PM-19 Reg # 51036-122 1920

Mr. Lee Tharrington
Micro Flo Company
P.O. Box 5948
Lakeland, Florida 33807

Subject: Revised Labeling Per PR Notice 96-7
Micro Flo Chlorpyrifos Termiticide Concentrate
EPA Registration Number 51036-122
Your Application Dated December 12, 1996

Dear Mr. Tharrington:

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, is acceptable provided that you make the labeling changes indicated below before you release the product for shipment bearing the amended labeling:

1. On page 8, in the "PRECONSTRUCTION SUBTERRANEAN TERMITE TREATMENT" section, in the third paragraph, delete "To meet F.H.A. termite proofing requirements, follow the latest edition of the Housing and Urban Development (H.U.D.) Minimum Property Standards."

2. On page 10, in paragraph 3., delete the added sentence, "When treating plenums, turn off the air circulation system of the structure until application has been completed and all termiticide has been absorbed by the soil." (We would expect that this preconstruction treatment would occur before the installation of the air circulation system.)

3. On page 17, delete the heading "Treatment Directions." Insert this heading on page 16, immediately above the paragraph beginning "To control wood-infesting beetles..."

Note that our review incorporated comments of the Association of Structural Pest Control Regulatory Officials (ASPCRO). A copy of their memorandum, dated March 6, 1997, is enclosed. We will attempt to consider these comments, if applicable, when reviewing termiticide labels submitted by other registrants.

Submit five (5) copies of your final printed labeling before you release the product for shipment.

A stamped copy of the labeling is enclosed for your records.

Sincerely yours,

/s/

Dennis H. Edwards, Jr.
Product Manager (19)
Insecticide-Rodenticide Branch
Registration Division (7505C)

Enclosures

39-20

MICRO FLO
CHLORPYRIFOS TERMITE CONCENTRATE

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

~~To Be Applied Only By Or Under The Supervision of Commercial Applicators Responsible For Insect Control Programs. Not Intended For Use By Homeowners.~~

ACTIVE INGREDIENT:	
Chlorpyrifos (0,0-diethyl 0-(3,5,6-trichloro-2-pyridyl) phosphorothioate)	42.8%
INERT INGREDIENTS:	57.2%
TOTAL	100.0%

Contains 4 pounds of chlorpyrifos per gallon
Contains petroleum distillate

KEEP OUT OF REACH OF CHILDREN

WARNING AVISO

PRECAUCION AL USUARIO: Si usted no lee ingles, no use este producto hasta que le etiqueta haya sido explicada ampliamente.

STATEMENT OF PRACTICAL TREATMENT

IF SWALLOWED: Call a physician or get medical attention. Do not induce vomiting. Contains an aromatic petroleum solvent. Do not give anything by mouth to an unconscious person. Avoid alcohol.
IF IN EYES: Flush with plenty of water. Call a physician if irritation persists.
IF ON SKIN: Wash with plenty of soap and water. Get medical attention.
IF INHALED: Remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. Get medical attention.

EPA Reg. No. 51036-122 EPA Est. No. 51036-GA-1

ACCEPTED with COMMENTS in EPA Letter Dated
MAR 26 1997
Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 51036-122

Manufactured By
MICRO FLO COMPANY
P.O. Box 5948
Lakeland, FL 33807

REC'D EPA/OPP/OPDI
96 DEC 19 A9:16

BEST AVAILABLE COPY

PRECAUTIONARY STATEMENTS
Hazards To Humans And Domestic Animals

WARNING

May be fatal if swallowed. Harmful if absorbed through skin or clothing. Causes moderate eye irritation. Avoid contact with eyes, skin or clothing. Harmful if inhaled. Avoid breathing of vapors. Wash thoroughly with soap and water after handling and before eating, drinking or using tobacco. Remove contaminated clothing and wash before reuse. Keep away from food, feed stuffs and water supplies. **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.**

NOTE TO PHYSICIAN: Chlorpyrifos is a cholinesterase inhibitor. Treat symptomatically. If exposed, plasma and red blood cell cholinesterase tests may indicate degree of exposure (baseline data are useful). Atropine, only by injection, is the preferable antidote. Oximes, such as 2-PAM/protopam, may be therapeutic if used early; however, use only in conjunction with atropine. In case of severe acute poisoning, use antidotes immediately after establishing an open airway and respiration. May pose an aspiration hazard.

ENVIRONMENTAL HAZARDS

This pesticide is extremely toxic to fish, birds, and other wildlife. Do not apply directly to water. Drift and runoff from treated areas may be hazardous to aquatic organisms in adjacent aquatic sites. Cover or incorporate spills. Do not contaminate water by cleaning of equipment or disposal of equipment washwaters.

PHYSICAL OR CHEMICAL HAZARDS

COMBUSTIBLE! Do not use or store near heat or open flame. Do not cut or weld container.

DIRECTIONS FOR USE

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

STORAGE AND DISPOSAL

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

STORAGE: Storage below 55 degrees F may result in formation of crystals. If product crystallizes out of solution, store at 72 degrees F to 90 degrees F and agitate to redissolve crystals.

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: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

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 (such as nitrile or butyl) gloves, and protective eyewear. In addition, all pesticide handlers must wear a respiratory protection device (Dust/mist filtering respirator with MSHA/NIOSH approval number prefix TC-21C or Respirator with an organic-vapor removing cartridge and a prefilter approved for pesticides with MSHA/NIOSH approval number prefix TC-14G or Supplied-air respirator with MSHA/NIOSH approval number prefix TC-19C or self-contained breathing apparatus (SCBA) with MSHA/NIOSH approval number TC-13F) when handling the concentrate or when working in a non-ventilated space.

~~SAFE HANDLING PROCEDURES~~

~~Wear suitable protective clothing when using or handling this product to help avoid exposure to eyes and skin. As a minimum, chemical workers goggles, neoprene or natural rubber gloves and footwear, a long sleeved shirt and long legged pants or coveralls are recommended. To avoid breathing spray mist during application in confined areas, wear a mask or respirator of a type recommended by NIOSH for filtering spray mists and organic vapors.~~

SUBTERRANEAN TERMITES

Chlorpyrifos Termite Concentrate for soil treatment is used to establish a barrier which is lethal to termites. 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.

It is important 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, and COPTOTERMES. Choice of appropriate procedures includes consideration of such variable factors as the design of the structure, water table, soil type, soil compaction, grade conditions, and the location and type of domestic water supplies. The biology and behavior of the involved termite species 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. For advice concerning current control practices for specific local conditions, consult resources in structural pest control.

GENERAL USE PRECAUTIONS

Do not contaminate wells or cisterns. Contamination of public and private water supplies must be avoided by following these precautions:

1. Use antiback-flow equipment or procedures to prevent siphonage of pesticide back into water supplies.

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

3. Consult state and local specifications for recommended distances of treatment areas from wells, and refer to Federal Housing Administration Specifications for further guidance.

STRUCTURES WITH WELLS/CISTERNS INSIDE FOUNDATIONS

Structures that contain wells or cisterns within the foundation of a structure can only be treated using the following techniques:

1. **Do not treat soil while it is beneath or within the foundation or along the exterior perimeter of a structure that contains a well or cistern. The treated backfill method must be used if soil is removed and treated outside/away from the foundation. The treated backfill technique is described as follows:**

   (a) Trench and remove soil to be treated onto heavy plastic sheeting or similar material or into a wheelbarrow.

   (b) Treat the soil at the rate of 4 gallons of dilute emulsion per 10 linear feet per foot of depth of the trench, or 1 gallon per 1.0 cubic feet of soil. See "Dilution 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 "Control of Wood Infesting Insects" section of this label.

STRUCTURES WITH ADJACENT WELLS/CISTERNS AND/OR OTHER WATER BODIES

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

1. Prior to treatment, if feasible, expose the water pipe(s) coming from the well to the structure, if the pipe(s) enter the structure within 3 feet of grade.

2. Prior to treatment applicators are advised to take precautions to limit the risk of applying the termiticide into subsurface drains that could empty into any bodies of water. These precautions include evaluating whether application of the termiticide to the top of the footer may result in contamination of the subsurface drain. Factors such as depth to the drain system and soil type and degree of compaction should be taken into account in determining the depth of treatment.

3. When appropriate (i.e., on the water side of the structure), the treated backfill technique (described above) can also be used to minimize off-site movement of termiticide.

~~Structures that contain wells or cisterns may be treated using the following guidelines:~~

~~1. Do not treat soil while it is beneath or within the foundation of a structure that contains a well or cistern. The treated backfill method may be used if the soil is removed and treated outside the foundation.~~

~~2. If treatment must be made along exterior foundation walls of structures containing wells or cisterns or other difficult situations such as near wells or cisterns, along fieldstone or rubble walls, along faulty foundation walls, around pipes and utility lines which lead downward from the structure to a well, pond, or other body of water, application may be made in the following manner:~~

~~EXCAVATION/TREATED BACKFILL TECHNIQUE~~

~~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 diluted emulsion per 10 linear feet per foot of depth of the trench or 1 gallon of dilution per 1.0 cubic feet (See Rate Determination Guideline below). An initial treatment using a 0.75 - 1.0 % dilution will provide effective optimum long term residual control. 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.~~

~~3.~~ ~~Infested and/or damaged wood can be treated using an injection technique such as described in "Control of Wood Infesting Insects".~~

All nonessential wood and cellulose containing materials, including scrap wood and form boards, should be removed from around foundation walls, crawl spaces, and porches. This does not include existing structural soil contact wood that either has been or needs to be treated.

RATE DETERMINATION GUIDELINES

Consult the local extension agent or state entomologist for application rate recommendations.
An initial treatment using 0.75 - 1.0% dilution will provide effective, optimum long term residual control.
~~The 0.75% rate may also be used when making follow up or spot treatments with no reinspection restrictions.~~
A 2.0% dilution may be used to protect utility poles and fence posts.

Mixing Directions

It is important that the termiticide dilution be uniformly mixed in the spray tank before beginning the treatment. Once mixed, Chlorpyrifos TC will not settle out in the tank although the initial mixing will be enhanced by agitation, circulation through the treating hose, and the filling process.

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 Chlorpyrifos TC.

4. Add remaining amount of water.

5. Let pump run and allow recirculation through the hose for 2 to 3 minutes.

DILUTION DIRECTIONS

Gallons of Finished Dilution Desired	Chlorpyrifos Termite Concentrate Needed			
	0.5%	0.75%	1.0%	2.0%
1	1 1/3 fl oz	2 fl oz	2 2/3 fl oz	5 1/3 fl oz
5	6 2/3 fl oz	10 fl oz	13 1/3 fl oz	26 2/3 fl oz
10	13 1/3 fl oz	20 fl oz	26 2/3 fl oz	53 1/3 fl oz
24	1 qt	1 1/2 qt	1/2 gl	1 gl
48	1/2 gl	3 qt	1 gl	2 gl
97	1 gl	1 1/2 gl	2 gl	4 gl

Application Volume

To provide maximum control and protection against termite infestation apply the specified volume of the finished water emulsion and active ingredient as set forth in the directions for use section of this label. If soil will not accept the labeled application volume, the volume may be reduced provided there is a corresponding increase in concentration so that the amount of active ingredient applied to the soil remains the same. NOTE: Large reductions of application volume reduce the ability to obtain a continuous barrier. Variance is allowed when volume and concentration are consistent with label directed rates and a continuous barrier can still be achieved.

Do not treat soil that is water saturated or frozen. Do not treat while precipitation is occurring.

~~To ensure thorough and complete coverage in different soil types, it may become necessary to adjust the volume being applied. In situations such as heavy, clay type soils which will not accept large amounts of water, reduced volumes can be used which will deliver the appropriate concentrations of termiticide in the soil. This would also apply to sensitive areas and/or horizontal applications where less volume may be desirable. Minimum volumes will be specified in the appropriate use directions.~~

~~In light textured soils such as sand or gravel which accept larger amounts of water, increased volumes which deliver the appropriate concentration of termiticide in the soil may be used. Maximum volumes will be specified in the appropriate use directions.~~

PRECONSTRUCTION SUBTERRANEAN TERMITE TREATMENT

PRECONSTRUCTION TREATMENT: DO NOT APPLY AT A LOWER DOSAGE AND/OR CONCENTRATION THAN SPECIFIED ON THIS LABEL FOR APPLICATIONS PRIOR TO 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 preconstruction subterranean termite control requires the establishment of a unbroken vertical and/or horizontal chemical barrier between wood in the structure and the termite colonies in 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. Follow state and local regulations to meet minimum treatment standards for preventive preconstruction treatments.

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.

~~All holes drilled in construction elements for preconstruction treatments should be securely plugged following application.~~

See "Rate Determination Guidelines" and Table 1 for dilution directions

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.

1. For Horizontal barriers, applications shall be made using a

low pressure spray after grading is completed and prior to the pouring of the slab or footing.

a. For a 0.75% rate, apply 1 gallon of dilution per 10 square feet or use 2 fluid ounces of Chlorpyrifos TC per 10 square feet in sufficient water (not less than 1/2 or more than 2 gallons) to provide thorough and continuous coverage of the area being treated (see Application Volume section).

For a 1.0% rate, apply 1 gallon of dilution per 10 square feet, or use 2 2/3 fluid ounces of Chlorpyrifos TC per 10 square feet in sufficient water (no less than 1/2 gallon or more than 2 gallons) to provide thorough and continuous coverage of the area being treated (See "Application Volume").

If the fill is washed gravel or other coarse material, it is important that a sufficient amount of dilution be used to reach the soil substrate beneath the coarse fill.

b. If concrete slabs cannot be poured over the soil the same day it has been treated, a vapor barrier should be placed over the treated soil to prevent disturbance of the termiticide barrier.

2. For Vertical barriers, apply the 0.75-1.0% dilution at a rate of 4 gallons per 10 linear feet per foot of depth. Establish vertical barriers in areas such as around the base of foundations, plumbing lines, backfilled soil against foundation walls and other areas which may warrant more than just a horizontal barrier.

a. Rodding and/or trenching applications should be made to reach the top of the footing. Rod holes should be spaced to provide a continuous barrier.

b. Trenches need not be wider than 6 inches. Treat soil with the dilution as it is being replaced in the trench.

For a 0.75% rate, apply 4 gallons of dilution per 10 linear feet per foot of depth or 8 fluid ounces of Chlorpyrifos TC per 10 linear feet per foot of depth from grade to top of footing in sufficient water (not less than 2 gallon or more than 8 gallons) to ensure complete coverage.
For a 1.0% rate, apply 4 gallons of dilution per 10 linear feet per foot of depth or 10 2/3 fluid ounces of Chlorpyrifos TC per 10 linear feet per foot of depth from grade to top of footing in sufficient water (not less than 2 gallons or more than 8 gallons) to insure complete

coverage.

c. Hollow block foundations or voids of masonry can be treated to make a complete chemical barrier especially if the soil was not treated prior to pouring the footing. Apply the dilution at a rate of 2 gallons per 10 linear feet so that it reaches the top of the footing.

d. For crawl spaces, establish a vertical barrier on both sides of the foundation and around all piers and areas where underground utilities exit the soil. Do not apply the dilution to the entire surface area intended as the crawl.

3. For Plenum type structures which use a sealed underfloor space to circulate heated and/or cooled air throughout the structure, apply the dilution at the rate of 4 gallons per 10 linear feet per foot of depth. Soil adjacent to both sides of foundation walls, supporting piers, plumbing and conduits should be treated by trenching or rodding (where soil conditions permit) to a depth of 6 inches or, if less shallow, to the top of the footing. When conditions will not permit trenching or rodding, surface application adjacent to interior foundation walls may be made but the treated strip shall not exceed a width of 18 inches, horizontally, from the foundation walls, piers or pipes. The surface application should be made at a rate of 1 gallon per 10 square feet as a very coarse spray under low pressure (not to exceed 20 P.S.I. when measured at the treating tool). After soil treatment, a continuous vapor barrier of at least 6 mil polyethylene film or other suitable vapor barrier must be installed on the ground surface over the entire subfloor area and on the inside of the plenum walls, in accordance with the recommended practices for plenum type structures.

When treating plenums, turn off the air circulation system of the structure until application has been completed and all termiticide has been absorbed by the soil.

POSTCONSTRUCTION TREATMENTS

For applications made after the final grade is installed, the applicator must trench and rod into the trench or trench along the foundation walls and around pillars and other foundation elements, at the rate prescribed from grade to the top of the footing. When the footing is more than four (4) feet below grade, the applicator must trench and rod into the trench or trench along the foundation walls at the rate prescribed to a minimum depth of four feet. The actual depth of treatment will vary depending on soil type, degree of compaction, and location of termite activity. When the top of the footing is exposed, the applicator must treat the soil adjacent to the footing to a depth not to exceed the bottom of the footing.

However, in no-case should a structure be treated below the footing.

Use a 1% emulsion for subterranean termites. Mix 2 gallons of Chlorpyrifos Termite Concentrate in 98 gallons of water to produce a 1% water emulsion. Postconstruction applications shall be made by injection, rodding, and/or trenching (using low pressure spray). Do not apply emulsion until location of heat or air conditioning ducts, vents, water and sewer lines and electrical conduits are known and identified. Extreme caution must be taken to avoid contamination of these structural elements and airways.

1. For slab on ground construction apply at the rate of 4 gallons of emulsion per 10 linear feet. Applications may be made by sub-slab injection and/or trenching. Injectors should not exceed beyond the tops of the footings. Treat along the outside of the foundation and where necessary just beneath the slab along one side of interior partitions and along all cracks and expansion joints.

   a. Drill holes in the slab to provide a continuous chemical barrier.

   b. Where necessary, drill through the foundation walls from the outside and force the emulsion just beneath the slab either along the inside of the foundation or along all the cracks and expansion joints and other critical areas.

   c. For shallow foundations, 1 foot or less, dig a narrow trench approximately six inches wide along the outside of the foundation walls. Do not dig below the bottom of the foundation. The emulsion should be applied to the trench and the soil at 4 gallons per 10 linear feet as the soil is replaced in the trench. Cover the treated soil with a layer of untreated soil.

   d. For foundations deeper than 1 foot follow rates for basements.

2. 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 areas of the structure until the clean up is completed.

Not for use in voids insulated with rigid foam.

~~Hollow block foundation or voids of masonry should be treated to make a continuous chemical barrier in voids. Apply at the rate of 2 gallons of emulsion per 10 linear feet.~~

3. For basements apply at the rate of 4 gallons of emulsion per 10 linear feet. Where footings are greater than 1 foot of depth from the grade to the bottom of the foundation application may be made by trenching and/or rodding at the rate of 4 gallons of emulsion per 10 linear feet per foot of depth. Treat outside of foundation walls, and if necessary beneath the basement floor along inside of foundation walls, along cracks in basement floors, along interior load bearing walls, around sewer pipes, conduits, and piers.

4. A. Accessible Crawl Spaces

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

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

2). Rod holes must be spaced so as to achieve a continuous chemical 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 emulsion must be mixed with the soil as it is replaced in the trench.

4). 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.

B. 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 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 powerspray with higher pressures.

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

When treating 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.

~~In crawl spaces apply at the rate of 4 gallons of emulsion per 10 linear feet per foot of depth from grade to bottom of foundation. Application may be made by rodding and/or trenching (utilizing low pressure spray). Treat both sides of foundation and around all piers and pipes.~~

~~a. Rod holes should be spaced (about 1 foot) to provide a continuous chemical barrier.~~

~~b. Trench need not be wider than 6 inches nor below the foundation. The emulsion should be mixed with the soil as it is replaced in the trench. Cover the treated soil with a layer of untreated soil or other suitable barrier such as polyethylene sheeting.~~

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~~e. For inaccessible crawl spaces, treat soil by an alternate method such as drilling and rodding through foundation walls from the outside.~~

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.

~~All treatment holes drilled in construction elements of living areas of homes should be securely plugged.~~

5. In plenum type structures, which use a sealed underfloor space to circulate heated and/or cooled air within the structure, apply the 0.75% - 1.0% dilution at the rate of 4 gallons per 10 linear feet per foot of depth. Soil adjacent to both sides of foundation walls, supporting piers, plumbing and conduits should be treated by trenching or rodding (where soil conditions permit) to a depth of 6 inches or to the top of the footing. When conditions will not permit trenching or rodding, a surface application adjacent to interior foundation walls may be made, but the treated strip shall not exceed a width of 18 inches, horizontally, from the foundation piers or pipes. The surface application should be made at a rate of 1 gallon per square foot as a very coarse spray under low pressure (not to exceed 20 P.S.I. when measured at the treating tool). In order to properly calculate the amount of termiticide dilution needed, use the following guideline: A strip 18 inches wide and 6 feet 8 inches long is equal to 10 square feet. Before treatment, a barrier of at least 6 mil polyethylene film or other suitable vapor barrier must be present on this ground surface over the entire subfloor area in accordance with recommended practices for plenum type structures. Install a new vapor barrier if barrier is absent or deteriorated. The vapor barrier film on the ground and foundation walls must be folded back from the areas to be treated prior to treatment and replaced immediately following treatment. Structures should be ventilated during application and until treatment is dry.

   When treating plenums, turn off the air circulation system of the structure until application has been completed and all termiticide has been absorbed by the soil.

6. **FOAM APPLICATIONS: The emulsion may be converted to a foam and the foam used to control or prevent termite infestations.**

   Depending on the circumstances, foam applications may be used alone or in combination with liquid emulsion applications. Applications may be made behind veneers, piers, chimney bases, into rubble foundations, into block voids or structural voids, under slabs, stoops, porches, or to the soil in 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.

~~Application using foam generating equipment. In situations where conventional application methods have not or are not likely to provide adequate coverage, foam generating equipment or similar machines can be used to provide a continuous barrier. Treatment of filled porches, chimney bases, soil under slabs and treatment of wall voids are examples where foam applications may be useful.~~

Foam Treatment Recommendations:
Refer to label of foaming adjuvant for proper amount of material to add per gallon of Chlorpyrifos TC dilution.

The following provides the amount of Chlorpyrifos TC required for a given area and volume range of the prefoamed termiticide dilution necessary for application of the product.

For a 0.75% rate, apply 8 fluid ounces of Chlorpyrifos TC per 10 linear feet using no less than 2 gallons, or more than 8 gallons, of prefoamed dilution.

For a 1% rate, apply 10 2/3 fluid ounces of Chlorpyrifos TC per 10 linear feet using no less than 2 gallons, or more than 8 gallons, of prefoamed dilution.

RETREATMENT RESTRICTIONS

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

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

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occurred.

~~1. Retreatment for subterranean termites should only be made when there is evidence of reinfestation subsequent to the initial treatment, or there has been a disruption of the chemical barrier in the soil due to construction, excavations, landscaping, etc.~~

~~2. Retreatments may be made to critical areas in accordance with the application techniques described above. This application should be made as a spot treatment to these areas. Routine retreatment of the entire premises should be avoided.~~

CONTROL OF WOOD INFESTING INSECTS

Dosage and Mixing Instructions:
Chlorpyrifos Termite Concentrate is recommended for use as an aqueous emulsion containing 0.5% or 1% Chlorpyrifos.

Advisements:
When spraying overhead interior areas of homes, apartment buildings, etc. to the point of runoff, 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 the spray has totally dried.

Contact with treated surfaces should be avoided until spray has dried. Cover or remove exposed foods before treatment. Do not use in structures housing animals which are intended for or which produce products to be used for food purposes. Do not use for above ground control of wood infesting insects in food areas of food handling establishments, restaurants or other areas where food is commercially prepared or processed.

To control wood-infesting beetles such as powderpost beetles (LYCTIDAE), false powder post beetles (BOSTRICHIDAE), deathwatch beetles (ANOBIIDAE), old house borers (CERAMBYCIDAE) and ambrosia beetles (SCOLYTIDAE) in homes and other structures, treatment may be applied either as coarse sprays or by brushing the product onto targeted surfaces. Use a sufficient amount of spray to cover the area to the point of wetness but avoid runoff. Use the following guidelines to determine appropriate rates of application:

New Wood - (typically less than 10 years of age) apply approximately 1 gallon of dilution per 150 square feet as a coarse spray.
Old Wood - (typically greater than 10 years of age) apply approximately 1 gallon of dilution per 100 square feet as a coarse spray.

Treatment Directions

For control of carpenter ants in homes and other structures, apply dilution around doors and windows and other places where carpenter ants enter the premises and where they crawl and hide. Also spray into cracks and crevices or through openings or small newly drilled holes into wall voids where these ants or their nests are present. Use a sufficient amount of coarse spray to cover the area to the point of wetness but avoiding runoff.

For control of termites (localized areas of infested wood in structures), apply dilution to voids and channels in damaged wood and in spaces between members of a structure and between wood and foundations where termite infestation is likely to occur. Application may be made to inaccessible areas by drilling, and then injecting the emulsion. Use a sufficient amount of spray to cover the area to the point of wetness but avoiding runoff. Treatment of localized areas is intended to kill workers and winged reproductive forms of termites in the treated areas and to prevent infestations for a temporary period. This type of application is not intended to be a substitute for soil treatment or mechanical alteration to control subterranean termites.

PEST CONTROL ON OUTSIDE SURFACES AND AROUND BUILDINGS

To control ants, bees, carpenter ants, clover mites, cockroaches, crickets, earwigs, hornets, millipedes, scorpions, spiders, ticks, wasps and yellowjackets.

Outside surface: Apply Chlorpyrifos TC termiticide as a residual spray to outside surfaces of buildings including porches, window frames, eaves, patios, garages, refuse dumps and other areas where pests congregate or have been observed. Treatment may be repeated as needed to maintain effectiveness.

Perimeter sprays: To help prevent infestation of buildings, treat a band of soil and vegetation 6 to 10 feet wide around and adjacent to the building. Also, treat the building foundation to a height of 2 to 3 feet where pests are active and may find entrance. For scorpions, treat or remove accumulations of lumber, firewood, and other materials which serve as insect harborage sites.

Dosage and Mixing Instructions: Use Chlorpyrifos TC mixed as a 0.25% to 0.5% dilution as indicated in the following table:

Gallons of Finished Dilution Desired	Chlorpyrifos TC Required 0.25% Solution	0.5% Solution
1	2/3 fl oz	1 1/3 fl oz
5	3 1/3 fl oz	6 2/3 fl oz
10	6 2/3 fl oz	13 1/3 fl oz
24	16 fl oz	1 qt
48	1 qt	2 qt
97	2 qt	1 gal

Small amounts of solution mixed at 0.5% to 1.0% termiticide rates remaining in the spray tank can be diluted as indicated in the following table and used to treat surfaces or perimeter areas:

Concentration of Termiticide Dilution	Amount of Water to Add to Each Gallon of Termiticide Dilution to Provide a 0.25% Spray	Amount of Water to Add to Each Gallon of Termiticide Dilution to Provide a 0.5% Spray
0.5%	1 gallon	none
0.75%	2 gallons	0.5 gallons
1.0%	3 gallons	1 gallon

CONDITIONS OF SALE

All statements concerning the use of this product apply only when used as directed.
THE MANUFACTURER MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, CONCERNING THIS PRODUCT OR ITS USE, WHICH EXTEND BEYOND THE DESCRIPTION ON THE LABEL.

Read all directions carefully.