

# OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

WASHINGTON, D.C. 20460

January 19, 2024

Annette Marine Agent for Sharda USA LLC Wagner Regulatory Associates, Inc. P.O Box 640 Hockessin, DE 19707

Subject: Notification per PRN 98-10 – Notification of revised label to correct optional market language/add QR code Product Name: Sharda Bifen 2lb EPA Registration Number: 83529-145 Application Date: Dec 18<sup>th</sup>, 2023 Case Number: 494608

Dear Annette Marine:

The Agency is in receipt of your Application for Pesticide Notification under Pesticide Registration Notice (PRN) 98-10 for the above referenced product. The Registration Division (RD) has conducted a review of this request for its applicability under PRN 98-10 and finds that the action requested falls within the scope of PRN 98-10.

The label submitted with the application has been stamped "NOTIFICATION" and placed in our records.

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 (FIFRA) 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) lists 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.

If you have any questions, please contact Laura Rademacher at <u>Rademacher.Laura@epa.gov</u>.

Page 2 of 2 EPA Reg. No. 83529-145 Case No. 494608

Sincerely,

Maynda Ulumiknishnon

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

Enclosure

#### BIFENTHRIN GROUP 3A INSECTICIDE

# Sharda Bifen 2lb ABN: Bidy

#### NOTIFICATION 83529-145

The applicant has certified that no changes, other than those reported to the Agency have been made to the labeling. The Agency acknowledges this notification by letter dated: 01/19/2024

[Insecticide/Termiticide]

Only for use by individuals/firms licensed or registered by the State to apply termiticide products. States may have more restrictive requirements regarding qualifications of persons using this product. Consult the structural pest control regulatory agency of your State prior to use of this product.

ACTIVE INGREDIENT:	WT. BY %
Bifenthrin*	
OTHER INGREDIENTS**:	
TOTAL:	
*Contains 2 pounds active ingredient per gallon.	

\*\*Contains petroleum distillates.

# KEEP OUT OF REACH OF CHILDREN WARNING/AVISO

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

FIRST AID				
<ul> <li>Immediately call a Poison Control Center or doctor.</li> <li>Do not induce vomiting unless told to do so by a poison control center or doctor.</li> <li>Do not give any liquid to the person.</li> <li>Do not give anything by mouth to an unconscious person.</li> </ul>				
<ul> <li>Move person to fresh air.</li> <li>If person is not breathing, call 911 or ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.</li> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>				
<ul> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>				
<ul> <li>Hold eye open and rinse slowly and gently with water for 15-20 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>				
NOTE TO PHYSICIAN				

This product is a pyrethroid. This product also contains aromatic hydrocarbons. Because of the risk of hydrocarbon pneumonitis if even tiny amounts are aspirated into the lung during emesis, consideration should be given to gastric lavage with endotracheal tube in place. Treatment is symptomatic and supportive. Animal and vegetable fats, milk, cream, and alcohol may increase absorption and should not be administered. Contains petroleum distillates. Vomiting may cause aspiration pneumonia.

### **HOTLINE NUMBER**

Have the product container or label with you when calling a poison control center or doctor or going for treatment. For emergency information concerning this product, call your poison control center at **1-800-222-1222**.

[Optional referral statements when booklets and container labels are used:]

[See label booklet for [complete] [additional] [First Aid,] [Precautionary Statements], [Directions For Use], and [Storage and Disposal].]



EPA Reg. No.: 83529-145 EPA Est. No.: XXXXX-XX-XXX

7217 Lancaster Pike, Suite A Hockessin, Delaware 19707

# PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

#### WARNING

May be fatal if swallowed. Causes substantial but temporary eye injury. Do not get in eyes or on clothing. Harmful if inhaled or absorbed through skin. Avoid breathing vapor or spray mist and contact with skin. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse.

#### PERSONAL PROTECTIVE EQUIPMENT (PPE)

#### Applicators, mixers, loaders, flaggers, and other handlers must wear:

- Long-sleeved coveralls worn over a minimum of long-sleeved shirt and long pants
- Shoes plus socks
- Chemical-resistant gloves: barrier laminate or viton(≥ 14 mils)
- Protective eyewear

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

In addition, all pesticide handlers must wear a minimum of a NIOSH-approved elastomeric half mask respirator with organic vapor (OV) cartridges and combination R, or P filters; OR a NIOSH-approved gas mask with OV cannisters; OR a NIOSH-approved powered air purifying respirator with OV cartridges and combination HE filters when handling the concentrate or when working in a non-ventilated space. All pesticide handlers must wear protective eyewear when working in non-ventilated space or applying termiticide by rodding or sub-slab injection.

#### Users should:

#### USER SAFETY RECOMMENDATIONS

- 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 apply when weather conditions favor drift from treated areas. Care must be used when spraying to avoid fish and reptile pets in/around ornamental ponds.

This pesticide is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply **Sharda Bifen 2lb** or allow it to drift to crops or weeds on which bees are actively foraging. Additional information may be obtained from your Cooperative Extension Service.

To protect the environment, do not allow pesticide to enter or run off into storm drains, drainage ditches, gutters, or surface waters. Applying this product in calm weather when rain is not predicted for the next 24 hours will help to ensure that wind or rain does not blow or wash pesticide off the treatment area. Rinsing application equipment over the treated area will help avoid run off to water bodies or drainage systems.

#### PHYSICAL/CHEMICAL HAZARDS

Combustible. **Do not** use or store near heat or open flame. Do not apply this product in or on electrical equipment due to the possibility of shock hazard. **Do not** mix or allow to come in contact with oxidizing agents. 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.

For indoor and outdoor use

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation. This labeling must be in the possession of the user at the time of pesticide application.

#### SPRAY DRIFT ADVISORIES

#### Handheld Technology Applications:

• Take precautions to minimize spray drift.

#### **Use Restrictions**

- Do not apply by air.
- Do not use in greenhouses or nurseries.
- Do not apply or irrigate to the point of run-off.
- Do not make applications during rain. Avoid making applications when rainfall is expected before the product has sufficient time to dry (minimum 4 hours). Rainfall within 24 hours after application may cause unintended runoff of pesticide applications.

- Do not spray the product into fish pools, ponds, streams, or lakes. Do not apply directly to sewers or storm drains, or to any areas like a drain or gutter where drainage to sewers, storm drains, water bodies, or aquatic habitat can occur. Do not allow the product to enter any drain during or after application. No permita la entrada a *desagües* internos o externos.
- All outdoor applications must be limited to spot or crack-and-crevice treatments only, except for the following permitted uses:
  - Treatment to soil or vegetation around structures;
  - o Applications to lawns, turf, and other vegetation; and
  - Application to building foundations, up to a maximum height of 2 feet.
- 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. For crack and crevice treatments, treat surfaces to ensure thorough coverage but avoid runoff.
- Spot treatments must not exceed two square feet in size (for example, 2 ft by 1 ft. or 4 ft. by 0.5 ft).
- Do not apply by ground within 25 feet of lakes, reservoirs, rivers, permanent streams, marshes or natural ponds, estuaries, and commercial fish ponds.
- For applications to turf and lawns, do not apply more than 0.23 lb. bifenthrin/acre/year.
- 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. To treat insects harbored in voids and cracks-and-crevices, applications must be made in such a manner to limit dripping and avoid runoff onto untreated structural surfaces and plants.

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

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

- 1. Applications to pervious surfaces, including soil, lawn, turf and other vegetation;
- 2. Applications to vertical surfaces (including the side of a man-made structure) directly above impervious surfaces (including driveways, sidewalks, etc.), up to 2 feet above ground level;
- 3. Applications to underside of eaves, soffits, doors, or windows permanently protected from rainfall by a covering, overhang, awning or other structure;
- 4. Applications around potential exterior pest entry points into man-made structures, including doorways and windows, when limited to a band not to exceed 1-inch;
- 5. Applications to vertical surfaces directly above pervious surfaces, including soil, lawn, turf, mulch or other vegetation) only if the pervious surface does not drain into ditches, storm drains, gutters, or surface waters.

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.



[Guidance only: The above pictogram must be legible (i.e. no smaller than 1.5 square centimeters or 0.25 square inches unless this size is greater than 10% of the size of the label.]

#### **PRODUCT INFORMATION**

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

Sharda Bifen 2lb prevents and controls termite infestations in and around structures and constructions.

Sharda Bifen 2lb used in and around structures and building construction will prevent and control termite infestations.

To institute a barrier between the wood and the termites in the soil, the chemical dilution 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. Treat the soil around untreated structural wood in contact with soil as stated below.

To use **Sharda Bifen 2lb** effectively, it is important that the service technician 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 must consider certain variables. Some of the variables to consider are species biology and behavior, structure design, heating, ventilation, and air conditioning (HVAC) systems, water table, soil type and compaction, 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.

#### Subterranean Termite Control Use

**Important:** Observe the following precautions to avoid contamination of public and private water supplies:

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

Note: For the purposes of this label, crawl spaces are defined as being inside of the structure.

**Critical Areas:** Points at which the foundation is penetrated or abuts another structure are critical areas. These include bath traps, cracks 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 the rate of 4 gallons of dilute dilution per 10 linear feet per foot of depth of the trench, or 1 gallon per 1.0 cubic feet of soil. See the Mixing Directions section of this label. Mix thoroughly into the soil taking care to contain the liquid and prevent runoff or spillage.
  - c. After the treated soil has absorbed the diluted emulsion, replace the soil into the trench.
- 2. Treat infested and/or damaged wood in place using an injection technique such as described in the **Control of Wood-Infesting Insects** section of this label.

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

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

- 1. Prior to treatment, if feasible, expose the water pipe(s) coming from the well to the structure, if the pipe(s) enter the structure within 3 ft. of grade.
- 2. Prior to treatment, applicators are advised to take precautions to limit the risk of applying the termiticide into subsurface drains that could empty into any bodies of water. These precautions include evaluating whether application of the termiticide to the top of the footer may result in contamination of the subsurface drain. Factors such as depth to the drain system and soil type and degree of compaction must 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 Use Rate: Use a 0.06% dilution for subterranean termites. For other pests on the label use specific listed rates.

#### **Mixing Directions**

**Mix the termiticide use dilution in the following manner:** Fill tank ¼ - ½ full. Start pump to begin by-pass agitation and place end of treating tool in tank to allow circulation through hose. Add appropriate amount of **Sharda Bifen 2lb**. Add remaining amount of water. Let pump run and allow recirculation through the hose for 2 - 3 minutes.

**Sharda Bifen 2lb** may 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 dilution, ready to use, dilute 1 qt. of Sharda Bifen 2lb with 99.75 gals. of water.

Mixing: Using the chart below, determine the volume of Sharda Bifen 2lb and water required to produce the desired volume of finished dilution.

Amount of Sharda Bifen 2lb			
<b>Dilution Concentrate</b>	Amount of Sharda Bifen 2lb	Amount of Water	Desired Gallons of Finished Dilution
0.06%	0.32 fl. oz.	127.68 fl. oz.	1

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	1.6 fl. oz.	4.99 gals.	5
	3.2 fl. oz.	9.975 gals.	10
	8 fl. oz.	24.94 gals.	25
	0.5 qt.	49.875 gals.	50
	0.75 qt.	74.8125 gals.	75
	1 qt.	99.75 gals.	100
	1.5 qts.	149.62 gals.	150
	2 qts.	199.5 gals.	200
0.12%*	0.64 fl. oz.	127.36 fl. oz.	1
	3.2 fl. oz.	4.975 gals.	5
	6.4 fl. oz.	9.95 gals.	10
	0.5 qt.	24.875 gals.	25
	1 qt.	49.75 gals.	50
	1.5 qts.	74.625 gals.	75
	2 qts.	99.5 gals.	100
	3 qts.	149.25 gals.	150
	1 gal.	199 gals.	200

\*When treating for termites, use this rate only in conjunction with volume adjustments, foam applications or underground services applications. Units of measure:

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 dilution and active ingredient as set forth in the **DIRECTIONS FOR USE** section of this label. If soil will not accept the labeled application volume, the volume may be reduced provided there is a corresponding increase in concentration so that the amount of active ingredient applied to the soil remains the same.

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

The volume of the 0.12% dilution may be reduced by half 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 (% Dilution) 0.06% 0.12%				
Volume Allowed:				
Horizontal (gallons dilution / 10 ft. <sup>2</sup> )	1 gal.	0.5 gal.		
Vertical (gallons dilution / 10 linear ft.)	4 gals.	2 gals.		

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

#### **Pre-Construction Subterranean Termite Treatment**

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.

The treatment site must be covered prior to a rain event in order to prevent run-off of the pesticide into non-target areas.

The applicator must either cover the soil him/herself or provide written notification of the above requirement to the contractor on site and to the person commissioning the application (if different than the contractor). If notice is provided to the contractor or the person commissioning the application, then they are responsible under FIFRA to ensure that: 1) if the concrete slab cannot be poured over the treated soil within 24 hours of application the treated soil is covered with a waterproof covering (such as polyethylene sheeting), and 2) the treated soil is covered if precipitation is predicted to occur before the concrete slab is scheduled to be poured.

#### **Use Restrictions**

- Do not treat soil that is water-saturated or frozen. Do not treat when raining.
- Do not allow treatment to runoff from the target area.
- Do not apply within 10 ft. of storm drains. Do not apply within 25 ft. of aquatic habitats (such as, but not limited to, lakes; reservoirs; rivers; permanent streams; marshes or ponds; estuaries; and commercial fish farm ponds).
- Do not make on-grade applications when sustained wind speeds are above 10 mph (at application site) at nozzle end height.

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 must a structure be treated below the footing.

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To produce effective pre-construction subterranean termite control, create vertical and/or horizontal chemically treated zones of protection using 0.06% dilution of **Sharda Bifen 2lb**.

#### **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 0.32 fl. oz. of **Sharda Bifen 2lb** per 10 sq. ft. in sufficient water (no less than 0.5 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 barriers 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 1.28 fl. oz. of **Sharda Bifen 2lb** 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, but not exceeding 12" apart. Avoid washing-out the soil around the footing. Trenches must 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.

Hollow block voids may be treated at the rate of 2 gals. of emulsion per 10 linear feet so that the emulsion reaches the top of the footing.

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

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

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

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

The volume of the 0.12% dilution may be reduced by half the labeled volume where desirable for pre- and post-construction applications. When the volume is reduced, the hole spacing for subslab 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 (% Dilution) 0.06% 0.12%					
Volume Allowed:					
Horizontal (gallons dilution / 10 ft. <sup>2</sup> )	1 gal.	0.5 gal.			
Vertical (gallons dilution / 10 linear ft.)	4 gals.	2 gals.			

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

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 must 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 Bifen 2lb**. Do not puncture or inject **Sharda Bifen 2lb** into such structures.

#### Foundations

For applications made after the final grade is installed, the applicator must trench and rod into the trench or trench along the foundation walls and around pillars and other foundation elements, at the rate prescribed from grade to the top of the footing. When

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the footing is more than 4 ft. 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 4 ft. 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 must a structure be treated below the footing.

#### 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-rodding 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 slab.
- b. For foundations that are less than or equal to 1 ft., dig a narrow trench about 6" wide beside the outside of the foundation walls.
   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 for **Basements** (see below) for foundations that are deeper than 1 ft.
- d. A 0.06% dilution may be used to treat exposed soil and wood in bath traps.

#### 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 ft. of depth. When the footer is greater than 4 ft. below grade, the applicator may trench and rod into the trench, or trench beside foundation walls at the rate designated for 4 ft. 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 must 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 dilution 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 ft. Apply by trenching and rodding into the trench, or trenching. Treat both sides of foundation and around all piers and pipes. Where physical obstructions such as concrete walkways adjacent to foundation elements prevent trenching, treatment may be made by rodding alone. When soil type and/or conditions make trenching prohibitive, rodding may be used. When the top of the footing is exposed, the applicator must treat the soil adjacent to the footing to a depth not to exceed the bottom of the footing. Read and follow the mixing and use direction section of the label if situations are encountered where the soil will not accept the full application volume.

- 1. Rod holes and trenches must not extend below the bottom of the footing.
- 2. Rod holes must be spaced so as to achieve a continuous termiticide barrier but in no case more than 12" apart.
- 3. Trenches must be a minimum of 6" 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 dilution 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 instruction for accessible crawl spaces. Otherwise, apply one or a combination of the following two methods.

- To establish a horizontal barrier, apply to the soil surface, 1 gal. of dilution per 10 square feet overall using a nozzle pressure of less than 25 PSI and a coarse application nozzle (e.g., Delavan Type RD Raindrop, RD-7 or larger, or Spraying Systems Co. 8010LP TeJet<sup>®</sup> 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 dilution per 10 square feet. 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.

#### **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 dilution 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 must 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.

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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.

Not for use in voids insulated with rigid foam insulation.

**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:

- a. Prepare a trench, placing the removed soil onto heavy-weight plastic sheeting or similar, water-impermeable material.
- b. 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.
- c. Place the treated soil back into the trench after it has absorbed the dilution.

Attention: Wear NIOSH approved respirator as listed in the PPE section of this label and unvented goggles when applying Sharda Bifen 2lb in a confined area.

#### Foam Applications

**Sharda Bifen 2Ib** dilution, from 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 ensure 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 Bifen 2lb** 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 (1.28 fl. oz. of **Sharda Bifen 2lb** concentrate) per 10 linear feet must be applied for a vertical barrier, or at least 1 gal. of 0.06% dilution (0.32 fl. oz. of **Sharda Bifen 2lb** concentrate) per 10 sq. ft. must be applied for a horizontal barrier. For a foam only application, apply **Sharda Bifen 2lb** concentrate in sufficient concentration and volume to equal 1.28 fl. oz. of concentrate per 10 linear feet or 1 fl. oz. 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 Bifen 2lb**, they can build mud tubes over surfaces that have been treated. Cracks and spaces must 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 Bifen 2lb** 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 re-infested areas may be retreated in accordance with application techniques described in **Sharda Bifen 2lb**'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 re-treatment of the structure is prohibited unless there is clear evidence that reinfestation or barrier disruption has occurred.

#### APPLICATION IN CONJUNCTION WITH THE USE OF ABOVE-GROUND TERMITE BAITS

As part of an integrated pest management (IPM) program for termite control, **Sharda Bifen 2lb** may be applied to critical areas of the structure including plumbing and utility entry sites, bath traps, expansion joints, foundation cracks and areas with known or suspected infestations at a rate of 0.06% as a spot treatment or complete barrier treatment. Applications may be made as described in the **Post-Construction** treatment section of this label.

#### **Specific Pest Control Applications**

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 installations of services.

Treat the soil using a 0.06 - 0.12% Sharda Bifen 2lb dilution to prevent and control termite and ant infestations.

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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, 1 gal. of 0.12% **Sharda Bifen 2lb** may be applied 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, the soil may be treated by trenching/rodding no more than 1 - 2 gals. of dilution into the soil.

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

## Posts, Poles, and Other Constructions

Around wooden constructions (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 must be used for larger constructions.

control of wood-intesting insects in wood (Localized Areas in Structures)	<b>Control of Wood-Infesting</b>	Insects in Wood	(Localized Areas in Structures)
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Insects	Application Rate	Remarks
Termites Ants Carpenter Ants Wood-Infesting Beetles (including Old House Borer & Powder Post)	Apply a 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> <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</li> </ul>

Controlling termite carton nests in building voids can be accomplished by injecting with a 0.06% dilution. To obtain control, various depths of injection and numerous injection points may be needed. After treatment is complete and when feasible, remove the carton nest material from the building void.

To control Bees, Wasps, Hornets, and Yellow-Jackets, apply a 0.06% dilution late in the evening or when insects are at rest. Direct the spray at nest openings in the ground, bushes, and in cracks and crevices, where the insects may nest. Saturate the openings and contact as many insects as possible.

#### **Restrictions:**

- Locate, identify, and mark wells, electrical conduits, water and sewer lines, and radiant heat pipes prior to application of **Sharda Bifen 2lb**. Do not puncture or inject **Sharda Bifen 2lb** into such structures.
- Do not apply into electrical fixtures, switches, or sockets.
- In the home, all food processing surfaces and utensils in the treatment area must be covered during treatment or thoroughly washed before re-use. Remove pets, birds, and cover aquariums before spraying.
- Do not permit humans or pets to contact treated surfaces until the spray has dried.
- During any overhead applications to overhead interior areas of structures, cover surfaces below with plastic sheeting or similar materials (except where exempt).
- 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.
- Do not use in food/feed areas of food/feed handling establishments, restaurants, or other areas where food/feed is commercially prepared or processed. Do not use in serving areas while food is exposed, or facility is in operation. Serving areas are areas where prepared foods are served such as dining rooms but excluding areas where food may be prepared or held.
- In the home, cover all food handling surfaces and cover or remove all food and cooking utensils, or wash thoroughly after treatment. Non-food/feed areas of food/feed areas are areas such as garbage rooms, lavatories, floor drains (to sewers) entries and vestibules, offices, locker rooms, machine rooms, boiler rooms, garages, mop closers, and storage (after bottling or canning).
- Not for use in Federally Inspected Meat and Poultry Plants.

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

In order to control listed wood-infesting insects active inside trees, utility poles and/or fences, inject 0.06% dilution 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, apply late in the evening. Direct the spray at nest openings in the ground, bushes, and in cracks and crevices, where the insects may nest. Saturate the openings and contact as many insects as possible.

#### 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 a 0.06% - 0.12% dilution per 10 sq. ft. or 2 gals. of dilution per 10 linear feet.

#### **Restrictions:**

- Do not apply to pets, crops, or sources of electricity. Firewood is not to be treated.
- Use only in well ventilated areas.
- During any application to overhead areas of structure, cover surfaces below with plastic sheeting or similar material (except where exempt).
- Do not allow spray to contact food, foodstuffs, food contacting surfaces, food utensils or water supplies.
- Thoroughly wash dishes and food handling utensils with soap and water if they become contaminated by application of this product.
- Do not treat areas where food is exposed.
- During indoor surface applications do not allow dripping or run-off to occur.

#### **Application Instructions**

**Sharda Bifen 2lb** formulation mixes readily with water and other aqueous carriers, and controls listed insects and mites on trees, shrubs, foliage plants, non-bearing fruit and nut trees, and flowers in interiorscapes including hotels, shopping malls, office buildings, and, outdoor plantscapes around residential dwellings, parks, institutional, recreational, athletic fields, and home lawns. Non-bearing crops are perennial crops that will not produce a harvestable raw agricultural commodity.

**Sharda Bifen 2lb** may be tank-mixed with other products, including insect growth regulators. When tank mixing **Sharda Bifen 2lb** with other products, observe all precautions and limitations on each separate product label. The addition of spreader stickers is not necessary. The physical compatibility of **Sharda Bifen 2lb** may vary with different sources of pesticide products, and local cultural practices. Any tank mixture which has not been previously tested must be prepared on a small scale (pint or quart jar), using the proper proportions of chemicals and water to ensure the physical compatibility of the mixture. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture. Always conduct a compatibility test prior to any tank mixture.

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

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

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

#### **Resistance Management**

#### **APPLICATION INFORMATION**

For resistance management, **Sharda Bifen 2lb** contains a Group 3A insecticide (or acaricide). Any (insect/mite) population may contain individuals naturally resistant to **Sharda Bifen 2lb** and other Group 3A insecticides/acaricides. The resistant individuals may dominate the insect/mite population if this group of insecticides/acaricides are used repeatedly in the same fields. Appropriate resistance-management strategies should be followed.

To delay insecticide/acaricide resistance, take the following steps:

- Use tank mixtures with insecticides/acaricides from a different group that are equally effective on the target pest when such use is permitted. Do not rely on the same mixture repeatedly for the same pest population. Consider any known cross-resistance issues (for the targeted pests) between the individual components of a mixture. In addition, consider the following recommendations provided by the Insecticide Resistance Action Committee (IRAC):
  - Individual insecticides selected for use in mixtures should be highly effective and be applied at the rates at which they are individually registered for use against the target species.
  - Mixtures with components having the same IRAC mode of action classification are not recommended for insect resistance management.
  - When using mixtures, consider any known cross-resistance issues between the individual components for the targeted pest(s).
  - Mixtures become less effective if resistance is already developing to one or both active ingredients, but they may still provide pest management benefits.
  - The insect resistance management benefits of an insecticide mixture are greatest if the two components have similar periods of residual insecticidal activity. Mixtures of insecticides with unequal periods of residual insecticide activity may offer an insect resistance management benefit only for the period where both insecticides are active.
- Adopt an integrated pest management program for insecticide/acaricides use that includes scouting, uses historical information
  related to pesticide use, crop rotation, record keeping, and which considers cultural, biological and other chemical control
  practices.
- Monitor after application for unexpected target pest survival. If the level of survival suggests the presence of resistance, consult with your local university specialist or certified pest control advisor.
- Contact your local extension specialist or certified crop advisors for any additional pesticide resistance-management and/or IPM recommendations for the specific site and pest problems in your area.

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• For further information or to report suspected resistance contact (company representatives) at (toll free number) or at (Internet site).

#### Lawns

**Sharda Bifen 2lb** may be used as a broadcast treatment. To accomplish uniform control when applying to dense grass foliage, use volumes of up to 10 gals. per 1,000 sq. ft.

For low water volume usage, less than 2 gals. per 1,000 sq. ft., addition of a non-ionic or silicone-based surfactant (0.25% v/v) is recommended, as is immediate irrigation of treated area with at least 0.25% of water following application to ensure efficacy of subsurface pests including Mole Crickets.

Pest	Sharda Bifen 2lb	Comments	
	(Fl. Oz. per 1,000 Sq. Ft.)		
Ants	0.07 - 0.15	To increase control of later Summer or Fall Adult Mole Crickets, apply	
Armyworms		a non-ionic surfactant or a silicone-based surfactant (0.25% v/v) as a	
Billbugs		tank-mix. To maximize efficacy against sub-surface pests, apply <b>Sharda</b>	
Chinch Bugs		<b>Bifen 2lb</b> with a non-ionic or silicone-based surfactant (0.25% v/v) in	
Crane Flies		enough water to ensure the spray penetrates to soil-thatch matrix.	
Crickets		Water treated areas with 0.25" - 0.5" of water immediately following	
Cutworms		application taking special care to prevent run-off or puddling.	
Earwigs			
Fall Webworms		To ensure that the best control of Armyworms, Cutworms, and Sod	
Fleas (Adults, Larvae)		Webworms is achieved, postpone watering or mowing for 24 hours	
Grasshoppers		following application.	
Mites			
Mole Crickets*		*Use a lower rate in the early Spring to control overwintered Mole Crickets.	
Sod Webworms		Use the higher rate in late-Summer or early Fall to control adult Mole Crickets.	
Spittlebugs		**For foraging ants.	
Ticks			
Imported Fire Ants**	0.07 - 0.30		
Japanese Beetles (Adults)			

#### Use Restrictions:

- Do Not Use This Product on Golf Courses and Sod Farms in Nassau County or Suffolk County, New York.
- In New York State, this product may not be applied within 100 feet (using ground equipment) to 300 feet (using aerial equipment) of coastal marshes or streams that drain into coastal marshes.
- In New York State, do make a single repeat application of this product if there are signs of renewed insect activity, but not sooner than 2 weeks after the first application.
- Do not apply when wind conditions favor downwind drift to nearby water bodies. Do not apply when wind velocity exceeds 10 mph.
- Avoid application when wind gust approach 10 mph.
- Apply using nozzles that provide the largest droplet size compatible with adequate coverage.

**Ornamentals and Trees:** Dilute 0.26 - 1.28 fl. oz. of **Sharda Bifen 2lb** per 10 gals. of water and apply at the rate of 10 gals. per 4,356 sq. ft. One gallon of finish spray will treat 435 sq. ft. If a higher volume application is needed to sufficiently cover the plant canopy, **Sharda Bifen 2lb** can be diluted in large volumes of water and applied through low volume equipment as long as the maximum label rate (1.28 fl. oz. per 4,356 sq. ft.) is not exceeded.

#### **ORNAMENTAL APPLICATION RATES**

Pests	Rate		Comments	
Pests	Lb. a.i. per 10 Gals.	Fl. Oz. per 10 Gals.	comments	
Ants	0.004 - 0.02	0.26 - 1.28	Apply the specified rate as a full coverage foliar	
Aphids			spray. As foliage and pest pressure increases,	
Bagworms			repeat application as needed using higher rates.	
Black Vine Weevil (Adults)				
Brown Soft Scales			Bagworm Control: Treat when larvae start to	
Broad Mites			hatch. Spray larvae directly.	
Budworms				
California Red Scale (Crawlers)			Applications will be most successful if they are	
Centipedes			made when the larvae are young.	
Clover Mites				
Crickets			Scale Crawler and Twig Borer Control: Treat	
Cutworms			trunks, stems, and twigs along with plant	
Earwigs			foliage.	
Elm Leaf Beetles				
Fall Webworms			Before treating an entire planting, treat a small	
Flea Beetles			amount of plants and observe for 1 week since	
Fungus Gnats (Adults)			certain cultivars may be sensitive to the final	
Grasshoppers			spray solution.	

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Lace Bugs Leafhoppers Leaf Feeding Caterpillars Mealybugs Millipedes Mole Crickets* Orchid Weevils Pillbugs Pine Needle Scales (Crawlers) Plant Bugs (including <i>Lygus</i> spp.) San Jose Scales (Crawlers) Sowbugs Spiders Spittlebugs Tent Caterpillars Tip Moths Weevils Whiteflies			To prevent or postpone pest resistance to Sharda Bifen 2lb, use an alternate class of chemistry. To achieve complete coverage, make sure enough water is used. Normal use rates are 10 gals. of spray per 4,356 sq. ft. Black Vine Weevil and Fungus Gnat Larvae Control: Apply as a drench at the rate of approximately 8 fl. oz. of finished spray per 6" pot. *Overwintered Mole Cricket Control: Early Spring - use the lower rate; Late Summer or early Fall - use the higher rate.
Citrus Thrips Beet Armyworm Diaprepes (Larvae, Adults) European Red Mite Leafrollers Spider Mites Thrips Twig Borers Black Vine Weevil (Larvae)	0.006 - 0.02	0.38 - 1.28	
Black Vine Weevil (Larvae) Fungus Gnats (Larvae) Japanese Beetles (Adults) Leafminers Pecan Leaf Scorch Mite	0.01 - 0.02	0.04 - 1.28	

#### Pest Control on Outside Surfaces and Around Buildings Follow Additional Application Restrictions for Residential Outdoor Surface and Space Sprays under DIRECTIONS FOR USE section.

Applications to vertical exterior surfaces (e.g., foundations) are permitted to a maximum height of  $\frac{3-2}{2}$  ft. from ground level. Sections of vertical exterior surfaces that abut non-porous horizontal surfaces can only be treated if either 1) these sections are protected from rainfall and spray from sprinklers or 2) 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).

Use Sites	Pests	Rate	Comments
Garages	Ants (Carpenter Ants and Fire Ants)	For a 0.03% dilution mix	Apply Sharda Bifen 2lb as a
Garbage Sites	Armyworms	0.17 fl. oz. / 1 gal. water	residual spray using a 0.03 -
Foundations	Bees	(1 fl. oz. = 2 tablespoons)	0.06% dilution.
Outdoor Siding	Centipedes		
Overhang and Eaves Patios	Chiggers	For a 0.06% dilution mix	Do not use household utensils to
Porches	Chinch Bugs	0.33 fl. oz. / 1 gal. water	measure Sharda Bifen 2lb.
Soil	Clover Mites	(1 fl. oz. = 2 tablespoons)	
Trunks of Woody Ornamentals	Crickets		For heavy pest infestation,
Window Frames	Cutworms		quicker knockdown, or longer
	Dichondra Flea Beetles		residual control, use the higher
Lawns next to:	Earwigs		rate.
Apartments	European Crane Flies		
Barns	Grasshoppers		To sustain effectiveness, repeat
Carports	Hornets		treatment as needed.
Condos	Millipedes		
Duplexes	Mosquitoes		
Fence Rows	Moths		
Garages	Roaches (Cockroaches)		
Private Houses	Scorpions		
Townhomes	Sod Webworms		
Trailers	Sowbugs (Pillbugs)		
Utility Sheds	Spiders (Black Widow Spiders)		
	Springtails		
Residential and Non-	Ticks (Brown Dog Ticks)		
Commercial Structures	Wasps		
Areas where pests gather			
or have been seen			

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**Perimeter Treatment:** Apply to a 7-foot wide band of soil and vegetation around and next to the structure and treat the foundation of the structure to a height of 2 ft. Use a spray volume of 2 - 10 gals. of dilution per 1,000 sq. ft. If foliage is thick or there is mulch or leaf litter nearby, higher volumes of water may be necessary. If certain pests such as Gypsy Moth adults and caterpillars, Boxelder Bugs, Elm Leaf Beetles, Earwigs or Silverfish are nearby, apply to house siding.

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).

**For Optimal Control of Ant and Fire Ant Mounds, use Sharda Bifen 2lb 0.06% dilution as Drench Method:** Sprinkle the mound, using 1 - 2 gals. of dilution, until it is wet and apply to a 4-foot diameter circle around the mound. When treating mounds larger than 12", use the higher volume. Do not treat in the heat of the day and for optimum results, apply in cool weather, such as in early morning or late evening hours.

**Application to Home Lawns:** Apply **Sharda Bifen 2lb** as a broadcast treatment in 2 - 10 gals. of carrier per 1,000 sq. ft. When treating thick grass foliage, use higher volumes to get complete, uniform coverage.

Attention: Keep children and pets off treated areas following application until the spray has dried.

#### TRUNK SPRAYS TO ORNAMENTAL TREES

To control *Dendroctonus* bark beetles such as Black turpentine beetle, mountain pine beetle, western pine tip beetle, southern pine tip beetle, and engraver beetles (*lps* spp.)

**Preventative Control:** In the spring, or when trees nearby have become infested posing a threat, treat the trunk of the tree with a hydraulic sprayer using a mixture that contains 1 - 2 pts. of **Sharda Bifen 2lb** per 100 gals. (0.25 - 0.5 lb. a.i. per 100 gals.) of water. Treat the main trunk from the base of the tree to at least halfway into the live crown spraying the tree directly and until the bark is completely wet (usually 1 - 4 gals. of spray per tree). Do not apply more than 0.2 lb. a.i. (12.8 fl. oz.) of **Sharda Bifen 2lb** to trees per acre. If reinfestation is probable it may be necessary to repeat treatment. Depending on certain local variables and target pests, application rates and timing will differ. Check with your local State Extension specialist or other qualified expert for specific recommendations.

**Treatment of Infested Trees:** To control emerging brood, treat trees that still have beetles in the bark by using a spray mixture containing 2 pts. of **Sharda Bifen 2lb** per 100 gals. of water. Treat the main trunk from the base of the tree to at least halfway into the live crown spraying the tree directly and until the bark is completely wet (usually 1 - 4 gals. of spray per tree). Do not apply more than 0.2 lb. a.i. (12.8 fl. oz.) of **Sharda Bifen 2lb** to trees per acre. Trees that have needles that have all turned brown normally have been vacated and must not be treated unless infestation is evident. Scrape off the outer bark to determine whether or not the tree is infested. If trunks are currently infested, fell the infested trees and cut into sections. Spray the trunk and large limbs of the sections thoroughly to treat the entire surface area. Do not apply more than 0.2 lb. a.i. (12.8 fl. oz.) of **Sharda Bifen 2lb** per acre.

#### To control other beetles including Ambrosia beetles, Elm Bark beetles, and Emerald Ash borer

**Preventative Control:** In the early spring or before adult beetle flight and tree infestation, treat the trunk, scaffolding, and limbs of the tree with a hydraulic sprayer using a spray mixture containing 1 - 2 pt.s of the product per 100 gals. (0.25 - 0.5 lb. a.i. per 100 gals.) of water. Spray the tree until the bark is completely wet (usually 6 - 12 gals. of spray per tree). Do not to apply more than 0.2 lb. a.i. to trees per acre. If reinfestation is probable it may be necessary to repeat treatment. Depending on certain local variables and target pests, application rates and timing will differ. Check with your local State Extension specialist or other qualified expert for specific recommendations.

#### **OTHER BORERS ON ORNAMENTAL TREES**

To control other boring insects, see the table below. Depending on geographic location and environmental conditions, application rate and timing will differ. Spray the tree until the bark is completely wet but not to the point of runoff (usually 1 - 4 gals. of spray per tree). Do not apply more than 100 gals. of diluted spray mixture to trees on a treated acre. Check with your local State Extension specialist or other qualified expert for specific recommendations.

Pest	Rate (Fl. Oz. per 100 Gals.)	Comments
Clearwing Moth Borers	6.4 - 12.8	Treat trunks and lower branches
(Ash borer, banded ash clearwing, Dogwood borer, Lesser		before adult emergence.
peachtree Borer, Lilac borer, Oak borer)		
Coleopteran Borers	6.4 - 12.8	
(Bronze birch borer, Flatheaded Appletree borer)		
For maximum residual control of the above listed pests.	12.8	

# **STORAGE AND DISPOSAL**

Do not contaminate water, food, or feed by storage or disposal. Do not pour or dispose down-the-drain or sewer. Call your local solid waste agency for local disposal options.

**PESTICIDE STORAGE:** Store upright at room temperature. Avoid exposure to extreme temperatures. In case of spillage or leakages, soak up with an absorbent material such as sand, sawdust, earth, Fuller's earth, etc. Dispose of with chemical waste.

**PESTICIDE DISPOSAL:** Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative of the nearest EPA Regional Office for guidance.

#### CONTAINER HANDLING:

**[Less Than or Equal to 5 Gallons]** [Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ½ 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 more times. Then offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill or by incineration.]

[Greater Than 5 Gallons] [Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ 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. Dispose of empty container in a sanitary landfill or by incineration.]

**[For Bulk and Mini-Bulk Containers]** [Refillable container. Refill this container with pesticide only. Do not use 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 person refilling. To clean container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10% 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 by other procedures allowed by State and local authorities.]

#### 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.

Sharda USA LLC warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. This warranty does not extend to the use of this product contrary to label instructions, or under conditions not reasonably foreseeable to or beyond the control of Seller or Sharda USA LLC and Buyer and User assume the risk of any such use. To the extent consistent with applicable law, Sharda USA LLC MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

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[OPTIONAL MARKETING LANGUAGE]

<u>2</u>	[Handle with Care]
<u>3</u>	[This side Up]