: Accessible**

For crawl spaces, apply vertical termiticide barriers at the rate of 4 gals. 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 ft. 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 Directions** section of the label if situations are encountered where the soil type 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" deep or to the bottom of the footing, whichever is less, and need not to be wider than 6". 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.
- 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.

**Crawl Spaces: Inaccessible**

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 instructions 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 gal. of emulsion per 10 sq. ft. 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 power spray 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 gal. of emulsion per 10 sq. ft. Drill spacing must be at intervals not to exceed 16". 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.

**Excavation Technique**

When treating in troublesome areas (e.g., beside fieldstone or rubble walls, beside faulty foundation walls, and around pipes and utility lines leading downward from the structure to a well or pond), apply using the following technique:

- 1) Prepare a trench, placing the removed soil onto heavy-weight plastic sheeting or similar, water-impermeable material.
- 2) Treat the soil with 4 gals. of 0.06% dilution per 10 linear feet per foot of depth of the trench. Completely mix the dilution into the soil, exercising care to avoid liquid running off the sheeting.
- 3) Place the treated soil back into the trench after it has absorbed the dilution.

**Attention:** Wear NIOSH approved unvented goggles and a respirator when applying **Sharda Bifenthrin 7.9SC** in a confined area.

**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, as 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.

**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 gals. 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.

**NOTE:** When treating behind veneer structures (walls, etc.), take proper care to not drill beyond the veneer. If concrete blocks exist behind the veneer, both can be drilled and treated simultaneously.

Do not use **Sharda Bifenthrin 7.9SC** in voids insulated with rigid foam insulation.

**Slabs**

Create vertical barriers by trenching and rodding into the trench or trenching outside at a rate of 4 gals. of dilution per 10 linear feet per foot of depth and by sub-slab injection within the structure. Ensure an even distribution of chemical. Applications must not be made below the bottom of the footing.

Apply beside the outside of the foundation and under the slab on the inside of foundation walls, where needed. Treatment of slabs may also be necessary under and beside both sides of any interior footing-supported walls, in all cracks and expansion joints, and beside one side of interior partitions. By long-rodging or grid pattern injection vertically through the slab, horizontal barriers may be created where necessary.

- a) To permit the creation of an uninterrupted insecticidal barrier, drill holes in the foundation and/or the slab.
- b) For foundations that are less than or equal to 1 foot, do not dig beneath the bottom of the footing. As the soil is placed back into the trench, apply 4 gals. of 0.06% dilution per 10 linear feet per foot of depth to the trench and soil.
- c) Follow the rates stated above for basements for foundations that are deeper than 1 foot.
- d) A 0.06% dilution may be used to treat soil that is exposed and wood in bath traps.

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

### FOOD HANDLING ESTABLISHMENTS

If used as a spot, surface, or crack and crevice treatment, **Sharda Bifenthrin 7.9SC** may be applied in both food/feed and non-food areas of food/feed handling establishments.

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

Non-food areas in which applications are allowed include entries and vestibules, floor drains (to sewers), garages, garbage rooms, lavatories, locker rooms, machine rooms, mop closets, offices, and storage (after canning or bottling). Listed below are some of the use sites that are allowed:

Aircraft (No Aircraft Cabins)	Canneries	Hotels	Restaurants
Apartment Buildings	Dairy Product Processing Plants	Industrial Buildings	Schools
Bakeries	Food Manufacturing Plants	Laboratories	Ships
Bottling Facilities	Food Processing Plants	Meat/Poultry/Egg Processing Plants	Trailers
Breweries	Food Service Establishments	Mobile/Motor Homes	Trucks
Buses	Granaries	Nursing Homes	Vessels
Cafeterias	Grain Mills	Offices	Warehouses
Candy Plants	Hospitals	Railcars	Wineries

**Surface Application:** Do not use this application method in food/feed handling establishments when the facility is in operation or foods/feeds are exposed. During treatment, remove or cover all food processing and/or handling equipment and do not apply directly to food products. All equipment, benches, shelving and other surfaces in food processing plants, bakeries, cafeterias and other facilities which food will contact must be washed after treatment. Clean food handling equipment or processing equipment and rinse completely with fresh, clean water.

**Spot, Crack and Crevice Application:** These types of treatments can be done when the facility is operating, but food should be covered or removed from the treatment area. Do not apply directly to food.

**Foam Applications:** Converting **Sharda Bifenthrin 7.9SC** to foam will allow it to be used to treat structural voids. To produce a 0.02% to 0.06% foam concentration, dilute 0.33 to 1.0 fl. oz. of **Sharda Bifenthrin 7.9SC** per gal. of water and add the manufacturer's recommended amount of foaming agent. Before application, make sure that the foaming agent is compatible with **Sharda Bifenthrin 7.9SC**.

### RESISTANCE MANAGEMENT

Some insects are known to develop resistance to products used repeatedly for control. Because the development of resistance cannot be predicted, the use of this product must 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 a 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 for you area.

**LAWN APPLICATION**

Apply **Sharda Bifenthrin 7.9SC** as broadcast treatment. Use application volumes of up to 10 gals. per 1,000 sq. ft. to get uniform coverage when treating dense grass foliage.

For low volume applications, less than 2 gals. per 1,000 sq. ft., immediate irrigation of treated area with at least 0.25" of water following application to ensure efficacy of listed sub-surface pests, including, Mole Crickets.

**LAWN 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, apply **Sharda Bifenthrin 7.9SC** at up to 1 fl. oz. per 1,000 sq. ft. to control each of the pests listed in this Table. Use the higher application rates within the specified rate range when maximum residual control is desired.

Pest	Application Rate Sharda Bifenthrin 7.9SC
Armyworms <sup>1</sup> Cutworms <sup>1</sup> Sod Webworm <sup>1</sup>	0.18 - 0.25 fl. oz. per 1,000 sq. ft.
Annual Bluegrass Weevil ( <i>Hyperodes</i> )(Adults) <sup>2</sup> Banks Grass Mite <sup>6</sup> Billbugs (Adults) <sup>3</sup> Black Turfgrass Ataenius (Adults) <sup>4</sup> Centipedes Chinch Bugs <sup>5</sup> Crickets Earwigs Fleas (Adults) Grasshoppers Leafhoppers Mealybugs Millipedes Mites <sup>6</sup> Pillbugs Sowbugs	0.25 - 0.5 fl. oz. per 1,000 sq. ft.
Crane Flies <sup>12</sup>	0.5 fl. oz. per 1,000 sq. ft.
Ants Fleas (Larvae) <sup>7</sup> Imported Fire Ants <sup>8</sup> Japanese Beetle (Adults) Mole Cricket (Adults) <sup>9</sup> Mole Cricket (Nymphs) <sup>10</sup> Ticks <sup>11</sup>	0.5 - 1.0 fl. oz. per 1,000 sq. ft.

**Footnotes:**

- 1 Armyworms, Cutworms, and Sod Webworms:** For optimum control, delay watering (irrigation) or mowing for 24 hours after application. If the grass area is at a mowing height of greater than 1", then higher application rates (up to 1 fl. oz. per 1,000 sq. ft.) may be required during periods of high pest pressure.
- 2 Annual Bluegrass Weevil (*Hyperodes*), Adults:** Time applications to control adult weevils as they leave their overwintering sites and move in to grass areas. This movement generally begins when Forsythia is in full bloom and concludes when flowering dogwood (*Cornus Florida*) is in full bloom. Consult your State Cooperative Extension Service for more specific information regarding application timing.
- 3 Billbug, Adults:** Make applications 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.
- 4 Black Turfgrass Ataenius, Adults:** Make applications during May and July to control the first and second generation of black turfgrass ataenius adults, respectively. Time the May application to coincide with the full bloom stage of Vanhoutte Spiraea (*Spiraea vanhouttei*) and horse chestnut (*Aesculus hippocastanum*). Time the July application to coincide with the blooming of Rose of Sharon (*Hibiscus syriacus*).
- 5 Chinch Bugs:** Chinch bugs infest the base of grass plants and are often found in the thatch layer. Irrigating the grass area before treatment will optimize the penetration of the insecticide to the area where the chinch bugs are located. Use higher listed 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 fl. oz. per 1,000 sq. ft.) may be required to control populations that contain both nymphs and adults during the middle of the summer.
- 6 Mites:** For 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.
- 7 Flea, Larvae:** Flea larvae develop in the soil of shaded areas that are accessible to pets or other animals. Use a higher listed volume application when treating these areas to ensure penetration of the insecticide into the soil. **Note:** If the lawn area is being treated with

**Sharda Bifenthrin 7.9SC** at 0.25 fl. oz. per 1,000 sq. ft. for adult flea control, then the larval application rate may be achieved by increasing the application volume two- to four-fold.

**8 Imported Fire Ants:** 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.

**For Broadcast Treatments,** apply 1 fl. oz. per 1,000 sq. ft. Treat mounds by diluting 1 tsp. of **Sharda Bifenthrin 7.9SC** per gal. of water and apply 1 to 2 gals. of finished spray per mound. Treat the mounds with sufficient force to break their apex and allow the insecticide solution to flow into the ant tunnels. Treat with a four foot diameter circle around the mound. For best results, apply in cool weather (65-80°F) or in early morning or late evening hours. **Note:** A spray rig that is calibrated to apply 1 fl. oz. per 1,000 sq. ft. of **Sharda Bifenthrin 7.9SC** in 5 gals. per 1,000 sq. ft. contains the approximate dilution (1 tsp. per gal.) that is required for fire ant mound drenches in the spray tank.

**9 Mole Cricket, Adults:** 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. Make applications as late in the day as possible and water in with up to 0.5" 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. Treat grass areas that receive pressure from adult mole crickets at peak egg hatch to ensure optimum control of subsequent nymph populations (see below).

**10 Mole Cricket, Nymphs:** Treat grass areas that received intense adult mole cricket pressure in the spring 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 listed application rates and more frequent application to maintain acceptable control. Make applications as late in the day as possible and water in with up to 0.5" 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.

**11 Ticks (Including ticks that may transmit Lyme Disease and Rocky Mountain Spotted fever):** Do not make spot applications. Treat entire area where exposure to ticks may occur. Use the higher listed spray volumes when treating areas with dense ground cover or heavy leaf litter. 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 applications must be limited to no more than once per seven days.

**Deer Ticks (*Ixodes sp.*)** have a complicated life cycle that ranges over a two year period and involves four-life stages. Make applications 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.

**American Dog Ticks** can 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. Make applications as necessary from mid-spring to early fall to control American dog tick larvae, nymphs and adults.

**12 Crane Flies:** Treatments can be made to control early to mid-season larvae (approximately August-February) as they feed on plant crowns. Treatments made to late-season larvae (approximately March, April) may only provide suppression.

**Sharda Bifenthrin 7.9SC - Lawn Dilution Chart**

Application Volume (Gals. per 1,000 Sq. Ft.)	Application Rate (Fl. Oz. per 1,000 Sq. Ft.)	Fl. Oz.* of Sharda Bifenthrin 7.9SC Diluted to these Volumes of Finished Spray			
		1 Gal.	5 Gals.	10 Gals.	100 Gals.
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 fl. oz. = 29.57 mL = 2 tbsps. = 6 tsps.

**Do not use household utensils to measure Sharda Bifenthrin 7.9SC.**

**ORNAMENTALS AND TREES**

For ornamental applications (including trees, shrubs, ground covers, bedding plants, and foliage plants), apply 0.125 to 1.0 fl. oz. of **Sharda Bifenthrin 7.9SC** per 1,000 sq. ft. or 5.4 to 43.5 fl. oz. per 100 gals. Dilute and apply **Sharda Bifenthrin 7.9SC** in various volumes of water providing that the maximum label rate (1.0 fl. oz. per 1,000 sq. ft. or 43.5 fl. oz. per 100 gals.) is not exceeded. Apply **Sharda Bifenthrin 7.9SC** through low volume application equipment by dilution with water or other carriers and providing that the maximum label rate (1.0 fl. oz. per 1,000 sq. ft. or 43.5 fl. oz. per 100 gals.) 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 within the specified rate range as pest pressure & foliage area increases. Repeat application must be limited to no more than once per seven days.

Certain cultivars may be sensitive to the final spray solution. Treat a small number of plants and observe for one week prior to application to the entire planting.

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

**Sharda Bifenthrin 7.9SC - Ornamental Dilution Chart**

Application Volume: Gals. per		Application Rate: Fl. Oz. per	Fl. Oz.* of Sharda Bifenthrin 7.9SC Diluted to these Volumes of Finished Spray			
1,000 Sq. Ft.	Acre	1,000 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

\*To convert to millimeters, multiply by 29.57

300 gals. per acre is a typical application volume for landscape ornamental applications.

1 fluid ounce (fl. oz.) = 29.57 ml = 2 tbsps. = 6 tsps.

**Do not use household utensils to measure Sharda Bifenthrin 7.9SC.**

**Calculating Dilution Rates using the Ornamental Application Rates Table and the Sharda Bifenthrin 7.9SC Ornamental Dilution Chart**

Take the following steps to determine the appropriate dilution of **Sharda Bifenthrin 7.9SC** that is required to control specific pests:

- 1) Identify the least susceptible target pest (the pest requiring the highest application rate for control).
- 2) Select an application rate in terms of fl. oz. of **Sharda Bifenthrin 7.9SC**.
- 3) Identify your application volume and how much spray mix you want to prepare.
- 4) Use the **Ornamental Dilution Chart** to determine the appropriate volume of **Sharda Bifenthrin 7.9SC** that must be mixed in your desired volume of water.

For example, suppose you are trying to control black vine weevil adults on rhododendron. The **Ornamental Application Rates** table shows that 0.25 to 0.5 fl. ounces of **Sharda Bifenthrin 7.9SC** should be applied per 1,000 sq. ft. You select an application rate of 0.5 fl. oz. per 1,000 sq. ft. because maximum residual control is desired. Your application volume is approximately 300 gals. per acre, which is equivalent to 6.9 gals. per 1,000 sq. ft. Consulting the **Ornamental Dilution Chart** reveals that you should dilute 0.72 fl. oz. of **Sharda Bifenthrin 7.9SC** in 10 gals. of water.

**ORNAMENTAL 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, apply **Sharda Bifenthrin 7.9SC** 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 this table. Use the higher application rates within the specified rate range when maximum residual control is desired.

Pest	Application Rate Sharda Bifenthrin 7.9SC	
	Fl. Oz. per 1,000 sq. ft.	Fl. Oz. per 100 Gals.
Bagworms <sup>12</sup> Cutworms Elm Leaf Beetles Fall Webworms Gypsy Moth Caterpillars Lace Bugs Leaf Feeding Caterpillars Tent Caterpillars	0.125 - 0.25	5.4 - 10.8
Adelgids Ants Aphids Bees Beet Armyworm Beetles <sup>13</sup> Black Vine Weevil (Adults) Brown Soft Scales Broad Mites Budworms California Red Scale (Crawlers) <sup>13</sup> Centipedes Cicadas Citrus Thrips Clover Mites Crickets Diaprepes (Adults) Earwigs European Red Mite Flea Beetles Fungus Gnats (Adults) Grasshoppers Japanese Beetle (Adults) Leafhoppers Leafrollers Mealybugs Millipedes Mites Mosquitoes Orchid Weevil Pillbugs Pine Needle Scales (Crawlers) <sup>13</sup> Plant Bugs (Including <i>Lygus</i> spp.) Psyllids San Jose Scales (Crawlers) <sup>13</sup> Scorpions Sowbugs Spider Mites Spiders Spittlebugs Thrips Tip Moths Treehoppers Twig Borers <sup>13</sup> Wasps Weevils <sup>13</sup> Whiteflies	0.25 - 0.5	10.8 - 21.7
Imported Fire Ants** Leafminers Pecan Leaf Scorch Mite Pine Shoot Beetle (Adults) Spider Mites <sup>14</sup>	0.5 - 1.0	21.7 - 43.5



**Footnotes:**

- 12 Bagworms:** Apply when larvae begin to hatch and spray larvae directly. Applications when larvae are young will be most effective.
- 13 Beetles, Scale Crawlers, Twig Borers, and Weevils:** Treat trunks, stems, and twigs in addition to plant foliage.
- 14 Spider Mites:** **Sharda Bifenthrin 7.9SC** provides optimal two-spotted spider mite control when applied during spring to mid-summer. Higher listed application rates and/or more frequent treatments may be required for acceptable two-spotted spider mite control during mid- to late-summer. The addition of a surfactant or horticultural oil may increase the effectiveness of **Sharda Bifenthrin 7.9SC**. Combinations of **Sharda Bifenthrin 7.9SC** with other registered miticides have also proven effective. Alternately, **Sharda Bifenthrin 7.9SC** 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 two-spotted spider mites. Consult your local Cooperative Extension Service for resistance management recommendations in your region.
- \*\* For foraging ants.

**PEST CONTROL ON OUTSIDE SURFACES AND AROUND BUILDINGS**

All outdoor applications must be limited to spot or crack-and-crevice treatments only, except for the following permitted uses:

- 1) Applications to soil or vegetation around structures;
- 2) Applications to lawns, turf, and other vegetation;
- 3) Applications to building foundations, up to a maximum height of 3 feet above grade;
- 4) Applications to underside of eaves, soffits, doors, or windows permanently protected from rainfall by a covering, overhang, awning, or other structure;
- 5) Applications around potential pest entry points into buildings, when limited to a surface band not to exceed one inch in width; and
- 6) Applications made through the use of a coarse, low pressure spray to only those portions of surfaces that are directly above bare soil, lawn, turf, mulch, or other vegetation, as listed on this label, and not over an impervious surface, drainage or vegetation, as listed on this label, and not over an impervious surface, drainage, or other condition that could result in runoff into storm drains, drainage ditches, gutters, or surface waters, in order to control occasional invaders or aggregating pests.

Other than applications to building foundations, all outdoor applications to impervious surfaces such as sidewalks, driveways, patios, porches, and structural surfaces (such as windows, doors, and eaves) are limited to spot and crack-and-crevice applications only.

Applications to vertical exterior surfaces (e.g., foundations) are permitted to a maximum height of 3 feet from ground level. Sections of vertical exterior surfaces that abut non-porous horizontal surfaces can only be treated if either these sections are protected from rainfall and spray from sprinklers or they do not drain into a sewer, storm drain, or curbside gutter (e.g., not to sections that abut driveways or sidewalks that drain into streets).

For control of Ants, Carpenter Ants and Fire Ants, Armyworms, Bees, Beetles (not in California), Biting Flies, Boxelder Bugs, Centipedes, Chiggers, Chinch Bugs, Clover Mites, Crickets, Cutworms, Dichondra Flea Beetles, Earwigs, Elm Leaf Beetles, Firebrats, Fleas, Flies, Gnats, Grasshoppers, Hornets, Japanese Beetles (not in California), Midges, Millipedes, Mosquitoes, Moths, Roaches (including Cockroaches), Scorpions, Silverfish, Sod Webworms, Sowbugs (Pillbugs), Spider Mites, Spiders (including Black Widow Spiders), Springtails, Ticks (including Brown Dog Ticks), and Wasps.

Apply **Sharda Bifenthrin 7.9SC** using a 0.02 to 0.06% suspension as a residual spray to outside surfaces of buildings including exterior siding, foundations, porches, window frames, eaves, patios, garages, refuse dumps, lawns such as grass areas adjacent 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 gals. of emulsion per 1,000 sq. ft. Higher listed 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 fl. oz. of **Sharda Bifenthrin 7.9SC** per gal. of water. For 0.06% suspension, mix 1 fl. oz. **Sharda Bifenthrin 7.9SC** per gal. of water (1 fl. oz. = 2 tbsps.). Do not use household utensils to measure **Sharda Bifenthrin 7.9SC**. Use the higher rates within the specified rate range (or higher listed 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 must be limited to no more than once per seven days.

**Perimeter Treatment:** Apply to a band of soil and vegetation 6 to 10 ft. wide around and adjacent to the structure. Also, treat the foundation of the structure to a height of 2 to 3 ft. Apply 0.33 to 1.0 fl. oz. of **Sharda Bifenthrin 7.9SC** per 1,000 sq. ft. in sufficient water to provide adequate coverage (refer to **Perimeter Dilution Chart**).

For sections of foundation that abut non-porous horizontal surfaces, the treated areas must be protected from rainfall and spray from sprinklers or they do not drain into a sewer, storm drain, or curbside gutter (e.g., not to sections that abut driveways or sidewalks that drain into streets).

#### Sharda Bifenthrin 7.9SC - Perimeter Dilution Chart

Application Volume: Gals. per 1,000 Sq. Ft.	Application Rate: Fl. Oz. per 1,000 Sq. Ft.	Fl. Oz.* of Sharda Bifenthrin 7.9SC Diluted to these Volumes of Finished Spray			
		1 Gal.	5 Gals.	10 Gals.	100 Gals.
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 millimeters, multiply by 29.57

1 fluid ounce (fl. oz.) = 29.57 mL = 2 tbsps. = 6 tsps.

**Do not use household utensils to measure Sharda Bifenthrin 7.9SC.**

**For Ant and Fire Ant Mounds use Sharda Bifenthrin 7.9SC 0.06% Emulsion as Drench Method:** Apply 1 - 2 gals. 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 **Sharda Bifenthrin 7.9SC** per gal. of water and apply at the rate of 1 gal. of dilution per 1,000 sq. ft. as a spray around landscapes, lawn and buildings to control mosquitoes. For higher listed volume applications, **Sharda Bifenthrin 7.9SC** 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 Dilution Charts**).

#### INDOOR USE

In the home, cover all food processing surfaces and utensils during treatment or thoroughly wash before use. Cover or remove exposed food. 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.

For control of Ants, Bees, Beetles, Boxelder Bugs, Carpet Beetles, Centipedes, Clothes Moths, Cockroaches, Crickets, Earwigs, Firebrats, Flies, Gnats, Midges, Millipedes, Pillbugs, Scorpions, Silverfish, Sowbugs, Spiders, Stink Bugs, Ticks, and Wasps.

Use a 0.02% to 0.06% suspension (0.33 to 1 fl. oz. per gal. of water) for residual pest control in buildings and structures and on modes of transport. Apply either as a crack and crevice, pinstream, spot, coarse, low-pressure spray (25 PSI or less), or with a paint brush.

**Indoor Treatments:** Apply as a coarse, low pressure, crack and crevice or spot spray 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, and drawers. Do not use as a space spray. Pay particular attention to cracks and crevices.

**Mixing Directions:** See mixing directions in “**Pest Control on Outside Surfaces and Around Buildings**” section.

Dilute **Sharda Bifenthrin 7.9SC** with water for spray or brush application. Fill sprayer with the desired volume of water and add **Sharda Bifenthrin 7.9SC**. 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 must be limited to no more than once per seven days.

**Cockroaches, Crickets, Firebrats, Scorpions, Silverfish, Spiders, and Ticks:** 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.

**Ants:** Apply to any trails, around doors and windows and other places where ants may be found.

**Bees and Wasps:** Make application to nests late in the evening when insects are at rest. Thoroughly spray nest and entrance and surrounding areas where insects alight. Contact as many insects as possible. Retreat if signs of renewed activity exist.

**Boxelder Bugs, Centipedes, Earwigs, Beetles, Millipedes, Pillbugs, Sowbugs, and Stink Bugs:** 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.

#### **LIVESTOCK AND POULTRY HOUSING STRUCTURES**

Controls pests of poultry and livestock facilities, including Biting Flies, Filth-Breeding Flies, Fleas, Litter Beetles, Hide Beetles, Bed Bugs, Mites, and Ticks. Apply as a surface (including directed spray) and/or crack and crevice treatment. Control is enhanced when interior and exterior perimeter applications are made in and around the livestock or poultry housing structures. Normal cleaning practices of the structure also must be followed along with applications of **Sharda Bifenthrin 7.9SC** to effectively control crawling and flying insect pests.

**Occupied Areas of Poultry and Livestock Facilities:** Apply to indoor cracks and crevices only. Exterior applications to walls and foundation perimeters can help prevent interior infestations of flying and crawling insect pests. Apply **Sharda Bifenthrin 7.9SC** at a rate equivalent to 0.33 to 1 fl. oz. per 1,000 sq. ft.

**Unoccupied Areas of Poultry and Livestock Facilities:** Apply to floors, vertical and overhead surfaces where crawling or flying insect pests may be present. Feeders, waterers, and feed carts must be covered before application to prevent contamination. Do not apply to milk rooms. Pay attention to animal areas including stanchions, pipes, windows, doors and areas where insect pests hide or congregate. Exterior applications to walls and foundation perimeters can help prevent interior infestations of flying and crawling insect pests. Apply **Sharda Bifenthrin 7.9SC** at a rate equivalent to 0.33 to 1 fl. oz. per 1,000 sq. ft.

**To Control Bed Bugs, Mites, and Ticks in Animal Facilities:** Treat cracks/crevices, walls, posts, nest boxes, and mobile side curtains. Do not apply **Sharda Bifenthrin 7.9SC** directly to animals.

**For Adult Fly Control in and around Animal Facilities:** Spray application should target areas where flies will rest, such as the ceiling, rafter, and trusses. Also treat windows, interior and exterior walls and supports, fences and vegetation. **Sharda Bifenthrin 7.9SC** suspension may be sprayed on manure in areas where fly larvae are abundant and the area cannot be cleaned.

**For Poultry Houses:** Apply to floor area (birds grown on litter) or to walls, posts and cage framing (birds grown in cages). Application should also be made into cracks and crevices around insulation. Reapply after each grow out or de-caking and sanitization procedure, but not more frequently than every 8 weeks. Indoor control can be enhanced by making perimeter treatments around the outside of building foundations to prevent immigrating adult beetles. Apply in a uniform band 2 to 3 feet up and 6 to 10 feet out from the structure. Maintaining a year-round treatment program will prevent background populations from reaching problem levels.

**To Control Beetles in Houses Containing Birds Grown on Litter:** Apply **Sharda Bifenthrin 7.9SC** at a rate equivalent to 0.33 to 1 fl. oz. per 1,000 sq. feet to litter after birds are removed and during tilling. If litter is removed and replaced with fresh litter, apply **Sharda Bifenthrin 7.9SC** at a rate equivalent to 0.33 to 1 fl. oz. per 1,000 sq. ft. to bare soil or concrete, and treat new litter after it is spread. Apply spray to inside walls, posts and exterior perimeter. Reapply between each flock.

**To Control Beetles in Broiler-Breeder Houses:** Apply as directed above for litter and soil/floor treatment.

**To Control Beetles in Caged-Layer Houses:** Do not treat accumulated manure as it will likely disrupt natural enemies that control fly breeding. Instead, treat the perimeter of the manure at a rate equivalent to 0.33 to 1 fl. oz. of **Sharda Bifenthrin 7.9SC** per 1,000 sq. ft. Pit walls, posts, and exterior of structure should also be sprayed. Reapply between each flock.

#### LIVESTOCK AND POULTRY HOUSING STRUCTURES - PRECAUTIONS

- Allow **Sharda Bifenthrin 7.9SC** treatment to dry before applying disinfectants.
- **Insecticide Class Rotations:** In order to avoid problems with developed resistance to insecticides, it is important to rotate to an insecticide of a different class each 2-3 flocks. It is best to attempt to use 3 different classes of insecticides during a calendar year.

#### LIVESTOCK AND POULTRY HOUSING STRUCTURES - RESTRICTIONS

- DO NOT apply **Sharda Bifenthrin 7.9SC** as a surface spray when animals are present in the facility. Allow applications to dry before restocking the facility. Treatment may be made to cracks and crevices when animals are present.
- DO NOT apply **Sharda Bifenthrin 7.9SC** to any animal feed, water or watering equipment.
- DO NOT contaminate any animal feed, food or water in and around livestock or poultry housing when making applications.

#### 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 fl. oz. of **Sharda Bifenthrin 7.9SC** per gal. of water and apply as a coarse fan spray at the rate of 1 gal. per 1,000 sq. ft. 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 fl. oz. of **Sharda Bifenthrin 7.9SC** per gal. 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 fl. oz. of **Sharda Bifenthrin 7.9SC** per gal. 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, remove the carton nest material from the building void after treatment.

#### **Pests Under Slabs**

To control infestations of Arthropods (e.g., ants, cockroaches, and scorpions) that live beneath the slab area, drill or horizontally rod and inject 1 gal. of 0.06% to 0.12% dilution per 10 sq. ft. or 2 gals. of dilution per 10 linear feet.

#### **Posts, Poles, and Other Constructions**

Around wooden construction (signs, fences, and landscape ornamentation), an insecticidal barrier can be established by treating with a 0.06% dilution. Sub-surface injection and gravity-flow through holes in the bottom of the trench are two treatment methods that can be used on poles and posts that have already been installed. Establishing a complete chemical zone around the pole can be accomplished by treating on all sides. For poles and posts that are fewer than 6" in diameter, use 1 gal. of dilution per foot of depth and 1.5 gals. for larger poles, applying under the wood to a depth of 6". 4 gals. per 10 linear feet per foot of depth should be used for larger constructions.

### **CONTROL OF WOOD-INFESTING INSECTS IN WOOD (LOCALIZED AREAS IN STRUCTURES)**

Insects	Application Rate	Instructions
Termites Ants Carpenter Ants Wood-Infesting Beetles (including Old House Borer & Powder Post)	0.06% dilution to voids and galleries in damaged wood and in spaces between wooden members of a structure and between wood and foundations where wood is at risk.	<ul style="list-style-type: none"> <li>• Can be applied as paint or fan spray.</li> <li>• Place plastic sheeting under overhead areas that are spot treated except for soil surfaces in crawl spaces.</li> <li>• Areas to which access is difficult can be treated by drilling, and then injecting dilution with a crack and crevice injector into the damaged wood or void spaces.</li> </ul> <p>(Not intended as a replacement for soil treatment, mechanical alteration or fumigation to control widespread infestation of wood-infesting insects.)</p>

#### **Control of Wood-Infesting Insects and Nuisance Pests Outside of Structures**

In order to control wood-infesting insects active inside trees, utility poles and/or fences, a 0.06% dilution should be injected into the infested cavity, which can be found by drilling into the wood. If treating nuisance pests on the exterior of the structure, use a fan spray at a maximum pressure of 25 PSI and apply up to the point of runoff. To control bees, wasps, hornets, and yellow-jackets, direct the spray at net openings in the ground, bushes, and in cracks and crevice, where the insects may nest. Saturate the openings and contact as many insects as possible.

Underground Services (e.g., cables, conduits, pipes, utility lines, wires, etc.) may be in right-of-ways, inside of structures or to guard long range (miles of installation of services).

Treat the soil using a 0.06-0.12% **Sharda Bifenthrin 7.9SC** dilution to prevent and control termite and ant infestations.

Treat the bottom of the trench with 2 gals. of dilution per 10 linear feet and let it soak into the soil. Place the services on the treated soil and cover with about 2" of fill soil. Apply another 2 gals. per 10 linear feet over the fill soil to complete the chemical barrier. Only treat the soil in the area near the services in wide trenches, but ensure a continuous barrier of treated soil surrounding the services.

In the event that the soil will not accept the volume stated above, apply 1 gal. of 0.12% **Sharda Bifenthrin 7.9SC** per 10 linear feet of trench over the soil that covers the services and to the base of the trench.

Fill the remainder of the trench with the treated fill soil. Where each service sticks out of the ground, treat the soil by trenching/rodding no more than 1 - 2 gals. of dilution into the soil.

DO NOT treat electrically active underground services.

### ANT CONTROL

**Nuisance Ants, Indoors:** For best results, locate and treat ant nests. Dilute 0.5 to 1.0 fl. oz. of **Sharda Bifenthrin 7.9SC** per gal. of water and apply at the rate of 1 gal. of dilution per 1,000 sq. ft. as a surface, crack and crevice or spot treatment to areas where ants have been observed or are expected to forage. These areas include: baseboards, in and behind cabinets, under and behind dishwashers, furnaces, refrigerators, sinks and stoves, around pipes, cracks and crevices and in corners. Treat entry points into the home or premises such as around doors and windows. When using **Sharda Bifenthrin 7.9SC** in combination with baits, apply **Sharda Bifenthrin 7.9SC** as instructed above, and use baits in other areas that have not been treated with **Sharda Bifenthrin 7.9SC**.

**Nuisance Ants, Outdoors:** For best results, locate and treat ant nests. Apply **Sharda Bifenthrin 7.9SC** 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 listed 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 only in areas protected from rainfall and spray from sprinklers with low volume applications using 0.5 to 1.0 fl. oz. of **Sharda Bifenthrin 7.9SC** per gal. of water and applying this dilution at the rate of 1 gal. per 1,000 sq. ft.
- 2) Treat porous surfaces and vegetation with high volume applications using dilutions that are calculated to deliver 0.5 to 1.0 fl. oz. of **Sharda Bifenthrin 7.9SC** per 1,000 sq. ft. (refer to the **Ornamental** and **Perimeter Dilution Charts**).
- 3) For maximum residual control, dilute 0.5 to 1.0 fl. oz. of **Sharda Bifenthrin 7.9SC** per gal. of water and apply at a rate of up to 10 gals. of dilution per 1,000 sq. ft.

**Carpenter Ants, Indoors:** Dilute 0.5 to 1.0 fl. oz. of **Sharda Bifenthrin 7.9SC** per gal. of water and apply at the rate of one gal. of dilution per 1,000 sq. ft. as a surface, crack and crevice or spot treatment to areas where carpenter ants have been observed or are expected to forage. These areas include baseboards, in and behind cabinets, under and behind dishwashers, furnaces, refrigerators, sinks, and stoves, around pipes, cracks and crevices, and in corners. Treat 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 **Sharda Bifenthrin 7.9SC** in combination with baits, apply **Sharda Bifenthrin 7.9SC** as instructed above, and use baits in other areas that have not been treated with **Sharda Bifenthrin 7.9SC**.

**Carpenter Ants, Outdoors:** Apply **Sharda Bifenthrin 7.9SC** 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 listed 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 only in areas protected from rainfall and spray from sprinklers with low volume applications using 0.5 to 1.0 fl. oz. of **Sharda Bifenthrin 7.9SC** per gal. of water and applying this dilution at the rate of 1 gal. per 1,000 sq. ft.
- 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 **Sharda Bifenthrin 7.9SC** per gal. 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 fl. oz. of **Sharda Bifenthrin 7.9SC** per 1,000 sq. ft. (refer to the **Ornamental** and **Perimeter Dilution Charts**).
- 4) For maximum residual control, dilute 0.5 to 1.0 fl. oz. of **Sharda Bifenthrin 7.9SC** per gal. of water and apply at a rate of up to 10 gals. of dilution per 1,000 sq. ft.

**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 **Sharda Bifenthrin 7.9SC** per gal. 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 fl. oz. of **Sharda Bifenthrin 7.9SC** per gal. of water and apply as a drench or inject the dilution or foam at intervals of 8” to 12”. 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 (and Termites):** Dilute 1.0 fl. oz. of **Sharda Bifenthrin 7.9SC** per gal. of water and apply to the soil beneath where the firewood will be stacked at the rate of 1 gal. of dilution per 8 sq. ft.

#### ANT CONTROL - RESTRICTIONS

- Do not treat firewood with this product.
- Do not allow people or pets on treated surfaces until spray has dried. Do not allow people or pets on treated surfaces until spray has dried. Do not treat pets with this product.
- Do not apply this product when classrooms are in use.
- Do not apply this product in occupied patient rooms, or in any rooms occupied by the infirm, elderly or children for extended periods of time.
- Do not apply water-based dilutions of this product to electrical equipment because of possible shock hazard.
- Do not apply this product in livestock buildings (barns).

Application equipment that delivers low volume treatments, such as the Micro-Injector® or Actisol® applicators, may also be used to make crack and crevice, deep harborage, spot and surface treatments of **Sharda Bifenthrin 7.9SC**.

**Sharda Bifenthrin 7.9SC** will not stain or damage any surface that water alone will not stain or damage.

#### STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** Keep out of reach of children and animals. Store in original containers only. 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.

**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.

**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).

#### CONTAINER HANDLING:

**[NON-REFILLABLE CONTAINERS]** Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying.

**(Non-refillable container less than or equal to 5 gallons):** Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

**(Non-refillable container greater than 5 gallons):** Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling if available 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.

#### **[REFILLABLE CONTAINERS]**

Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or a mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Then offer for recycling if available 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.

**CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY**

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

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather, presence of other materials or other influencing factors in the use of the product, which are beyond the control of Sharda USA LLC or Seller. To the extent consistent with applicable law, all such risks shall be assumed by Buyer and User, and Buyer and User agree to hold Sharda USA LLC and Seller harmless for any claims relating to such factors.

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