

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

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

March 5, 2012

P. Leanne Pruett
Ensystex IV, Inc.
c/o Pyxis Regulatory Consulting, Inc.
4110 136<sup>th</sup> Street, NW
Gig Harbor, WA 98332

Subject:

Amendment - Bifenthrin Task Force Restrictions

Maxxthor EC

EPA Reg. No. 83923-6

Your submission dated October 18, 2011

Dear Ms. Pruett:

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

- 1. Move the last paragraph in the *Precautionary Statements* starting with "Termite Control Treatment ... etc" to the *Directions For Use* section. Also replace "Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco" with "Wash thoroughly with soap and water after handling and before eating, drinking, using tobacco or using the toilet".
- 2. Under Structures with Adjacent Wells/Cisterns and/or Other Water Bodies replace "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" with "Applicators must inspect all structures with nearby water sources including wells, cisterns, surface ponds, streams, and other bodies of water and evaluate, at a minimum, the treatment listed below prior to making an application".
- 3. Under Application To Wood Outdoors To Protect Against Wood Destroying Insects replace "... attack of wood infesting insects such as termites, Carpenter ants ... etc" with "... attack of wood infesting insects including termites, Carpenter ants ... etc". Also replace "Locate the cavity that the insects (such as Carpenter ants) ... etc" with "Locate the cavity that the insects including Carpenter ants ... etc".

- 4. Under Application To Control Lawn Pests make the following revisions:
  - a. Replace "MAXXTHOR EC controls a wide range of turfgrass insect and mite pests" with "MAXXTHOR EC controls the listed turfgrass insect and mite pests".
  - b. Replace "Permitted sites include but are not limited to lawns, grounds, recreational areas, parks, landscapes and athletic fields" with "Permitted sites include lawns, grounds, recreational areas, parks, landscapes and athletic fields".
  - c. Replace "To maximize efficacy against sub-surface pests such as mole crickets or chinch bug ... etc" with "To maximize efficacy against sub-surface pests including mole crickets or chinch bug ... etc".
  - d. Replace "Recommended rates for specific pests within this range are given below" with "Specific rates for listed pests within this range are given below".
  - e. Replace "The addition of a non-ionic or silicone based surfactant (0.25% v/v) is also recommended when making a minimal volume application" with "Add a non-ionic or silicone based surfactant (0.25% v/v) when making a minimal volume application".
  - f. Replace the heading "Application Recommendations Against Specific Lawn Pests" with "Application Instructions Against Specific Lawn Pests".
- 5. Under Application To Control Ornamental Pests make the following revisions:
  - a. Replace "For use on ornamental plants including but not limited to trees, shrubs ... etc" with "For use on ornamental plants including trees, shrubs ... etc".
  - b. Replace "Recommended ornamental application use rates, based on the target pest ... etc" with "Specific ornamental application use rates, based on the target pest ... etc".
  - c. Replace "Recommended rates for specific pests within this range are below" with "Rates for specific pests within this range are below".
  - d. Replace "Application Recommendations Against Specific Ornamental Pests" with "Application Against Specific Ornamental Pests".
  - e. On the table for other boring insects replace "Recommended Dilution Rate (Range)" with "Dilution Rate (Range)".
- 6. Under Control Of Structural Pests (Other Than Wood Infesting Insects) On And Around Buildings make the following revisions:
  - a. Replace "MAXXTHOR EC controls a wide range of structural pests ... etc" with "MAXXTHOR EC controls the listed structural pests ... etc".
  - b. Replace "Permitted sites include but are not limited to the exterior of homes ... etc" with "Permitted sites include the exterior of homes ... etc".
  - c. Replace "Treatments should not be repeated more often than once every 7 days" with "Treatments must not be repeated more often than once every 7 days".
  - d. Replace "Repeat application should be limited to no more than once every seven days" with "Repeat application must be limited to no more than once every seven days"

7. Under Application Under Slabs To Control Pests replace "Infestations of pests such as ants, cockroaches ... etc" with "Infestations of pests including ants, cockroaches ... etc"

If you have any questions regarding this action, please contact BeWanda Alexander at Alexander.bewanda@epa.gov or (703) 305-7460.

Sincerely,

anda Aleyander for Richard Gebken Product Manager Insecticide Branch

Registration Division (7505P)

Enclosure



with COMMENTS
In EPA Letter Dated
MAR 5 2012
Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No.

# MAXXTHOR EC

For use only by individuals/firms licensed or registered by the state to apply termiticide products when applied as a termiticide. States may have more restrictive requirements regarding qualifications of persons using this product. Consult the structural pest control regulatory agency of your state prior to use of this product. For use by pest control operators or commercial operators to control pests on lawns and ornamental plants.

Active Ingredient:	By Wt.
Bifenthrin*	23.4%
Other Ingredients**:	76.6%
TOTAL:	100.0%

\*Cis isomers 97% minimum, trans isomers 3% maximum.

\*\*Contains petroleum distillates

MAXXTHOR EC contains 2 pounds active ingredient per gallon.

EPA Reg. No. 83923-6 EPA Est. 81824-NC-001

(PRECAUCION AL USUARIO: Si usted no puede leer o entender ingles, no use este producto hasta gue la etiqueta le haya sido explicada ampliamente.)

(TO THE USER: If you cannot read and understand English, do not use this product until the label has been fully explained to you.)

For product use information call 1-866-FOR-THOR (367-8467).

# KEEP OUT OF REACH OF CHILDREN WARNING

### ENSYSTEX IV, Inc.

Fayetteville, NC 28303

#### **Net Contents: As marked on container**

	FIDOT AID:
	FIRST AID
If swallowed	Immediately call a poison control center or doctor.
	<ul> <li>Do not induce vomiting unless told to do so by a poison control center or doctor.</li> </ul>
	Do not give any liquid to the person.
	Do not give anything by mouth to an unconscious person.
If inhaled	Move person to fresh air.
	<ul> <li>If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.</li> </ul>
	<ul> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>
If on skin or	Take off contaminated clothing.
clothing	<ul> <li>Rinse skin immediately with plenty of water for 15 to 20 minutes.</li> </ul>
	<ul> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
If in eyes	<ul> <li>Hold eye open and rinse slowly and gently with water for 15 to 20 minutes.</li> </ul>
	<ul> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> </ul>
	Call a poison control center or doctor for treatment advice.
Representation of the second	HOTLINE NUMBER

#### HOTLINE NUMBER

Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also call 1-800-369-4352 for emergency medical treatment information.

#### 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.

### PRECAUTIONARY STATEMENTS

#### Hazards to Humans and Domestic Animals

May be fatal if swallowed. Causes skin irritation and moderate eye irritation. Do not get on skin or on clothing. Avoid breathing vapors or spray mist, and contact with eyes. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Wash thoroughly with soap and water after handling and before eating, drinking or using tobacco. Remove contaminated clothing and wash contaminated clothing before reuse.

Personal Protective Equipment: All pesticide handlers (mixers, loaders and applicators) must wear long-sleeved coveralls worn over a minimum of short-sleeved shirt and short pants, socks, chemical-resistant footwear, chemical-resistant gloves and protective eyewear. After the product is diluted in accordance with label directions for use (or if an inline injector system is used) shirts, pants, socks, shoes and waterproof gloves are sufficient. All pesticide handlers must wear a respiratory protection device when handling the concentrate or when working in a non-ventilated space (such as a NIOSH approved respirator with any R, P or HE filter or a NIOSH approved respirator with an organic vapor (OV)

cartridge or canister with any R, P or HE pre-filter). All pesticide handlers must wear protective eyewear, such as goggles, faceshield or safety glasses, when working in a non-ventilated space or when applying as a termiticide by rodding or subslab injection.

Termite Control Treatment: 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 complicated.

#### **Environmental Hazards**

This pesticide is extremely toxic to fish and aquatic invertebrates. Do not apply when weather conditions favor drift from treated areas. Care should be used when spraying to avoid fish and reptile pets in/around ornamental ponds.

Do not apply this product 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 and drainage systems.

#### **Physical and Chemical Hazards**

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.

#### **DIRECTIONS FOR USE**

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. Do not water the treated area to the point of run-off.

Do not make applications during rain.

Application is prohibited 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 the product to enter any drain during application.

#### Additional Application Restrictions for Pre-Construction Termiticide Applications:

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 from 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.

Do not treat soil that is water-saturated or frozen.

Do not treat when raining.

Do not allow treatment to run off from the target area.

Do not apply within 10 feet of storm drains. Do not apply within 25 feet 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 sweeps are above 10 mph (at application site) at nozzle end height.

#### 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) Treatment 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.

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.

#### STORAGE AND DISPOSAL

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

**Pesticide Storage:** If crystals are observed, warm material to above 60°F by placing container in warm location. Shake or roll container periodically to redissolve solids. Do not use external source of heat for warming container.

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 containers. Do not contaminate other pesticides, fertilizers, water, food, or feed by storage or disposal.

In Case of Spill: Confine it, avoid contact, isolate area and keep animals and unprotected persons away. If spill is liquid, form dike around spill area and/or absorb spill with absorbent materials, such as sand, cat litter or clay. If spill is dry material, cover to prevent dispersal. Place damaged package in a holding container and identify contents. Contact Ensystex at 1-866-367-8467 or Chemtrec at 1-800-424-9300 for any assistance

**Pesticide Disposal:** Pesticide wastes are toxic. 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 directions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

Container Disposal: Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ 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.

#### APPLICATION FOR CONTROL OF SUBTERRANEAN TERMITES

#### General

MAXXTHOR EC, in the form of a dilute insecticidal solution, prevents and controls subterranean termite infestations in and around structures and other items by creating a continuous chemically treated zone (horizontal and/or vertical as needed) between the wood and other cellulose material in the structure and termite colonies in the soil. In order to establish a barrier between the wood in the structure and the termites in the soil, adequately disperse the solution of this product in the soil.

To effectively control termites with this product, the service technician should be familiar with current termite control practices including trenching, rodding, sub-slab and void injection, soil surface fan spraying, excavated soil treatment and brush, spray and injection applications to wood. Correct use of these techniques is necessary to effectively control infestations by subterranean termites such as *Coptotermes*, *Heterotermes*, *Reticulitermes* and *Zootermopsis*. The service technician should consider the biology and behavior of the termite specie(s) to be controlled to determine which control practices to use.

Treatment standards and procedures for subterranean termite control may vary due to regulations, water table level, structure design, soil types, construction practices and other factors. For advice concerning current control practices with respect to specific local conditions, consult resources in structural pest control and state cooperative extension and regulatory agencies. Follow all federal, state and local regulations and treatment standards for protection of a structure from subterranean termites.

Effective termite control may also include mechanical alteration of the structure. Elimination of leaks or points of moisture accumulation within or on the exterior of the structure that result in an increase in the moisture content of wooden structural components is advised. Removal of non-essential cellulose containing materials that are in contact with the ground under or around the structure can reduce termite foraging in the area. When untreated wooden parts of the structure touch the ground and such contact cannot be broken, creating a barrier between the soil and such components using a solution of the product may protect the components and the structure against termite attack.

MAXXTHOR EC is labeled for use against subterranean termites as a 0.06% or 0.12% solution in water, however the 0.06% finished solution should be used for typical control situations. When difficult or problem soils or construction types are encountered, it may be necessary to use 0.12% MAXXTHOR EC mixed in reduced volumes of water.

Avoid contamination of water supplies due to backflow under reduced water system pressure by using anti-backflow equipment or procedures to prevent siphoning of any solution back into a water supply. Do not contaminate cisterns or wells. Do not treat soil that is water saturated or frozen. Do not treat while precipitation is occurring. Do not apply solution to an area or site if the soil at the area or site is in such a state or condition that runoff or movement of the solution from the treated area or site is likely to occur. Consult state and local specifications for recommended distances of wells from treated areas, or if such regulations do not exist, refer to Federal Housing Administration Specifications (H.U.D.) for guidance.

For the purposes of this label and its directions, crawl spaces are to be considered to be inside of the structure. Critical areas include areas where the foundation is penetrated by utility services, cracks and expansion joints, bath traps and areas where construction elements such as stairs, patios and slab additions abut the foundation.

#### Mixing Directions For MAXXTHOR EC For Use As A Termiticide

Mix MAXXTHOR EC for use as a termiticide in the following manner:

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

MAXXTHOR EC may also be mixed into full tanks of water, but substantial agitation is required to ensure uniformity of the solution.

#### Dilution of MAXXTHOR EC for Use as a Termiticide

For termite control, use rates for MAXXTHOR EC are expressed and the solution is mixed according to the percentage (%) concentration it forms when mixed in water. Use the mixing table or alternately the formulas below to determine the amount of MAXXTHOR EC to add to any quantity of water.

To prepare a 0.06% water solution, ready to use, dilute 1 quart of MAXXTHOR EC with 99.75 gallons of water. To prepare a 0.12% water solution, ready to use, dilute 2 quarts of MAXXTHOR EC with 99.5 gallons of water.

Solution Percentage	Gallons of	Amount of MAXXTHOR	Water to mix with MAXXTHOR EC
Concentration Desired	Finished Solution Desired	EC to add	Water to mix with MAXXTHOR LO
0.06%	1	0.32 oz	127.68 oz
	5	1.60 oz	4.99 gallons
	10	3.2 oz	9.975 gallons
	25	8.0 oz.	24.94 gallons
	50	0.50 quart	49.875 gallons
	75	0.75 quart	74.8125 gallons
	100	1.00 quart	99.75 gallons
	150	1.50 quart	149.62 gallons
	200	2.00 quart	199.5 gallons
0.12%*	1	0.64 oz	127.36 oz
	5	3.2 oz	4.975 gallons
	10	6.4 oz.	9.95 gallons
	25	0.5 quart	24.875 gallons
	50	1.0 quart	49.75 gallons
	75	1.5 quart	74.625 gallons
	100	2.0 quart	99.5 gallons
	150	3.0 quart	149.25 gallons
	200	1 gallon	199.0 gallons

\*Only use the 0.12% rate in accordance with the *Adjustments to Application Volume* section. May also be used in accordance with the *FOAM APPLICATION* and *APPLICATIONS TO PROTECT UNDERGROUND ITEMS FROM TERMITE ATTACK* sections.

#### Calculating an Amount of MAXXTHOR EC to Mix

To mix any amount of MAXXTHOR EC for termite control, determine:

A = Units of water into which the MAXXTHOR EC will be mixed. Express any partial units as decimal fractions (1/2 = .5). Any unit of measure, such as gallons or quarts, can be used for A. Answers to equations below are in same units as A.

MAXXTHOR EC to add to A for 0.06% = A / 399

MAXXTHOR EC to add to A for 0.12% = A / 199.5

To convert gallons to fluid ounces, multiply number of gallons X 128

128 fluid ounces = 16 cups = 8 pints = 4 quarts = 1 gallon

32 fluid ounces = 1 quart

#### **Application Volume**

To provide maximum control and protection against termite infestation, apply the specified volume of the finished water solution containing the specified amount of MAXXTHOR EC as set out below or as otherwise directed in this label.

**Prescribed Horizontal Barrier Rate:** Unless otherwise directed, horizontal barriers are created by applying a 0.06% solution at a rate of one gallon of solution per 10 square feet. (One gallon of 0.06% solution contains 0.32 fluid ounce of MAXXTHOR EC.)

**Prescribed Vertical Barrier Rate:** Unless otherwise directed, vertical barriers are created by applying a 0.06% solution at a rate of four gallons of solution per 10 linear feet per foot of depth. (Four gallons of 0.06% solution contains 1.28 fluid ounces of MAXXTHOR EC.)

#### Adjustments to Application Volume

If soil will not accept the labeled application volumes, 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 likelihood of obtaining a continuous barrier. Variance is allowed when volume and concentration are consistent with label directed rates and a continuous barrier can still be achieved. When volume is reduced, the spacing of holes created for sub slab injection and soil rodding may need to be reduced to account for decreased dispersion of the solution in the soil.

For example, adjust the amount of solution applied to deliver a horizontal barrier of 10 square feet from 1 gallon to as low as 0.5 gallons and as high as 2 gallons while maintaining the amount of MAXXTHOR EC (.32 fluid ounce) applied per 10 square feet.

For example, adjust the amount of solution applied to deliver a vertical barrier 10 feet long by one foot deep from 4 gallons to as low as 2 gallons and as high as 8 gallons while maintaining the amount of MAXXTHOR EC (1.28 fluid ounces) applied per 10 linear feet.

#### PRE-CONSTRUCTION TREATMENT

#### **All Structures**

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

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.

Effective control of subterranean termites can be accomplished during construction by using a 0.06% solution of MAXXTHOR EC to establish vertical and/or horizontal barriers between the structure and the soil as directed. Applications should be made as a coarse low pressure spray (less than 50 psi). To meet current termite proofing requirements, follow the procedures in the latest edition of the Housing and Urban Development Minimum Property Standards.

#### Horizontal Barriers Under Slabs on Ground Including Basements

Create a horizontal barrier on the entire surface of soil or substrate that will be covered by a slab, including, but not limited to, slab floors, footing trenches, garages, carports, basements, porches and entrance platforms by treating the soil or substrate with the solution at the Prescribed Horizontal Barrier Rate.

If the fill under the slab is a coarse material such as washed gravel, apply at 1.5 times the Prescribed Horizontal Barrier Rate to make sure that a sufficient enough amount of dilution is applied that the solution reaches the soil beneath the fill.

Apply solution using a coarse spray nozzle. If the slab over the treated area will not be poured on the same day as the application (and there are no foundation walls in place around the treated soil) cover treated soil with a water-proof barrier such as polyethylene sheeting.

#### **Vertical Barriers**

Create a vertical barrier along the inside and outside of foundation walls, around piers, plumbing and utility service entrances and other points of possible future termite access and entry by treating the soil at these points at the Prescribed Vertical Barrier Rate. When trenching and rodding into the trench, or trenching alone, it is important that the solution reaches the top of the footing. Rod holes must be spaced so as to achieve a continuous termiticidal barrier, but they should in no case be more than 12 inches apart. Trenches need not be wider than 6 inches. Mix the solution into the soil

as it is being replaced in the trench. Care should be taken to avoid washing soil out from around footings thereby undermining the stability of the structure. An inside vertical barrier may not be required for a monolithic slab.

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

#### Hollow Block Foundations and Voids

Hollow block foundations and voids may be treated at a rate of 2 gallons of solution per 10 linear feet to create a continuous treated zone within the voids at the footing.

#### POST CONSTRUCTION TREATMENT

#### **All Structures**

Post construction soil applications shall be made by injection, rodding, trenching or coarse fan spray with pressures not exceeding 25 p. s. i. at the nozzle. Care should be taken to avoid washing soil out from around footings thereby undermining the stability of the structure.

Do not apply treatment until the identity and location of all wells, radiant heat pipes, water and sewer lines, electrical conduits and sub-slab heating and air conditioning ducts is established. Caution must be taken to avoid puncturing these elements and/or injecting solution into them. 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.

**Vertical Barrier Depth:** 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 and treat at the rate prescribed from grade to the top of the footing. When the footing is more than four (4) feet below grade, the applicator must trench and rod into the trench or trench along the foundation walls and treat at the rate prescribed to a minimum depth of four feet. The actual depth of treatment will vary depending on the 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.

### Structures Containing Concrete Slabs on Ground (Monolithic/Floating/Supported) including Basements

To make an application beneath existing slabs, it may be necessary to drill holes in the slab or adjacent foundation and to apply solution. Holes should be spaced such that when treatment is applied through them, a continuous treated zone is applied beneath the slab.

**Vertical Barriers Along Exterior of Foundation Walls:** Trench and rod into the trench or trench along the outside of foundation walls and treat at the Prescribed Vertical Barrier Rate to the depth specified under Vertical Barrier Depth. Where physical obstructions such as concrete walkways adjacent to foundation elements or soil type and/or conditions make trenching prohibitive, treatment may be made by rodding alone.

Vertical Barriers Along Interior of Foundation Walls: Vertical barriers may be established on the interior side of foundation walls by sub-slab injection of the solution at the Prescribed Vertical Barrier Rate. Injection openings can be drilled either vertically through the slab along the interior of the foundation wall or horizontally from the exterior through the foundation wall low enough on the wall to allow for the deposition of the solution beneath the slab along the interior side of the foundation wall. Drill holes should be spaced so as to achieve a continuous chemical barrier but in no case farther apart than 12 inches. Special care must be taken to distribute the solution evenly. Vertical barriers may also be established beneath the slab along both sides of interior footing-supported walls, one side of interior partitions and along all cracks and expansion joints and utility service entrances and bath traps.

Horizontal Barriers Beneath Slabs on Ground: Create a horizontal barrier by treating at the Prescribed Horizontal Barrier Rate beneath slabs by either drilling and long rodding from the exterior or by grid pattern drilling and injection vertically through the slab. Long rodding should be used only when grid pattern drilling and injection and horizontal short rodding and injection cannot be used to deliver the sub slab treatment.

**Bath Traps:** Exposed soil beneath and around areas where plumbing and utility services penetrate the slab should be treated at the rate of 1 gallon of solution per square foot of soil.

#### Structures Containing Accessible Crawl Spaces

For crawl spaces, apply vertical termiticide barriers at the rate of 4 gallons of solution per 10 linear feet per foot of depth from grade to the top of the footing, or if the footing is more than 4 feet below grade, to a minimum depth of 4 feet. Apply by trenching and rodding into the trench, or trenching. Treat both sides of foundation and around all piers and pipes. Where physical obstructions such as concrete walkways adjacent to foundation elements prevent trenching, treatment may be made by rodding alone. When soil type and/or conditions make trenching prohibitive, rodding may be used. When the top of the footing is exposed, the applicator must treat the soil adjacent to the footing to a depth not to exceed

the bottom of the footing. Read and follow the mixing and use direction section of the label if situations are encountered where the soil will not accept the full application volume.

- 1. Rod holes and trenches must not extend below the bottom of the footing.
- 2. Rod holes must be spaced so as to achieve a continuous termiticide barrier but in no case more than 12 inches apart.
- 3. Trenches must be a minimum of 6 inches deep or to the bottom of the footing, whichever is less, and need not be wider than 6 inches. When trenching in sloping (tiered) soil, the trench must be stepped to ensure adequate distribution and to prevent termiticide from running off. The solution 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 solution has been absorbed by the soil.

#### Structures Containing Inaccessible Crawl Spaces

For inaccessible interior areas, such as areas where there is insufficient clearance between floor joists and ground surfaces to allow operator access, excavate, if possible, and treat according to the 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 gallon of solution per 10 square feet overall using a nozzle pressure of less than 25 p.s.i. and a coarse application nozzle (e.g., Delavan Type RD Raindrop, RD-7 or larger, or Spraying Systems Co. 8010LP TeeJet or comparable nozzle). For an area that cannot be reached with the application wand, use one or more extension rods to make the application to the soil. Do not broadcast or 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 gallon of solution per 10 square feet. Drill spacing must be at intervals not to exceed 16 inches. Many states have smaller intervals, so check state regulations which may apply.

When treating plenums 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.

#### **Masonry Voids**

Drill and treat voids in multiple masonry elements of the structure extending from the structure to the soil in order to create a continuous treatment barrier in the area to be treated. Apply at the rate of 2 gallons of solution per 10 linear feet of footing using a nozzle pressure of less than 25 p.s.i. When using this treatment access holes must be drilled below the sill plate and should be as close as possible to the footing as is practical. Treatment of voids in block or rubble foundation walls must be closely monitored: 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 drilling veneer walls, care should be taken to not drill beyond the depth of the void behind the veneer into another construction layer behind the veneer. It is however permissible to drill through the veneer and into concrete blocks behind the veneer and to treat the veneer and the concrete blocks at the same time.

Note: Not for use in voids insulated with rigid foam.

#### TREATMENT OF STRUCTURES WITH WELLS AND CISTERNS

Do not contaminate wells or cisterns.

#### 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 solution per 10 linear feet per foot of depth of the trench, or 1 gallon per 1.0 cubic feet of soil. See *Mixing Directions for MAXXTHOR EC for Use as a Termiticide* section of the 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 solution, replace the soil into the trench.
- 2. Treat infested and/or damaged wood in place using an injection technique such as described in the APPLICATION TO WOOD INDOORS TO PROTECT AGAINST WOOD DESTROYING INSECTS or APPLICATION TO WOOD OUTDOORS TO PROTECT AGAINST WOOD DESTROYING INSECTS sections 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 a well to the structure, if the pipe(s) enter the structure within 3 feet of grade.
- 2. Prior to treatment, applicators are advised to take precautions to limit the risk of applying the termiticide into subsurface drains that could empty into any bodies of water. These precautions include evaluating whether application of the termiticide to the top of the footer may result in contamination of the subsurface drain. Factors such as depth to the drain system and soil type and degree of compaction should be taken into account in determining the depth of treatment.
- 3. When appropriate (for example, on the water side of the structure), the treated backfill technique (described above) can also be used to minimize offsite movement of termiticide.

#### **FOAM APPLICATION**

MAXXTHOR EC, in the form of a foam, can be used to deliver MAXXTHOR EC as a termiticide any time it appears likely this form of delivery will improve the dispersal of MAXXTHOR EC into and within the intended target area. Foam can be particularly useful to deliver MAXXTHOR EC where it either cannot be depended upon to be delivered as just a solution or due to a need to reduce the amount of water used in order to avoid water damage to the target or adjacent areas. In some situations, for example under some slabs, a solution cannot be depended upon to disperse as completely as a foam because of deflection of the liquid stream or some other structural obstacle or defect.

Depending on the circumstances, foam applications of MAXXTHOR EC may be used alone or in combination with liquid solution applications, provided that the cumulative amount of active ingredient per unit of area applied is equivalent to that which would be contained in a 0.06% solution-only application applied to the same area. Mix and apply foam and or foam/liquid emulsion in combination such that at least 1.28 ounces of MAXXTHOR EC concentrate is applied per 10 linear feet when creating vertical barriers or 0.32 ounces of MAXXTHOR EC concentrate is applied per 10 square feet when creating horizontal barriers. Typically, at least 75% of the labeled liquid emulsion volume of product should be applied as a liquid, with the remaining percent delivered as a foam. Foam may be used alone in difficult situations.

Using foam generating equipment, a solution of MAXXTHOR EC, ranging in concentration from 0.06% to 0.12%, may be converted into a foam 2 to 40 times the volume of its liquid equivalent according to the foaming agent and foaming equipment manufacturer's recommendations.

First, form a solution of MAXXTHOR EC of the appropriate percentage concentration and volume. Then add the recommended volume of a foaming agent. Verify that the foaming agent is compatible with MAXXTHOR EC.

Applications may be made behind veneers, piers, chimney bases, into rubble foundations, into block voids, structural voids or other similar voids, under slabs, stoops, porches or to the soil in crawlspaces.

#### RETREATMENT

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

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

#### **APPLICATION IN CONJUNCTION WITH TERMITE BAITS**

Spot only applications of MAXXTHOR EC can be used as a supplement to termite baiting systems. For the purposes of this section, spot only applications are defined as the use of MAXXTHOR EC according to any of the permitted and applicable post-treatment application techniques contained in this label, alone or in combination, to the extent needed or deemed necessary or useful as an adjunct to a termite bait product labeled as a stand alone protection against termite attack. Stand alone termite bait product is defined as a termite bait product that provides sufficient structural protection when applied without other termite control products.

# APPLICATION TO PROTECT UNDERGROUND ITEMS FROM SUBTERRANEAN TERMITE ATTACK

To protect components installed underground such as wires, conduits, cables and pipes buried in soil against termite attack, create an envelope of MAXXTHOR EC treated soil around the components along the entire underground length of the component. First, treat soil through which components will be run with 0.06% to 0.12% solution of MAXXTHOR EC at a rate of 2 gallons of solution per 10 linear feet. Install components, laying them on the treated soil. Cover components with untreated soil and then treat this covering soil using the same percent solution at 2 gallons of solution per 10 linear feet.

Underground components to be protected may be located within the foundation of a structure or outside of a structure such as within a utility right of way, for example. Do not treat items that are electrically energized at the time of application.

If the soil will not absorb the indicated amount of solution, as little as 1 gallon of 0.12% solution per 10 linear feet can be used. Treat points where services emerge from the ground at a rate of 1 to 2 gallons of solution at the point of emergence.

# APPLICATIONS TO PROTECT POLES, POSTS AND OTHER WOODEN ITEMS FROM SUBTERRANEAN TERMITE ATTACK

MAXXTHOR EC can be used to protect the below ground portions of wooden structural components from termites. Form a treated zone around components below ground by vertically rodding the soil around their perimeter to a depth of six inches below their maximum depth of placement in the soil and applying a 0.06% solution of MAXXTHOR EC at a rate of 0.4 gallons of solution per linear foot of perimeter around the component per foot of treated depth. Measure the perimeter of the component six inches from the outside of the component.

#### APPLICATIONS TO CONTROL WOOD INFESTING INSECTS

Mix and dilute MAXXTHOR EC according to the instructions contained in the APPLICATION FOR CONTROL OF SUBTERRANEAN TERMITES section.

### APPLICATIONS TO CONTROL EXPOSED WOOD INFESTING INSECTS LOCATED ABOVE GROUND

MAXXTHOR EC can be applied above ground as a non-soil treatment to control and kill exposed worker and winged reproductive (swarmer) termites and Carpenter ants. This type of application is only supplementary to and should not be considered as a replacement for soil treatment in the case of termite infestation.

Apply a 0.06% solution as a general fan spray within attics, crawl spaces, unfinished basements and other void areas where termites have been found. Apply treatment directly to swarming termites and areas where they congregate.

#### APPLICATIONS TO TERMITE CARTON NESTS LOCATED IN ABOVE GROUND WALL VOIDS

Apply a 0.06% solution of MAXXTHOR EC directly into above ground termite carton nests including nests located in wall voids using a directional injector. Apply as a solution or foam under pressure to distribute solution thoroughly throughout the nest. It may be necessary to inject solution at one or more points and at varying depths within the nest to adequately distribute solution within the interior of the nest.

#### APPLICATION TO WOOD INDOORS TO PROTECT AGAINST WOOD INFESTING INSECTS

A 0.06% solution of MAXXTHOR EC applied as a liquid or foam to wooden structural components within structures can be used to protect them against attack from wood infesting insects such as termites, Carpenter ants and wood boring beetles or borers. This type of application is only supplementary to and should not be considered a replacement for soil treatment in the case of termite infestation.

Apply solution as a general fan spray onto the surface of the wood or inject solution under pressure into the wood as a liquid or foam. Inject by either injecting solution through a directional injector directly into existing voids and galleries or by drilling wood to form treatment channels through which the solution can be injected into the insect galleries. Multiple treatment channels of varying depth may need to be drilled to adequately distribute the solution within the wood interior. Application can also be made with a paintbrush.

Before application, locate heat pipes, ducts, water and sewer lines and electrical conduits. Take precautions to avoid puncturing and/or injecting solution into these items. Do not apply solution inside of electrified enclosures, switches or sockets.

Plastic sheeting must be placed below any indoor overhead surfaces being treated that are located anywhere except within a soil-based crawl space. Wear protective clothing, unvented goggles, gloves and respirator when making an overhead application or when applying in poorly ventilated indoor areas. Do not touch surfaces until spray has dried.

When treating in home food preparation and storage areas, cover all food preparation surfaces and utensils prior to beginning treatment. Surfaces or items that cannot be covered or removed should be thoroughly washed after treatment and before use. Food that cannot be covered should be removed. Before application, remove pets, birds and cover and disconnect aquariums. Do not allow humans and pets to touch treated surfaces until they have dried.

### APPLICATION TO WOOD OUTDOORS TO PROTECT AGAINST WOOD DESTROYING INSECTS

#### On and around structures

A 0.06% solution of MAXXTHOR EC applied as a liquid or foam to exterior structural components can be used to protect them from the attack of wood infesting insects such as termites, Carpenter ants and wood boring beetles or borers. Apply solution by general fan spray to the point of runoff onto the surface of the wood or inject solution under pressure into the

wood as a liquid or foam. Inject by either injecting solution directly into existing voids and galleries or drilling wood to form treatment channels through which the solution can be injected into the insect galleries. Multiple treatment channels of varying depth may need to be drilled to adequately distribute the solution within the wood interior. Application can also be made with a paintbrush.

To control Carpenter ants, also apply solution around doors and windows and other areas Carpenter ants have been observed or can be expected to forage.

#### Within wooden components and trees

Locate the cavity that the insects (such as Carpenter ants) are inhabiting, drilling to find the interior infested cavity if necessary. Inject a 0.06% solution of MAXXTHOR EC into the cavity as a solution or foam. Apply a sufficient volume of solution to completely flood or fill the cavity. Drill injection channels if necessary.

#### APPLICATION TO CONTROL LAWN PESTS

MAXXTHOR EC controls a wide range of turfgrass insect and mite pests. MAXXTHOR EC is not for use on turfgrass being grown for sale, for commercial seed production, for other commercial use or for research.

#### **Application Sites**

For use on any type of landscape or recreational turfgrass in any type of setting or at any type of site except as otherwise prohibited. Permitted sites include but are not limited to lawns, grounds, recreational areas, parks, landscapes and athletic fields. New York State only: Do not apply MAXXTHOR EC containing solutions to grass or turf within 100 feet of a body of water (lake, pond, river, stream, wetland or drainage ditch).

#### **Application Precautions and Preparations**

Keep children and pets off treated areas until spray has dried.

If necessary, test the effects of applications of different rates and volumes of mixed solution on a small patch of a type of grass (with observations over one week to detect the occurrence of negative effects) before application of solutions to large areas of that type of grass.

MAXXTHOR EC can be mixed with other pesticides, including insect growth regulators. Follow the label directions of all the products mixed, making sure not to exceed the labeled application rate of any individual product in the mixture. Any tank mixture that has not been tested before should be tested before full scale use by first mixing a small quantity of the mixture to ensure there is no physical or chemical incompatibility.

Do not apply when wind conditions favor downwind drift to nearby water bodies or when wind velocity exceeds 10 miles per hour.

#### **Application Methods**

Apply solution as a broadcast treatment in a quantity sufficient to wet all foliage. Apply using nozzles that provide the largest droplet size compatible with adequate coverage.

To maximize efficacy against sub-surface pests such as mole crickets or chinch bugs, MAXXTHOR EC should be applied with a non-ionic or silicone based surfactant (0.25% v/v) in sufficient water to ensure good penetration of spray into the soil-thatch matrix. Treated areas should then be irrigated with 0.25 to 0.5 inches of water immediately afterwards paying special attention so that run-off or puddling does not occur.

If necessary, consult resources in horticulture in your area (such as your Cooperative Extension Service) to determine appropriate application timing and cultural practices to control different types of pests.

#### Reapplication

Reapplications may be necessary particularly in the event of high pest pressure. Do not apply more often than every 7 days. New York State only: Do make a single reapplication of MAXXTHOR EC if there is renewed insect activity, but not sooner than two weeks after first application.

#### Lawn Application Use Rates and Volumes

Use rates for MAXXTHOR EC for lawn pests are stated in fluid ounces of MAXXTHOR EC per 1000 square feet.

Apply MAXXTHOR EC at 0.07 to 0.30 fluid ounces per 1000 square feet depending on the target pest. Recommended rates for specific pests within this range are given below.

Depending on the length and/or density of grass being treated, application volumes of up to 10 gallons per 1000 square feet can be made in order to obtain uniform coverage. If a minimal volume application is made (2 gallons per 1000 square feet) and the target pest, such as mole crickets or chinch bugs for example, are located in the thatch or below the surface, irrigate the treated area with at least 0.25 to 0.50 inches of water immediately after the application. The addition of a non-ionic or silicone based surfactant (0.25% v/v) is also recommended when making a minimal volume application.

The calculated amount of MAXXTHOR EC can be applied in any volume of water as long as the maximum label rate per 1000 feet is not exceeded. Do not exceed the maximum label rate by applying solution to an area smaller than intended when it was mixed and diluted unless such under dosing will not result in an application rate per 1000 square feet in excess of the maximum label rate.

#### **Lawn Pest Application Use Rates**

The application rates listed below provide control of the listed pests under normal conditions. -Use the higher application rates when maximum residual control is needed.

Use R	ate Table for MAXXTHOR EC for Lawn Applications
Use Rate Fluid ounces MAXXTHOR EC per square feet	
	(Range)
Α	0.07⇒0.15
В	0.07⇒0.30
С	0.15

#### Lawn Pests Grouped by Use Rates

**Use Rate A:** Ants, Armyworms, Billbugs, Chinch Bugs, Crane Flies, Crickets, Cutworms, Earwigs, Fall Webworms, Fleas (adults, Iarvae), Grasshoppers, Mites, Mole Crickets, Sod Webworms, Spittlebugs

Use Rate B: Japanese Beetles (adult)

Use Rate C: Crane Flies

Mixing T	able for MA Appli	XXTHOR	EC for L	awn
Application Volume: Gallons/10 00 sq. ft.	Use Rate: Fluid oz. / 1000 sq. ft. (select from Use Rate Table)	Add these amounts of MAXXTHOR EC to the indicated volumes of water		to the
		5 gal.	10 gal.	25 gal.
2	.07	.175	.35	0.875
	.15	.375	.75	1.875
	.22	.550	1.10	2.750
	.30	.75	1.50	3.750
5	.07	.07	.14	0.350
	.15	.15	.30	0.750
	.22	.22	.44	1.100
	.30	.30	.60	1.500
10	.07		.07	.175
	.15	-	.15	.375
	.22	-	.22	.550
	.30	- I	.30	.750

#### Calculating Amounts of MAXXTHOR EC to Mix for Lawn Pests

To mix and apply any amount of MAXXTHOR EC for lawn pests, determine:

A = Square feet of area to be treated / 1000

B = Use Rate per 1000 square feet for the target pest(s) in fluid ounces MAXXTHOR EC taken from the Use Rate Table. If treating for more than one type of pest, select the highest rate.

Calculate the amount of MAXXTHOR EC to mix for lawn pests as follows:

Fluid Ounces MAXXTHOR EC to use = A X B

Mix this amount of MAXXTHOR EC in the amount of water needed to make the application.

#### **Application Recommendations Against Specific Lawn Pests**

**Armyworms, Cutworms, Sod Webworms:** Do not water or mow grass within 24 hours of application for optimum control of these surface feeding insects.

**Chinch Bugs:** Water grass immediately after application to help move active ingredient deeper into thatch where these insects live. The highest application rate may be necessary to achieve control during the summer.

**Mole Crickets:** For control of overwintering Mole Crickets, apply the lower rate in early Spring. For the control of adult Mole Crickets in late-Summer or early Fall, apply the higher rate.

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

#### APPLICATION TO CONTROL ORNAMENTAL PESTS

MAXXTHOR EC controls a wide range of insects and mites on trees, shrubs, foliage plants, non-bearing fruit and nut trees and flowers. Non-bearing trees are perennial plants that will not produce a harvestable agricultural commodity within the next 12 months. MAXXTHOR EC is not for use on plants being grown for sale, for commercial seed production or for research.

#### **Application Sites**

For use on ornamental plants including but not limited to trees, shrubs, ground covers, bedding plants and foliage plants being used for decorative or climate modification purposes. Plants on which use is permitted include those being grown in any type of setting or at any type of site not otherwise prohibited. Permitted sites include but are not limited to ornamental gardens, parks, landscapes, lawns, grounds and interior plantscapes.

#### **Application Preparation**

If necessary, test the effects of applications of different rates and volumes of mixed solution on a small number of a type of plant (with observations over one week to detect the occurrence of negative effects) before application of solution to large numbers of that type of plant.

MAXXTHOR EC can be mixed with other pesticides, including insect growth regulators. Follow the label directions of all the products mixed, making sure not to exceed the label rate of any individual product in the mixture. Any tank mixture that has not been tested before should be tested before full scale use by first mixing a small quantity of the mixture to ensure there is no physical or chemical incompatibility.

#### **Application Methods**

Apply solution in a quantity sufficient to wet all foliage. It may also be necessary to treat non-foliage parts of plants such as trunks and bark to control some pests based on where the pest may be located on the plant at a particular life stage. For specific recommendations for your area and situation, consult your local County or State Extension specialist or other qualified authority.

#### Reapplication

Reapplications may be necessary as plant growth occurs and new foliage appears or in the event of high pest pressure. Do not apply more often than every 7 days.

#### Ornamental Application Use Rates and Volumes

Use rates for MAXXTHOR EC for ornamental pests are stated in fluid ounces of MAXXTHOR EC per 4,356 square feet. Recommended ornamental application use rates, based on the target pest, range between 0.26 to 1.28 fluid ounce of MAXXTHOR EC per 4,356 square feet. Recommended rates for specific pests within this range are given below.

The calculated amount of MAXXTHOR EC can be applied in any volume of water as long as the applicable label rate per 4,356 feet is not exceeded. Do not exceed the maximum label rate by applying solution to an area smaller than intended when it was mixed and diluted unless such underdosing will not result in an application rate per 4,356 square feet in excess of the maximum label rate.

#### **Ornamental Pest Dilution Rates**

The dilution rates listed below provide control of the listed pests under normal conditions. Use the higher dilution rate when maximum residual control is needed.

Dilution Rate Table for MAXXTHOR EC for Ornamental Applications			
Dilution Rate	Lbs. a. i. per 10 gallons Lbs. a. i. per 4,356 sq. ft.	FI. oz. per 10 gallons FI. oz. per 4,356 sq. ft.	
Α	0.004 ⇒ 0.02	0.26 ⇒ 1.28	
В	0.006 ⇒ 0.02	0.38 ⇒ 1.28	
С	0.01 ⇒ 0.02	0.64 ⇒ 1.28	

#### **Ornamental Pests Grouped by Dilution Rates**

Dilution Rate A: Ants, Aphids, Bagworms, Black Vine Weevil (adults), Brown Soft Scales, Broad Mites, Budworms, California Red Scales (crawlers), Centipedes, Clover Mites, Crickets, Cutworms, Earwigs, Elm Leaf Beetles, Fall Webworms, Flea Beetles, Fungus Gnats (adults), Grasshoppers, Lace Bugs, Leafhoppers, Leaf feeding Caterpillars, Mealybugs, Millipedes, Mole Crickets, Orchid Weevil, Pillbugs, Pine Needle Scales (crawlers), Plant Bugs (incl. Lygus spp.), San Jose scales (crawlers), Sowbugs, Spiders, Spittlebugs, Tent Caterpillars, Tip Moths, Weevils, Whiteflies

**Dilution Rate B:** Citrus Thrips, Beet Armyworm, Diaprepes (larvae, adult), European Red Mite, Leafrollers, Spider Mites, Thrips, Twig Borers

Dilution Rate C: Japanese Beetles (adult), Leafminers, Pecan Leaf Scorch Mite, Black Vine Weevil (larvae), Fungus Gnats (larvae)

Mixing Tabl		THOR EC	for Orna	mental
Application Volume: Gallons/43 56 sq. ft.	Use Rate: Fluid ounces / 4356 sq. ft.	Add these amounts of MAXXTHOR EC to the indicated volumes of water		to the
		5 gal.	10 gal.	25 gal.
2	0.26	0.650	1.30	3.25
	0.38	0.950	1.90	4.75
	0.64	1.600	3.20	8.0
	1.28	3.200	6.40	16.00
5	0.26	0.260	0.52	1.30
	0.38	0.380	0.76	1.90
	0.64	0.640	1.28	3.20
	1.28	1.280	2.56	6.40
10	0.26	-	0.26	0.65
	0.38		0.38	0.95
	0.64		0.64	1.60
	1.28		1.28	3.20

#### Calculating Amounts of MAXXTHOR EC to Mix for Ornamental Pests

To mix and apply any amount of MAXXTHOR EC for ornamental pests, determine:

A = Square feet of area to be treated /4,356

B = Use Rate per 4,356 square feet for the target pest(s) in fluid ounces MAXXTHOR EC taken from the Dilution Rate Table. If treating for more than one pest, select the highest rate.

Calculate the amount of MAXXTHOR to mix for ornamental pests as follows:

Fluid Ounces MAXXTHOR EC to use = A X B

Mix this amount of MAXXTHOR EC in the amount of water needed to make the application.

#### **Application Recommendations Against Specific Ornamental Pests**

**Bagworms:** Spray when bagworms first begin to hatch. Apply directly to the larvae. Treatment is most effective against young larvae.

Scale crawlers and twig borers: Treat trunks, stems and twigs in addition to plant foliage.

Black Vine Weevil and Fungus Gnat larvae: Apply as a drench at the rate of approximately 8 ounces of finished spray per 6 inch pot.

#### ORNAMENTAL TREE TRUNK SPRAY TO CONTROL BARK BEETLES

Control of Dendroctonus bark beetles including mountain pine beetle, southern pine beetle, western pine beetle, Black turpentine beetle, and engraver beetles (lps spp.)

**Preventative treatment:** Spray an aqueous solution containing 1.0 to 2.0 pints of MAXXTHOR EC per 100 gallons (0.25 to 0.5 lbs. ai/100 gallons) of water to the trunk of the tree in the spring or whenever nearby infested trees create the threat of an infestation. Apply spray directly to the main trunk from the base of the tree to at least half way into the live crown. Wet the bark with the spray thoroughly (usually 1 to 4 gallons of spray per tree). Do not apply more than 0.2 lbs. ai (12.8 fl. Oz.) of this product per acre of trees. Repeat application if infestation occurs. Application rates and application timing

differ according to the target pest and other factors. For specific recommendations for your area and situation, consult your local County or State Extension specialist or other qualified authority.

Treatment of infested trees to control emerging brood: Make applications of a spray mixture containing 2.0 pints of this product per 100 gallons 0.5 lbs. ai/100 gallons) of water to trees that have beetles in their bark. Apply spray directly to the main trunk from the base of the tree to at least half way into the live crown. Spray until the bark is thoroughly wetted by the spray (usually 1 to 4 gallons of spray per tree). Do not apply more than 0.2 lbs. ai (12.8 fl. oz.) of this product per acre of trees.

Beetles are normally no longer present in trees in which all needles have turned brown. Trees in this condition should be sprayed only if a continuing infestation is confirmed. Confirm an infestation by removing bark. If live infestations remain in the trunks, fell the trees and cut into sections. Spray the trunk and large limbs, rotating the trunks as they are sprayed in order to thoroughly treat the exterior of the entire trunk. Do not apply more than 0.2 lbs. ai (12.8 fl. oz.) of this product per acre.

#### Control of other bark beetles such as Ambrosia beetles, elm bark beetles and Emerald Ash borer

**Preventative control:** Spray an aqueous solution containing 1.0 to 2.0 pints of MAXXTHOR EC per 100 gallons (0.25 to 0.5 lbs. ai/100 gallons) of water to the trunk, scaffolding and limbs of the tree in the early spring or prior to adult beetle flight and tree infestation. Spray until the bark is thoroughly wetted by the spray (usually 6 to 12 gallons of spray per tree). Do not apply more than 0.2 lbs. ai of this product per acre of trees. Repeat application may be necessary if reinfestation is likely or for extended adult emergence and flight. Application rates and application timing differ according to the target pest and other factors. For specific recommendations for your area and situation, consult your local County or State Extension specialist or other qualified authority.

#### CONTROL OF OTHER BORERS ON ORNAMENTAL TREES

Consult the table below for other boring insects. Geographic location and environmental conditions will affect application rate and timing. Spray bark until it is thoroughly wetted by the spray (usually 1 to 4 gallons of spray per tree). Do not apply more than 100 gallons of solution per acre of trees. For specific recommendations for your area and situation, consult your local County or State Extension specialist or other qualified authority.

Pest	Recommended Dilution Rate (Range)	Specific Instructions
Clearwing Moth borers  Ash borer, banded ash clearwing, Dogwood borer, Lesser peachtree borer, Lilac borer, Oak borer  Coleopteran borers  Bronze birch borer, Flatheaded appletree borer	6.4 to 12.8 fl. oz. per 100 gallons	Apply to the lower branches and trunks prior to adult emergence  Apply 12.8 fl. oz. per 100 gallons for maximum residual control

# CONTROL OF STRUCTURAL PESTS (OTHER THAN WOOD INFESTING INSECTS) ON AND AROUND BUILDINGS

MAXXTHOR EC controls a wide range of structural pests including nuisance pests outside of structures. MAXXTHOR EC can be applied around any type of residential or commercial structure or building. Permitted sites include but are not limited to the exterior of homes, office buildings, mobile and modular homes, apartments and stores.

Follow additional application restrictions for residential outdoor surface and space sprays under DIRECTIONS FOR USE.

#### **Dilution of MAXXTHOR EC for Structural Pests**

For structural pests, use rates for MAXXTHOR EC are expressed and mixed according to the percentage (%) concentration solution it forms when mixed in water. Each 0.166 fluid ounce (1 teaspoon) of MAXXTHOR EC that is added to one gallon of water increases the concentration of MAXXTHOR EC in that one gallon of water by 0.03%. For example, to make a 0.06% solution in one gallon of water, mix 0.333 fluid ounce (2 teaspoons) of MAXXTHOR EC in one gallon of water. Use the conversion table and formulas below to determine the amount of MAXXTHOR EC to add to any quantity of water.

Mixir	ng Table for MAXXTHOR Pests	R EC for Structural
% to mix	Fluid ounces to add per gallon of water to mix this %	Teaspoons to add per gallon of water to mix this %
0.03	0.166	1
0.06	0.333	2

29.57 milliliters = 2 tablespoons = 6 teaspoons=1 Fluid ounce

#### Calculating Amount of MAXXTHOR EC to Mix for Structural Pests

Calculate the amount of MAXXTHOR EC to mix for structural pests as follows:

A = Volume of water, in gallons, into which the MAXXTHOR EC will be mixed. Express any partial gallons as decimal fractions (1/2 = .5)

B = Fluid ounces (or teaspoons) MAXXTHOR EC per gallon from Mixing Table. Select the desired % concentration based on the site of application and the pest(s) to be controlled. Read across to find amount of MAXXTHOR EC to add per gallon in fluid ounces or teaspoons.

Fluid ounces (or teaspoons) MAXXTHOR EC to mix = A X B

Mix this amount of MAXXTHOR EC in the predetermined amount of water (A). Food utensils such as teaspoons and measuring cups should not be used for food purposes after use with pesticides.

#### **Pests Controlled**

Ants, including Carpenter Ants, Armyworms, Bees, Boxelder Bugs, Centipedes, Chiggers, Chinch Bugs, Clover Mites, Crickets, Cutworms, Dichondra Flea Beetles, Earwigs, Elm Leaf Beetles, European Craneflies, Fleas, Flies, Grasshoppers, Hornets, Millipedes, Mosquitoes, Moths, Roaches, including Cockroaches, Scorpions, Silverfish, Sod Webworms, Sowbugs (Pillbugs), spiders including Black Widow Spiders, Springtails and Wasps.

#### **Application Methods**

Apply MAXXTHOR EC as a solution in the form of a general surface, spot, crack and crevice, pinstream or coarse spray. Do not apply as a space spray. May also be applied with a paintbrush.

#### **Application Use Rates and Volumes**

Use a 0.03% to 0.06% solution of MAXXTHOR EC. Use a spray volume of between 2 and 10 gallons of solution per 1,000 square feet. Higher application volumes may be used if necessary to sufficiently wet vegetation and landscaping with the spray solution.

#### Re-Application

Treatments should not be repeated more often than once every 7 days. The best efficacy and longest residual control is achieved when the highest concentration is used.

#### **Application Locations**

The following procedures must be followed to help achieve maximum control of the pest.

Apply spray to the exterior surfaces of structures and to grounds, lawns, landscaping, plants and hard surface areas adjacent to structures. Can also be applied to any areas where pests congregate or have been seen.

Treat non-porous surfaces only in areas protected from rainfall and spray from sprinklers with low volume applications at the rate of one gallon product diluted in water (see above dilution rates) per 1000 square feet.

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 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).

#### **Perimeter Band Treatment**

To help prevent pest infestation of structures, create a treated zone or band on the structure, soil and vegetation around the entire perimeter of a structure. Apply solution to all surfaces within a band beginning 6 to 10 feet from the exterior foundation of the structure that extends back to the structure and then continues 2 to 3 feet up the exterior surface of the structure from the ground. Application volume will depend upon the nature of the surface being treated. Mulch areas, for example, require more volume and hard surface areas requiring less.

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).

#### **Control of Specific Structural Pests Outdoors**

Ants (Nuisance ants other than Carpenter Ants) Outdoors: To achieve the highest level of control, locate and directly treat ant nests. Apply solution to ant trails, around doors and windows and at points where ants can be expected to forage or congregate.

**For Ant Mounds:** Treat mounds and area within a 2 foot radius of the center of the mound with 1-2 gallons of a 0.06% solution. When mounds exceed 12 inches in size use the highest volume of solution. Applications in cool weather (65 to 80 degrees F) or the cooler parts of the day are most effective. Do not apply treatment during the heat of the day.

Bees, Wasps, Hornets, and Yellow Jackets: Always use the highest rate. Make application in late evening when insects are at rest at the nest for best results and to avoid stings. Spray nest openings in ground, in bushes and wherever insects may be nesting. Spray to the point of saturation. Spray as many insects as possible. Remove and destroy treated nests to prevent emergence of newly hatched insects.

Centipedes, Earwigs, Beetles, Millipedes, Pillbugs, Sowbugs: Thoroughly treat mulch areas. The reduction of moisture in mulch areas may also aid in control of these pests.

**Mosquitoes:** Apply solution to lawns and landscaping, under decks and to building foundations. Refer to APPLICATIONS FOR ORNAMENTAL PESTS section for mixing and applying large amounts of solution against mosquitoes.

**Fleas:** Treat the entire area where insects could be present. Begin treatments in the spring. Insects may be reintroduced by host animals in the surrounding area. Retreatment may be necessary to achieve and maintain control during periods of high pest pressure.

#### CONTROL OF NUISANCE INSECTS INSIDE BUILDINGS

MAXXTHOR EC can be used indoors to control bees, wasps, hornets and yellow jackets by liberally spraying a 0.06% emulsion in the late evening when insects are at rest into hiding and breeding places, especially under attic rafters, contacting as many insects as possible. Repeat application is necessary only if there are signs of renewed insect activity which is more likely in situations of high initial pest pressure. Repeat application should be limited to no more than once every seven days.

Refer to the CONTROL OF STRUCTURAL PESTS (OTHER THAN WOOD INFESTING INSECTS) ON AND AROUND BUILDINGS section of this label for directions on mixing MAXXTHOR EC for these types of applications.

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

Remove pets, birds and cover aquariums before spraying. Do not permit humans or pets to contact treated surfaces until the spray has dried.

Wear protective clothing, unvented goggles, gloves and respirator, when applying to overhead areas or in poorly ventilated areas. During any overhead applications to overhead interior areas of structures, cover surfaces below with plastic sheeting or similar materials.

In the home, cover all food handling/processing surfaces and cover or remove all food and cooking utensils, or wash thoroughly after treatment.

For use only in nonfood/feed areas of food/feed handling establishments. 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. Nonfood/feed areas of food/feed areas are areas such as garbage rooms, lavatories, floor drains (to sewers) entries and vestibules, offices, locker rooms, machine rooms, boiler rooms, garages, mop closets and storage (after bottling or canning).

Not for use in Federally inspected meat and poultry plants.

#### APPLICATION UNDER SLABS TO CONTROL PESTS

Infestations of pests such as ants, cockroaches and scorpions inhabiting areas under slabs may be controlled by drilling and injecting or horizontal rodding and then injecting 1 gallon of a 0.06% to 0.12% emulsion per 10 square feet or 2 gallons of emulsion per 10 linear ft.

#### ATTENTION

Use only in well ventilated areas.

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

During any application to overhead areas of structure, cover surfaces below with plastic sheeting or similar material, except for soil surfaces in crawlspaces.

Do not allow dripping or runoff to occur during indoor applications.

Do not treat areas where food is exposed.

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 allow people or pets to touch or walk on treated surfaces until spray has dried.

Do not apply a broadcast application to interior surfaces of homes.

Do not apply in livestock buildings such as barns.

Do not allow spray to drift onto ponds, streams or lakes.

Do not apply in greenhouses or nurseries or by air.

#### IMPORTANT READ BEFORE USE

**NOTICE:** Read the entire Directions for Use, Conditions of Sale, Disclaimer of Warranties and Limitations of 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.

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[EPA Approval Date]