

# Cyper TC Insecticide

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 pest control regulatory agency of your state prior to use of this product.

## ACTIVE INGREDIENT:

### Cypermethrin

(±)α-cyano-(3-phenoxyphenyl)methyl(±)-*cis,trans*-3-(2,2-dichloroethenyl)-2,2-dimethylcyclopropanecarboxylate\* . . . . . 25.4%

**INERT INGREDIENTS\*\*:** . . . . . 74.6%

Total . . . . . 100.0%

\**Cis/trans* ratio: 47/53 ± 10%

\*\*contains petroleum distillates

Contains 2 pounds active ingredient per gallon.

## KEEP OUT OF REACH OF CHILDREN WARNING/AVISO

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

## FIRST AID

**IF SWALLOWED:** Call poison control center or doctor immediately for treatment advice. Do not give any liquid to the person. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

**IF ON SKIN OR CLOTHING:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

**IF IN EYES:** Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

**IF INHALED:** Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

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

**NOTE TO PHYSICIAN:** Contains petroleum distillate – vomiting may cause aspiration pneumonia.

**FOR CHEMICAL EMERGENCY: Spill, leak, fire, exposure, or accident call CHEMTREC 1-800-424-9300.**

## PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS WARNING

MAY BE FATAL IF SWALLOWED. CAUSES SKIN IRRITATION. HARMFUL IF ABSORBED THROUGH SKIN OR INHALED. CAUSES MODERATE EYE IRRITATION. PROLONGED OR FREQUENTLY REPEATED SKIN CONTACT MAY CAUSE ALLERGIC SKIN REACTIONS IN SOME INDIVIDUALS. Do not get on skin or on clothing. Avoid contact with eyes. Avoid breathing vapors or spray mist. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco. Remove and wash contaminated clothing before reuse.

## PERSONAL PROTECTIVE EQUIPMENT

All pesticide handlers (mixer, loader, and applicators) must wear a chemical-resistant apron or long-sleeved coveralls worn over a minimum of short-sleeved shirt and short pants, socks, chemical-resistant footwear, chemical-resistant gloves. Regular work shirts, pants, socks, shoes and waterproof gloves are sufficient 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 infector system. In addition, all pesticide handlers must wear a respiratory protection device<sup>1</sup> when working in a non-ventilated space; all pesticide handlers must wear protective eyewear (goggles and/or face shield and/or shielded safety glasses with front, brow and temple protection) when working in a non-ventilated space or when applying termiticide by rodding or sub-slab injection.

<sup>1</sup> Use one of the following Mine Safety and Health Administration (MSHA)/National Institute for Occupational Safety and Health (NIOSH) respirator types with approval number prefixes or letters:

TC-21C (Dust/mist filtering respirator or a NIOSH approved respirator with a N, R, P or HE filter);

TC-23C (with an organic-vapor removing cartridge with pre-filter approved for pesticides), or

TC-14G (with an organic-vapor removing canister approved for pesticides), or a NIOSH approved respirator with an

organic-vapor (OV) approved cartridge or canister with N, R, P or HE prefilter;

TC-19C (Supplied-air)

TC-13F (Self-contained breathing apparatus (SCBA))

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

#### ENVIRONMENTAL HAZARDS

This pesticide is extremely toxic to fish. Use with care when applying in areas adjacent to any body of water. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not apply when weather conditions favor drift from treated areas. Do not contaminate water when cleaning equipment or disposing of equipment washwaters.

This product is highly toxic to bees exposed to direct treatment or residues on crops or weeds. Do not apply CYPER TC Insecticide, 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. Apply this product only as specified on this label.

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

#### PHYSICAL AND CHEMICAL HAZARDS

Do not use or store near heat or open flame.

#### CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

**NOTICE: Read the entire Direction for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product.** If the terms are not acceptable please return the unopened container to the dealer from whom you purchased the product.

The directions for Use of this product should be followed carefully. It is impossible to eliminate all risk 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 CONTROL SOLUTIONS, INC. or Seller. All such risk shall be assumed by Buyer and User, and Buyer and User agree to hold CONTROL SOLUTIONS, INC. and Seller harmless for any claims relating to such factors.

CONTROL SOLUTIONS, INC. 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 risk 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 abnormal conditions or under conditions not reasonably foreseeable to or beyond the control of Seller or CONTROL SOLUTIONS, INC. and Buyer and User assume the risk of any such use. CONTROL SOLUTIONS, INC. MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

To the fullest extent permitted by law CONTROL SOLUTIONS, INC. or Seller shall not be liable for any incidental, consequential or special damages resulting from the use or handling of this product. **THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF CONTROL SOLUTIONS, INC. AND SELLER FOR ANY AND ALL CLAIMS, LOSSES INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF CONTROL SOLUTIONS, INC. OR SELLER, THE REPLACEMENT OF THE PRODUCT.** CONTROL SOLUTIONS, INC. and Seller offer this product, and Buyer and User accept it, subject to the foregoing conditions of sale and limitations of warranty of liability, which may not be modified except by written agreement signed by a duly authorized representative of CONTROL SOLUTIONS, INC.

#### DIRECTIONS FOR USE

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

For use on plants intended for aesthetic purposes or climate modification and being grown in interior plantscapes, ornamentals, gardens or parks, or lawns and grounds. Do not use in commercial greenhouses or nurseries. Not for use on plants or turf being grown for sale or other commercial use, or for commercial seed production, or for research purposes. Do not use on food or feed crops.

### **GENERAL INFORMATION ON THE USE OF THIS PRODUCT FOR TERMITE CONTROL**

CYPER TC Insecticide provides control of subterranean termites (including eastern subterranean, western subterranean, desert termite, and Formosan subterranean termite) and when applied to wood may be used for spot treatment of drywood termites (*Incisitermes* spp.).

Chemicals for soil treatment are used to establish a barrier against termite attack. The chemical emulsion must be adequately dispersed in the soil to provide a barrier between the wood in the structure and the termite colonies in the soil.

For the effective use of this product, it is necessary that the service technician be familiar with current control practices including trenching, rodding, subslab injection, and low-pressure spray applications. These techniques must be correctly employed to prevent or control infestations by subterranean termite species of *Reticulitermes*, *Zootermopsis*, *Heterotermes* and *Coptotermes* (Formosan termite). Choice of appropriate procedures should include consideration of such variable factors as the design of the structure, water table, soil type, soil compaction, grade conditions, location and type of domestic water supplies and drainage systems. The biology and behavior of the termite species involved are important factors to be known as well as suspected location of the colony and severity of the infestation within the structure to be protected.

Effective termite control also includes elimination of termite access to moisture by recommending repair of faulty construction grade and/or plumbing. Remove all wood and cellulose containing debris in contact with soil from crawl spaces, porches, and around foundations.

For advice concerning current control practices with relation to the specific local conditions, consult resources in structural pest control and the State regulatory agency.

**EACH YEAR PRIOR TO AN APPLICATION TO VINYL SIDING, TREAT A SMALL AREA ON ALL SIDES OF THE STRUCTURE WHERE WEATHERING IS MOST SEVERE, AND ALLOW TO DRY. OBSERVE FOR STAINING. SOME TYPES OF VINYL SIDING, PARTICULARLY IF AGED OR WEATHERED, MAY SHOW SOME STAINING AFTER APPLICATION OF AN EMULSIFIABLE CONCENTRATE PRODUCT. TO COMPLETELY ELIMINATE THE POTENTIAL RISK ASSOCIATED WITH STAINING, IT IS SUGGESTED THAT A WATER BASED PRODUCT BE USED.**

### **SUBTERRANEAN TERMITE CONTROL (Including Eastern, Western and Formosan Termites)**

#### **USE DIRECTIONS**

Apply 0.25%-0.50% solution to establish subsurface termite control barriers as specified on product labeling.

Avoid contamination of public and private water supplies by following these precautions:

- Use anti-backflow equipment or procedures to prevent siphonage of pesticide back into water supplies.
- Do not treat soil beneath structures that contain wells or cisterns.
- Care must be taken to avoid runoff. Do not treat soil that is water-saturated or frozen. Do not treat while precipitation is occurring.
- Care should be taken that the treatment solution is not introduced into the gravel and/or pipe drainage system which may be located on the exterior of the foundation in close proximity to the footing of the structure.

Consult State and local specifications for recommended distance of treatment areas from wells. Refer to Federal Housing Administration Specifications for guidance on preconstruction treatments.

#### **MIXING DIRECTIONS**

Mix the termiticide in the following manner:

1. Fill tank 1/4 to 1/3 full with water.
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 CYPER TC Insecticide.
4. Add remaining amount of water.
5. Let pump run and allow recirculation through the hose for 2 to 3 minutes.

**CYPER TC Use Dilutions**

Concentration (% active)	Tank Size							
	1 gallon		25 gallon		50 gallon		100 gallon	
	Cyper TC	Water	Cyper TC	Water	Cyper TC	Water	Cyper TC	Water
0.25	1.3 oz.	126.7 oz.	32.0 oz.	24.8 gal.	0.5 gal.	49.5 gal.	1.0 gal.	99.0 gal.
0.50	2.6 oz.	125.4 oz.	64.0 oz.	24.5 gal.	1.0 gal.	49.0 gal.	2.0 gal.	98.0 gal.
1.00	5.1 oz.	122.0 oz.	128.0 oz.	24.0 gal.	2.0 gal.	48.0 gal.	4.0 gal.	96.0 gal.

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

**APPLICATION VOLUMES**

To provide maximum control and protection against termite infestation apply the specified volume of the finished water emulsion and active ingredient as set forth in the directions for use section of this label. In situations which will not accept sufficient amounts of water, such as clay rich soils, reduced volumes of emulsion can be used which will deliver the appropriate concentration of termiticide to the soil. This may also apply to sensitive areas and/or applications where less volume may be desirable. Under such circumstances, the volume may be reduced provided there is a corresponding increase in concentration so that the amount of active ingredient applied to the soil remains the same.

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

Where soil conditions will not accept application of specified volume (gallons) of emulsion, the 0.5% emulsion may be applied at one-half the labeled application volume or a 1% emulsion may be applied at one-half the labeled application volume. Distribute the treatment evenly.

NOTE: When volume is reduced, the hole spacing for subslab injection and soil rodding may require similar adjustments to account for lower volume dispersal of the termiticide in the soil. Volume adjustments at 1% are not recommended for subslab injection.

VOLUME ADJUSTMENT CHART			
Volume Allowed	Rate (% Emulsion)		
	0.25%	0.5%	1.0%
Horizontal (gallons emulsion/10 sq. ft)	1 gallon	0.5 to 1 gallon	0.25 to 0.5 * gallon
Vertical (gallons emulsion/10 linear ft)	4 gallons	2 to 4 gallons	1 to 2* gallons

\*Not recommended for subslab injection.

**PRECONSTRUCTION SUBTERRANEAN TERMITE TREATMENT**

Effective pre-construction subterranean termite control requires the establishment of an unbroken vertical and/or horizontal chemical barrier between wood in the structure and the termite colonies in the soil.

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.

To meet F.H.A. termite-proofing requirements, follow the latest edition of the Housing and Urban Development (H.U.D.) Minimum Property Standards.

**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.**

After grading is completed and prior to pouring of the slab, slab-supported or constructed porches, and other critical areas, make the following treatments:

**HORIZONTAL BARRIERS:** Horizontal barriers may be established in areas intended for covering such as floors, porches, and other critical areas. Application shall be made by a low-pressure spray (less than 50 p.s.i. at the nozzle).

Apply the emulsion at the rate of 1 gallon per 10 square feet to fill dirt. If fill is washed gravel or other coarse material, apply the emulsion at the rate of 1-1/2 gallons per 10 square feet. If concrete slabs cannot be poured over soil the same day it has been treated, a waterproof cover, such as polyethylene sheeting, should be placed over the soil. This is not necessary if foundation walls have been installed around the treated soil.

**VERTICAL BARRIERS:** Vertical barriers may be established around the base of foundations, plumbing, back-filled soil against foundation walls, and other critical areas; applications may be made by trenching and rodding into the trench or trenching. Apply the emulsion at the rate of 4 gallons per 10 linear feet per foot of depth. For example, a footing 3 feet deep would require 12 gallons of emulsion per 10 linear feet.

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

A trench need not be wider than 6 inches. Rod from the base of a shallow trench to the top of the footings. Low-pressure spray (less than 50 p.s.i. at the nozzle) may be used to treat soil which will be replaced in the trench. Mix the emulsion with the soil as it is being replaced in the trench.

Soil should be treated around sewer lines, plumbing, or around any other utility extending from the soil through a slab.

**HOLLOW MASONRY UNITS OF THE FOUNDATION:** Hollow block voids may be treated at the rate of 2 gallons of emulsion per 10 linear feet so that the emulsion will reach the top of the footing. Treat so as to make a continuous chemical barrier in the voids.

You may drill and treat voids in multiple masonry elements of the structure extending from the structure to the soil in order to create a continuous treatment barrier in the area to be treated. Apply at the rate of 2 gallons of emulsion per 10 linear feet of footing using a nozzle pressure of less than 25 p.s.i. When using this treatment access holes must be drilled below the sill plate and should be as close as possible to the footing as is practical. Treatment of voids in block or rubble foundation walls must be closely examined: Applicators must inspect area 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.

Not for use in voids insulated with rigid foam.

**CRAWL SPACES:** For crawl spaces apply at the rate of 4 gallons of emulsion per 10 linear feet per foot of depth from grade to the top of the footing. Application may be made by trenching and rodding into the trench or trenching. If the footing is exposed at or above grade, application should be made with special care to avoid washout around footing. Treatment should include both sides of foundation and around all piers and pipes.

- Rod holes should be spaced to provide a continuous chemical barrier.
- Trench need not be wider than 6 inches nor below the foundation. The emulsion should be mixed with the soil as it is being replaced in the trench.

#### **POSTCONSTRUCTION TREATMENTS**

Postconstruction applications may be made by subslab injection, trenching and rodding into the trench or trenching, using low-pressure spray not exceeding 25 p.s.i. at the nozzle.

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

Do not apply emulsion until location of heat or air-conditioning ducts, vents, and water and sewer (or plumbing) lines are known and identified. Caution must be taken to avoid contamination of these structural elements and airways.

**SLAB-ON-GROUND:** Apply the emulsion at the rate of 4 gallons per 10 linear feet per foot of depth. Application shall be made by sub-slab injection, trenching and rodding into the trench or trenching. Injectors should not extend below the tops of the footings.

Treat the soil from grade to the top of the footing along the outside and, where necessary, along the inside of the foundation perimeter. Treatment may also be required along one side of a partition wall (especially where the wall is connected to the floor by fixtures inserted in the slab) and along cracks, expansion joints, and other critical areas.

Drill holes should be spaced about 10 to 24 inches apart to provide a continuous chemical barrier. (For best results, application should be made with a lateral dispersion nozzle).

Where necessary, drill through the foundation walls from the outside and inject the chemical just beneath the slab or along the inside of the foundation.

Along the outside of the foundation walls where shallow foundations exist (1 foot or less), dig a narrow trench approximately 6 inches wide and not below the top of the footing. Apply the emulsion at the rate of 2 gallons per 10 linear feet. As the soil is being replaced into the trench, apply another 2 gallons per 10 linear feet to the backfill.

When making soil applications to the foundations extending deeper than 1 foot, follow instructions under **BASEMENTS – Outside Perimeter.** (See exception for monolithic slabs immediately following.)

**Note:** For monolithic slab construction a vertical barrier may be established along the outside of foundation walls from grade to the bottom of the monolithic poured concrete foundation. Where the foundation extends deeper than 1 foot, rod holes should not extend beneath the bottom of the monolithic poured concrete foundation.

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

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

Not for use in voids insulated with rigid foam.

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

**BASEMENTS:** Apply the emulsion at the rate of 4 gallons per 10 linear feet per foot of depth from the grade to the top of the footing. For example a footing 3 feet deep would require 12 gallons of emulsion per 10 linear feet. Application shall be made by subslab, injection, trenching and rodding into the trench or trenching.

**Inside:** Treatment may be required along inside of foundation walls and along one side of interior partition walls (or bearing walls) especially where the wall is connected by fixtures inserted in the floor. Application may also be necessary around sewer pipes, floor drains, conduits, or any cracks in the basement floor. Drill holes should be spaced about 10 to 24 inches apart to provide a continuous chemical barrier.

**Note:** Sandy soils will tend to give less lateral dispersion than clay soils. Spacing should be determined by soil type.

**Outside Perimeter:** Applications must be made by trenching and rodding into the trench or trenching. When rodding from grade or from the bottom of a shallow trench, rod holes should be spaced in a manner that will allow for application of a continuous chemical barrier. Rod holes should not extend beneath the top of the footings.

A trench need not be wider than 6 inches. Rod from the base of a shallow trench to the top of the footings. Low-pressure spray (not exceeding 25 p.s.i.) may be used to treat soil which will be replaced in the trench. Mix the emulsion with the soil as it is being replaced in the trench.

**HOLLOW MASONRY UNITS OF THE FOUNDATION AND/OR BASEMENT WALL (BELOW GRADE):** Treat so as to make a continuous chemical barrier in the voids. Apply the emulsion at the rate of 2 gallons per 10 linear feet. Apply the emulsion so it will reach the footing.

**ACCESSIBLE CRAWL SPACES:** For crawl spaces, apply vertical termiticide barriers at the rate of 4 gallons of emulsion per 10 linear feet per foot of depth from grade to the top of the footing, or if the footing is more than 4 feet below grade, to a minimum depth of 4 feet. Apply by trenching and rodding into the trench, or trenching. Treat both sides of foundation and around all piers and pipes. Where physical obstructions, such as concrete walkways adjacent to foundation elements, prevent trenching, treatment may be made by rodding alone. When soil type and/or conditions make trenching

prohibitive, rodding may be used. When the top of the footing is exposed, the applicator must treat the soil adjacent to the footing to a depth not to exceed the bottom of the footing. Read and follow the mixing and use direction section of the label if situations are encountered where the soil will not accept the full application volume.

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

**INACCESSIBLE CRAWL SPACES:** For inaccessible interior areas, such as areas where there is insufficient clearance between floor joists and ground surfaces to allow 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:

- To establish a horizontal barrier, apply to the soil surface, 1 gallon of emulsion per 10 sq. ft. 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.
- To establish a horizontal barrier drill through the foundation wall or through the floor above and treat the soil perimeter at a rate of 1 gallon of emulsion per 10 square feet. Drill spacing must be at intervals not to exceed 16 inches. Many states have smaller intervals so check state regulations which may apply.

When treating 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.

It is recommended that inadequately ventilated crawl spaces be brought into compliance with FHA Minimum Property Standards specifying 1 square foot of ventilator opening per 150 square feet of crawl space area.

**NOTE: Children and pets should be kept out of treated area until surface is completely dry.**

**BATH TRAPS:** Where there is exposed soil beneath and around plumbing/waste pipe entrances through a concrete slab, this soil may be treated with 0.5% emulsion of this product.

An access door for inspection and treatment should be cut and installed if not already present. After inspection and removal of any wood (form boards) or cellular debris, treat the soil by rodding and/or flooding with 0.5% emulsion of this product.

#### **FOAM APPLICATIONS**

CYPER TC Insecticide emulsion may be converted to a foam and the foam used to treat voids to control or prevent termite, ant, bee, wasp infestations or other arthropods harboring under slabs.

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 crawl spaces, 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.

**Rates:** Use a 0.25% to 1.0% emulsion converted to a foam with expansion characteristics from 2 to 20 times.

**Note:** When using a foaming product be sure that it is compatible with CYPER TC Insecticide.

#### **Applications Under Slabs or to Soil in Crawl Spaces:**

- Applications should be made using CYPER TC Insecticide foam in combination with liquid emulsion applications.
- The total amount of product applied with the combination of foam and liquid emulsion should be equivalent to that of an application using a liquid emulsion only.

#### **Applications to Other Areas:**

- Applications may be made using either CYPER TC Insecticide foam alone or in combination with a liquid emulsion.

- Applications may be made behind veneers, piers (concrete or wood), chimney bases, into rubble foundations, into block voids, structural voids (i.e., between stud walls), poles, stumps, and wood in crawl spaces.
- Applications may be made in other areas, which include but are not limited to:
  - Foundations penetrated by utility services
  - Cracks and expansion joints
  - Bath traps
  - Areas where cement constructions have been poured adjacent to the foundation such as stairs, patios and slab additions.

#### **POSTS, POLES AND OTHER CONSTRUCTIONS**

Application may be made to create a chemical barrier in the soil around wooden construction such as signs and landscape ornamentation by applying a 0.25%-0.5% emulsion. Treat on all sides to create a continuous barrier around posts and poles.

Use 1 gallon of emulsion per foot of depth for poles and posts less than six inches in diameter. For larger poles, use 1 1/2 gallons of emulsion per foot of depth. For larger constructions, use 4 gallons per 10 linear feet per foot of depth.

For treatments made during installation, the emulsion may be applied to the soil as it is replaced around the pole or post. Previously installed poles and posts may be treated by subsurface injection or treated by gravity-flow through holes made from the bottom of a trench around the pole or post. Treat on all sides to create a continuous chemical barrier. Apply to a depth of 6 inches below the bottom of the wood.

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 emulsion per 10 linear feet per foot of depth of the trench, or 1gallon per 1.0 cubic feet of soil. See "Mixing Directions" section of the label. Mix thoroughly into the soil taking care to contain the liquid and prevent 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 "Treatment of Wood in Place for Control of Termites, Carpenter Ants, Carpenter Bees and Wood Infesting Beetles" section of this label.

#### **STRUCTURES WITH ADJACENT WELL/CISTERNS AND/OR OTHER WATER BODIES**

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

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

#### **UNDERGROUND SERVICES**

Examples of underground services are wires, cables, utility lines, pipes and conduits. Services may be within structures or located outside structures, in right-of-ways or to protect long range (miles) or installations of services.

Soil treatment may be made using a 0.25% to 0.5% CYPHER TC Insecticide emulsion to prevent attack by termites and ants.

Apply 2 to 4 gallons of emulsion per 10 linear feet to the bottom of the trench and allow to soak into the soil. Lay services on the treated soil and cover with approximately 2 inches of fill soil. Apply another 2 to 4 gallons per 10 linear feet over the soil surface to complete the treatment barrier. In wide trenches, only treat the soil in the area near the service. It is important to establish a continuous barrier of treated soil surrounding the services.

Where soil condition will not accept application of specified volume of 0.25% emulsion, the 0.5% emulsion may be applied at one-half the application rate or 2 gallons per 10 linear feet.



Finish filling the trench with untreated fill soil. The soil where each service protrudes from the ground may be treated by trenching and rodding into the trench or trenching of no more than 1 to 2 gallons of emulsion into the soil.

**Precaution:** Do not treat electrically-active underground services.

#### RETREATMENT

Retreatment for subterranean termites can only be performed if there is clear evidence of re-infestation 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 area 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.

#### TREATMENT OF WOOD IN PLACE FOR CONTROL OF TERMITES, CARPENTER ANT, CARPENTER BEES AND WOOD INFESTING BEETLES

In addition to subsurface applications, this product may be used for treating infested wood in place. It can be applied to wood by crack and crevice tool, coarse fan spray or injection. Overall broadcast spray applications must be limited to attics, crawl spaces, unfinished basements and similar generally unoccupied areas. In occupied indoor areas, treat wood trim and exposed beams by brush or coarse spray directed only onto the wood to be treated. Use this spray at a rate of 1 gallon of diluted spray per 1,000 square feet of surface area.

**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 indoors. Do not permit humans or pets to contact treated surfaces until the spray has dried.

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

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

**CONTROL OF WOOD INFESTING BEETLES:** To control wood infesting insects such as powderpost beetle (*Lyctidae*), false powderpost beetles (*Bostrichidae*), deathwatch beetles (*Anobiidae*), old house borers (*Cerambycidae*), and ambrosia beetles (*Scolytidae*) in homes and other structures, apply as an emulsion containing 0.25% CYPER TC Insecticide. For treatment of small areas, apply by brushing the emulsion evenly on wood surfaces. For large or overhead areas, apply as a coarse spray. When spraying overhead interior areas of homes, apartment buildings, etc., cover all surfaces below the area being sprayed with plastic sheeting or other material which could be disposed of by placing in trash if contamination from dripping occurs. Sprayed surfaces should be avoided until spray has totally dried. Do not use in structures occupied by animals to be used for food purposes or which produce products for human consumption.

**TERMITES ABOVE GROUND:** For control of termites, subterranean aerial colonies, Formosan aerial colonies or drywood termites in localized areas of infested wood in structures, apply a 0.1%-0.25% emulsion to voids and galleries in damaged wood and in spaces between wooden members of a structure and between wood and foundations where wood is vulnerable. Application may be made to inaccessible areas by drilling, and then injecting the emulsion with a crack and crevice injector into the damaged wood or void spaces. Application to attics, crawl spaces unfinished basements, or man-made voids may be made with a coarse fan spray of 0.1%-0.25% emulsion to control workers and winged reproductive forms of termites in mud shelter tubes. This type of application is not intended to be a substitute for soil treatment for extensive infestation of drywood termites or other wood-infesting insects. Make treatments at a rate of 1 gallon of the emulsion per 1,000 sq. ft. of surface area.

For termites active inside trees, utility poles and/or fence post, drill to find the interior infested cavity and inject 0.1% emulsion using treatment tool with a splashback guard.

Termite carton nests in trees or building voids may be injected with 0.25%-0.50% emulsion using a pointed injection tool. Multiple injection points to varying depths may be necessary. It is desirable to physically remove carton nest material from building voids when such nests are found.

**CARPENTER ANTS:** For control of carpenter ants in houses and other structures, apply as a 0.25% emulsion for protection up to 5 weeks, a 0.5% emulsion for protection up to 11 weeks, and a 1.0% emulsion for protection up to 1 year, with re-treatment semiannually as needed, around doors and windows, and other places where carpenter ants enter the premises and where they crawl. Spray into cracks and crevices or through openings or small-drilled holes into voids where these ants or their nests are present. Use no more than a sufficient amount of coarse spray to thoroughly cover the area. Do not allow runoff to occur. Do not exceed 1 gallon of dilute emulsion per 1000 square feet of treatment surface.

For carpenter ants active inside trees, utility poles and/or fence post, drill to find the interior infested cavity and inject 0.25% emulsion, for protection up to 1 week, using a treatment tool with a splashback guard. Reapply under heavy reinfestation pressure.

**FIREWOOD PROTECTION FROM CARPENTER ANTS:** Prior to laying in firewood, soil beneath the cord(s) may be treated with a 0.25%-0.50% emulsion at 1 gallon per 10 square feet to prevent carpenter ant infestation.

**CARPENTER BEES:** Use a 0.1% emulsion for control of carpenter bees. Liquid may be sprayed directly into gallery entrance holes. Following treatment, the entrance holes may be left open 24 hours to be certain that returning adult bees are killed. When there is no activity, the hole may be closed with wood putty.

**Treatment of Preconstruction Lumber and Logs\***

To protect unseasoned lumber and logs from wood-destroying insects, such as termites, carpenter ants, and beetles (ambrosia, powder-post, old house borers, and others), totally treat wood with a 0.25% to 0.5% solution of CYPHER TC Insecticide. This solution can be applied by various methods, including spraying, brushing, dipping, and pressure treatment. Frequent monitoring of dip and pressure systems are necessary to ensure that the desired level of CYPHER TC Insecticide is maintained. Wood can be handled after treatment when dry.

1. For dip treatments, the wood should be totally submerged in the solution until thoroughly wet and allowed to dry in a suitable location. Dipping solutions to which CYPHER TC Insecticide has been added should be agitated before use if left unused for long periods of time. Sediment, debris and other deposits should be periodically cleaned from the tank.
2. For pressure treatments, the wood should be placed in the treatment chamber, the CYPHER TC Insecticide solution added, and the system pressurized up to 250 psi for up to 1 hour, depending on the density and type of wood treated. After the pressure is released and the system drained, the wood should be placed in a suitable location for drying.
3. For spray treatments, the wood should be sprayed thoroughly, including back and ends.
4. For brush treatments, all parts of wood surfaces should be thoroughly treated.

\*Not approved for use in California

**GENERAL PEST CONTROL UNDER AND AROUND STRUCTURES**

CYPHER TC Insecticide may be diluted with water for use to control pests in and around homes and other structure. Pests controlled are listed in the following tables.

**UNDER SLABS**

Infestations of Arthropods, such as ants, cockroaches and scorpions inhabiting under slab areas may be controlled by drilling and injecting or horizontal rodding and then injecting 1 gallon of a 0.25% to 0.5% emulsion per 10 square feet or 2 gallons of emulsion per 10 linear feet.

**IN CRAWL SPACES**

Broadcast CYPHER TC Insecticide at 0.25% to 0.5% to all surfaces in crawl spaces to control ants, fleas, cockroaches, scorpions, or other arthropods. Product may also be applied through under-structure insecticidal delivery systems such as piping or flexible tubing mounted under the structure. This treatment is not intended as a substitute for termite control. Treat surfaces thoroughly but not to the point of runoff. Keep children and pets off surface until dry.

**OUTSIDE SURFACES AND AROUND BUILDINGS**

Apply CYPHER TC Insecticide using a 0.1% emulsion as a residual treatment to outside surfaces of buildings including, but not limited to, exterior siding, foundations, porches window frames, eaves, patios, garages, refuse dumps, lawns or grass areas adjacent or around private homes, duplexes, townhouses, condominiums, house trailers, apartment complexes, carports, garages, fence lines, storage sheds, barns, and other residential structures, commercial, industrial and institutional buildings, soil, trunks of woody ornamentals and other areas where pests congregate or have been seen. Base need for retreatment upon monitoring for pest presence.

Keep children and pets off treated areas until completely dry.

**CAUTION ON APPLICATION TO VINYL SIDING**

**EACH YEAR PRIOR TO AN APPLICATION TO VINYL SIDING, TREAT A SMALL AREA ON ALL SIDES OF THE STRUCTURE WHERE WEATHERING IS MOST SEVERE, AND ALLOW TO DRY. OBSERVE FOR STAINING. SOME TYPES OF VINYL SIDING, PARTICULARLY IF AGED OR WEATHERED, MAY SHOW SOME STAINING AFTER APPLICATION OF AN EMULSIFIABLE CONCENTRATE PRODUCT. TO COMPLETELY ELIMINATE THE POTENTIAL RISK ASSOCIATED WITH STAINING, IT IS SUGGESTED THAT A WATER BASED PRODUCT BE USED.**

**BARRIER TREATMENT:** Apply 0.1% to a band of soil and vegetation 6 to 10 feet wide around and adjacent to the structure. Also, treat the foundation of the structure to a height of 2 to 3 feet. Use a treatment volume of 2 to 10 gallons per 1,000 square feet. Higher volumes of water may be needed if mulch or leaf litter is present or dense foliage exists. House siding may be treated if boxelder bugs, elm leaf beetles, earwigs, silverfish or other similar pests are present.

PEST	SPECIFIC INSTRUCTIONS
Ants Bees Carpenter Ants Carpenter Bees Centipedes Chiggers <sup>1</sup> Cockroaches Asian Cockroaches Crickets Earwigs Firebrats Flies Ground Beetles Mosquitoes Millipedes Pill Bugs <sup>1</sup> Scorpions Silverfish Sowbugs Spiders Wasps	Apply as a pinstream, as a fine/course, low pressure spray (20 psi or less), as a spot treatment or with a paintbrush. Treat where pests are found or entry points of the structure such as windows and door frames and along the foundation.

<sup>1</sup>Not approved for use in California.

#### LAWN AND LANDSCAPE PEST CONTROL

PEST	SPECIFIC INSTRUCTIONS
Chinch Bugs <sup>1</sup> Mole Crickets <sup>1</sup>	For residential lawns apply CYPHER TC Insecticide at the rate of 0.33 to 0.65 fl. oz. per 1000 square feet in a volume of water sufficient for uniform coverage such as 3 to 20 gallons. Use the lower rate to knock down pests and the higher rate where faster knockdown or greater residual is desired. Lawn should not be longer than 3 inches at the time of application. Base need for retreatment upon monitoring for pest presence. Application in combination with compatible surfactants may enhance penetration. Arid climates generally require the higher volume.  For example refer to Lawn Application Dilution Table.
Ants Ant Mounds <sup>1</sup> Fire Ants <sup>1</sup>	Drench Method (Ant Mounds, Fire ants): Apply 1 to 2 gallons of emulsion to each mound area by sprinkling the mound until it is wet and treat a 4 foot diameter circle around the mound. Use the higher volume for mounds larger than 12 inches. For best results, apply in cool weather, such as in early morning or late evening hours, but not in the heat of the day.
Bark Beetles Borers Boxelder Bugs <sup>1</sup> Elm Leaf Beetles <sup>1</sup> Gypsy Moths (adults & caterpillars) <sup>1</sup>	Boxelder Bugs, Elm Leaf Beetles, Gypsy Moth Caterpillars: Spray tree trunks, building siding or wherever pests congregate thoroughly but not to the point of runoff.  Borers and Bark Beetles: To prevent infestation of trees and woody ornamentals, spray the bark thoroughly but not to the point of runoff .
Fleas & Ticks	Fleas and ticks: Mix 1.25 to 2.5 oz. of CYPHER TC Insecticide in 16 to 100 gallons of water and apply to 4,000 square feet of lawn. Use the lower rate to knockdown existing fleas and the higher rate where faster knockdown or greater residual is desired.

<sup>1</sup>Not approved for use in California.

**LAWN APPLICATION DILUTION TABLE:** CYPHER TC Insecticide rate (oz.) for 100 gallons according to volume of application.

Example: For a Chinch bug application at the rate of 0.65 oz. per 1,000 square feet, using 5 gallons of solution per 1,000 square feet of lawn, use 13 oz. of CYPHER TC Insecticide in a 100 gallon tank. (1 fl. oz. equals 30 ml).

Volume per 1,000 sq. ft.	Amount of CYPHER TC Insecticide		
	0.33 oz. per 1,000 sq. ft.	0.5 oz. per 1,000 sq. ft.	0.65 oz. per 1,000 sq. ft.
5 gal.	6.5 oz.	10.0 oz.	13.0 oz.
8 gal.	4.0 oz.	6.5 oz.	8.0 oz.
10 gal.	3.5 oz.	5.0 oz.	6.5 oz.
15 gal.	2.0 oz.	3.5 oz.	4.5 oz.
20 gal.	1.5 oz.	2.5 oz.	3.5 oz.

### GENERAL RESTRICTIONS AND PRECAUTIONS

Do not use in food or feed areas of food handling establishments, restaurants or other areas where food or 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 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 canning or bottling).

Not for use in Federally inspected meat and poultry plants.

DO NOT APPLY THIS PRODUCT TO EDIBLE CROPS.

Do not use in warehouses where raw or cured tobacco is stored.

Do not use in warehouses while raw agricultural commodities for food or feed are being stored.

Thoroughly wash dishes and food handling utensils with soap and water if they become contaminated by application of this product.

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

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

Do not allow people or pets on treated surfaces until the spray has completely dried.

Do not use concentrate or emulsion in fogging equipment.

During indoor surface application, do not allow dripping or run-off to occur.

Do not apply this product in any rooms being used as living, eating, sleeping or recovery area by patients, the elderly or infirm when they are in the room.

Do not apply to classrooms when in use.

Do not touch treated surface until dry.

### STORAGE AND DISPOSAL

**PROHIBITIONS:** Do not contaminate water, food or feed by storage or disposal. Open dumping prohibited. Do not reuse empty container.

**STORAGE:** Keep container closed when not in use. Do not store near food or feed. Protect from freezing. In case of spill or leak on floor or paved surfaces, soak up with sand, earth or synthetic absorbent. Remove to chemical waste area.

**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 instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

#### CONTAINER DISPOSAL:

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

*Refillable Return Containers:* Reseal container and offer for reconditioning, or triple rinse (or equivalent) and offer for recycling or reconditioning.

Container Precautions: Before refilling, inspect thoroughly for damage such as cracks, punctures, bulges, dents, abrasions, and damaged or worn threads on closure devices. REFILL ONLY WITH CYPHER TC Insecticide. The contents of this container cannot be completely removed by cleaning. Refilling with materials other than CYPHER TC Insecticide will result in contamination and may weaken container.

After filling and before transporting, check for leaks.

Do not refill or transport damaged or leaking containers.

CONTAINER IS NOT SAFE FOR FOOD, FEED OR DRINKING WATER.

Control Solutions, Inc.  
5903 Genoa-Red Bluff  
Pasadena, TX 77507-1041  
EPA Reg. No. 53883 – 92  
EPA Est. No. 53883-TX-002