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U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Pesticide Programs
Registration Division (7505C)
401 "M" St., S.W.
Washington, D.C. 20460

NOTICE OF PESTICIDE:
x Registration
____ Reregistration

(under FIFRA, as amended)

EPA Reg. Number: 33658-7

Date of Issuance: MAY 15 1997

Term of Issuance: Until Reregistration

Name of Pesticide Product: Gharda Chlorpyrifos 4 TC Termiticide

Name and Address of Registrant (include ZIP Code):

Gharda Chemicals Limited
48, Hill Road
Bandra (West)
Bombay 400 050
India

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is conditionally registered in accordance with FIFRA sec. 3(c)(7)(A) provided that you:

1. Submit and/or cite all data required for registration of your product under FIFRA sec. 3(c)(5) when the Agency requires all registrants of similar products to submit such data; and submit acceptable responses required for reregistration of your product under FIFRA section 4.

2. Change the label by revising the EPA Registration Number to read, "EPA Reg. No. 33658-7."

3. Generate storage stability data as required by 40 CFR Part 158. The data must be maintained for submission to the Agency upon request.

Signature of Approving Official:

/s/

Tina E. Levine, Ph.D.
Acting Product Manager (19)
Insecticide-Rodenticide Branch
Registration Division (7505C)

Date: MAY 15 1997

EPA Form 8570-6

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4. Submit two copies of the revised final printed label for the record.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec. 6(e). Your release for shipment of the product constitutes acceptance of these conditions.

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

Sincerely yours,

/s/

Tina E. Levine, Ph.D.
Acting Product Manager (19)
Insecticide-Rodenticide Branch
Registration Division (7505C)

Enclosure

ACCEPTED
with COMMENTS
in EPA Letter Dated

MAY 15 1997

Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 33658-7

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GHARDA CHLORPYRIFOS 4 TC TERMITICIDE

Specialty Termiticide 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.

Active Ingredient:	
chlorpyrifos: 0,0-diethyl 0-(3,5,6-trichloro-2 pyridinyl)phosphorothioate	42.43%
rt Ingredients:	57.57%
Total	100.00%

Contains 4 pounds of chlorpyrifos per gallon.

KEEP OUT OF REACH OF CHILDREN

WARNING AVISO

Precaucion al Usuario: Si usted no lee ingles, no use este producto hasta que la etiqueta le haya sido explicada ampliamente.

STATEMENT OF PRACTICAL TREATMENT

wallowed: Call a physician or Poison Control Center immediately. not induce vomiting. Contains an aromatic petroleum solvent. Do not give anything by mouth to an unconscious person.
If on skin: Immediately wash with plenty of soap and water. Get medical attention.
If in eyes: Flush with plenty of water for 15 minutes. Get medical attention.
If inhaled: Remove to fresh air if symptoms of cholinesterase inhibition appear and get medical attention immediately.

Note to physician: Chlorpyrifos is a cholinesterase inhibitor. Treat symptomatically. If exposed, plasma and red blood cell cholinesterase tests may indicate significance 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 conjuction with atropine. In case of severe acute poisoning, use antidote immediately after establishing an open airway and respiration.

MFG. By: Gharda Chemicals Limited
EPA Est. No.: 33658-IND-001
EPA Registration No.: 33658-(To Be Assigned)
Net Contents:

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

WARNING

May Be Fatal If Swallowed • Excessive Absorption Through Skin May Be Fatal • Causes Substantial But Temporary Eye Injury • May Cause Skin Irritation.

Do not get in eyes, on skin or clothing. Wear eye protection. Avoid breathing vapors and spray mist. Handle concentrate in a ventilated area. Wear protective clothing and chemically resistant gloves when handling. Wash thoroughly with soap and water after handling and before eating or smoking. Remove contaminated clothing and wash before reuse. Keep away from food, feedstuffs 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 sign 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.

Personal Protective Equipment

Applicators and other handlers must wear:

- long sleeved coveralls over short sleeved shirt and short pants
- chemical resistant footwear plus socks
- chemical resistant gloves such as nitrile or butyl
- protective eyewear

When handling the concentrate or working in a non-ventilated space all handlers must wear a:

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 prefix TC-13F

ENVIRONMENTAL HAZARDS

This pesticide is toxic to birds and wildlife, and extremely toxic to fish and aquatic organisms. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Drift and 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

Do not use or store near heat or open flame.

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DIRECTIONS FOR USE

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

Read all Directions for Use carefully before applying.

Do not formulate this product into other end-use products.

STORAGE AND DISPOSAL

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

Storage: Store in original container in secured dry storage area. Prevent cross-contamination with other pesticides and fertilizers. Avoid storing above 122°F for extended periods of time. Storage below 40°F may result in formation of crystals. If product crystallizes, store at 55-75°F and shake occasionally to redissolve crystals. If container is damaged or spill occurs, use product immediately or dispose of product and damaged container as indicated below.

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 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 for Non-Refillable Containers: Triple rinse (or equivalent) then offer for recycling or reconditioning, or puncture and/or crush rinsed, empty container and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

or

Triple rinse (or equivalent). Then 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.

Container Disposal for Refillable Containers: Replace the dry disconnect cap, if applicable, and seal all openings which have been opened during use.

General Information

Subterranean Termites

Gharda TC termicide concentrate for soil treatment is used to establish a barrier which is lethal to termites. In order to provide an effective barrier between the wood in the structure and termite colonies in the soil, disperse the chemical emulsion so as to avoid untreated gaps in the barrier.

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, Heterotermes* 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

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 has been treated.

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

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

Contamination of public and private water supplies must be avoided by following these minimum precautions:

1. Use anti-backflow equipment or procedures to prevent siphonage of pesticide back into water supplies.
2. Do not treat soil that is water saturated or frozen.
3. Do not treat while precipitation is occurring.
4. Consult Federal, state and local specifications for information regarding approved treatment practices in your area.
5. Do not contaminate wells or cisterns. See specific "Treatment of Structures with Wells, Cisterns or Other Bodies of Water Adjacent to Treated Sites".

Rate Determination Guidelines

Consult the local extension agent or state entomologist for application rate recommendations.

An initial treatment using a 0.75-1.0% dilution will provide effective, optimum long term residual control. Initial treatments of less than 0.75% but not less than 0.5% may be made. Areas treated with less than 0.75% must be inspected annually for signs of reinfestation. The 0.5% - 0.75% rate may also be used when making follow-up or spot treatments with no re-inspection restrictions.

A 2.0% dilution may be used to protect utility poles and fence posts.

Table 1 - Dilution Directions

Gallons of Finished Dilution Desired	Gharda TC 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 gal	1 gal
48	1/2 gal	3 qt	1 gal	2 gal
97	1 gal	1 1/2 gal	2 gal	4 gal

Mixing Directions

It is important that the termiticide dilution be uniformly mixed in the spray tank before beginning the treatment. Once mixed, Gharda 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 Gharda TC.
4. Add remaining amount of water.
5. Let pump run and allow recirculation through the hose for 2 to 3 minutes.

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, such as heavy, clay-type soils, 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. 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. 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.

Treatment of Structures with Wells, Cisterns or Other Bodies of Water Within or Adjacent to Treated Sites

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:

a. 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:

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

2) 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 "Mixing Directions" section of this label). Mix thoroughly into the soil taking care to contain the liquid and prevent runoff or spillage.

3) After the treated soil has absorbed the diluted emulsion, replace the soil into the trench.

b. 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.

2. **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.

a) 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.

b) 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.

c) 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.

Preconstruction Subterranean Termite Treatment

Preconstruction applications are defined as those applications made prior to the finished grade being installed. Effective preconstruction treatment for subterranean termite prevention requires the establishment of vertical and/or horizontal chemical barriers between wood in the structure and the termite colonies in the soil. Follow state and local regulations to meet minimum treatment standards for preventative preconstruction treatments.

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.

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

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 0.5% rate, apply 1 gallon of dilution per 10 square feet or use 1 1/3 fluid ounces of Gharda 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 0.75% rate, apply 1 gallon of dilution per 10 square feet or use 2 fluid ounces of Gharda 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 Gharda 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.

For the State of Mississippi -

If the fill is washed gravel or other coarse material, use 2 gallons of a 0.5% dilution per 10 square feet. 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 0.5%-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 foundations, plumbing lines, backfilled soil against foundation walls and other areas which may warrant more than just a horizontal barrier.

a. When treating foundations deeper then 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.

For the States of Louisiana, Mississippi and South Carolina -

Rodding and/or trenching applications should be made at a rate of 4 gallons of emulsion per 10 linear feet per foot of depth from grade to top of footing. However, in no case should a structure be treated below the footer. 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 0.5% rate, apply 4 gallons of dilution per 10 linear feet per foot of depth or 5 1/3 fluid ounces of Gharda 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 0.75% rate, apply 4 gallons of dilution per 10 linear feet per foot of depth or 8 fluid ounces of Gharda 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 Gharda 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 ensure 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 psi 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.

Postconstruction Treatments

Postconstruction applications are defined as those applications made after the final grade is installed.

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

Precaution: Do not apply dilution 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.

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

1. For slab-on-ground construction applications may be made using techniques such as sub-slab injection, rodding and/or trenching. Injectors should not extend beyond the tops of the footings.

a. Treat along the outside of the foundation to form a continuous termiticide barrier in the soil.

For shallow foundations, 1 foot or less, dig a narrow trench approximately 6 inches wide along the outside of the foundation walls. Do not dig below the bottom of the footings. For foundations with exposed footings, dig a trench alongside the footing taking care not to undermine the footing. The dilution should be applied to the trench and mixed with the soil as it is replaced in the trench.

For a 0.5% rate, apply 4 gallons of dilution per 10 linear feet or use 5 1/3 fluid ounces of Gharda TC per 10 linear feet in sufficient water (not less than 2 gallons or more than 8 gallons) to provide thorough and complete coverage of the area being treated (See Application Volume section).

For a 0.75% rate, apply 4 gallons of dilution per 10 linear feet or use 8 fluid ounces of Gharda TC per 10 linear feet in sufficient water (not less than 2 gallons or more than 8 gallons) to provide thorough and complete coverage of the area being treated (See Application Volume section).

For a 1.0% rate, apply 4 gallons of dilution per 10 linear feet or use 10 2/3 fluid ounces of Gharda TC per 10 linear feet in sufficient water (no less than 2 gallons or more than 8 gallons) to provide thorough and complete coverage of the area being treated (See "Application Volume").

For foundations with footings deeper than 1 foot, apply the dilution at a rate of 4 gallons per 10 linear feet per foot of depth. For applications made after the final grade is installed, the applicator must trench and rod into the trench or trench along the foundation walls and around pillars and other foundation elements 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 wall 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 to exceed the bottom of the footing. However, in no case should a structure be treated below the footing.

For the States of Louisiana, Mississippi and South Carolina -

For foundations with footings deeper than 1 foot, apply the dilution at a rate of 4 gallons per 10 linear feet per foot of depth to the top of the footing unless the footer is more than 4 feet below grade, in which case the applicator may apply vertical barriers at the rate of 4 gallons per 10 linear feet per foot of depth to a minimum depth of 4 feet. However, in no case should a structure be treated below the footer. Rod holes should be spaced to provide a continuous barrier.

The actual depth of treatment may vary depending on soil type, degree of compaction, and location of termite activity. Certain construction types, (e.g., deep hollow block foundations, brick veneers which disappear below grade, etc.) may require installation of a vertical barrier which is greater than the minimum 4 foot depth. In those cases, vertical barriers should be installed by trenching and/or rodding with an application rate of 4 gallons per 10 linear feet per foot of depth , while at the same time avoiding possible contamination of any adjacent environmentally sensitive areas (i.e., wells and/or surface water).

b. When treating cracks and expansion joints in the slab, along sidewalks or patios adjacent to the exterior foundation wall or other areas where holes are to be drilled to form a continuous termiticide barrier, the holes should be spaced at intervals up to 24 inches depending on soil type.

Hard, dry soils typically allow good lateral (horizontal) dispersion. However, they may be slow in absorption or downward movement. Care must be taken when injecting through slabs into areas with this type of soil. Low pressures should be considered in this situation. This will help to avoid backsplashing from the injection hole, backflow from the cracks and expansion joints, and unwanted emergence of the termiticide dilution from adjacent drill holes. A slow, low pressure application using the proper volume of termiticide dilution will allow the soil to absorb the liquid and provide an adequate vertical barrier. The wider drill hole spacings (18 to 24 inches) can usually be used in this situation. Sand, loam, or gravel backfill materials are commonly found under slab foundations. The type of fill, amount of settling that has occurred, moisture content, etc., will determine drill hole spacing and amount of termiticide dilution to be injected through each hole. Highly absorptive soils or those with large pore spaces (gravel, coarse sand) will afford rapid downward (vertical) movement and limited lateral (horizontal) distribution of the termiticide dilution. In this situation, consider using a lateral dispersion tip on the sub-slab injector and place the drill holes closer together (12 to 18 inches).

For a 0.5%-0.75%-1.0% rate, apply 4 gallons of dilution per 10 linear feet.

c. It may be necessary to treat along one side of interior partition walls if there are cracks in the slab, plumbing entry points, existing termiticide infestations, or other conditions which would make treatment appropriate.

d. To complete the termiticide barrier under slab foundations, it may be necessary to drill and treat near plumbing and electrical entry areas, cracks, or other areas where termites might enter the structure. In this instance, one or more holes should be drilled in the slab as close to the entry point as is practical and termiticide placed in the fill. As a general rule, 3 to 5 gallons of dilution per entry point will usually give adequate coverage, however, the use of directional or lateral dispersion tips or foam delivery systems can give adequate coverage with lower volumes. Location of the drill hole in relation to the entry point, type of soil fill, presence or absence of a vapor barrier, application pressure and other considerations will affect the coverage and volume of termiticide needed to form a complete barrier. Precautions must be taken to avoid drilling into plumbing or electrical conduit.

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

f. Bath traps: Exposed soil or soil covered with tar or a similar type sealant beneath and around plumbing and/or drain pipe entry areas may be treated with a 0.5%-0.75-1.0% dilution of Gharda TC.

An access door or inspection vent should be cut and installed, if not already present. After inspection and removal of any wood or cellulose debris, the soil can be treated by rodding or drenching the soil. A one square foot bath trap will usually require about 3 to 5 gallons of dilution for thorough and complete coverage.

2. Hollow block foundations or voids in masonry resting on footing can be treated to make a continuous chemical barrier in the voids. If the void has direct contact with the soil, it should be treated. Drill and treat all 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 psi. When using this treatment access holes must be drilled below the sill plate and should be as close as possible to the footing as is practical. Treatment 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.

Not for use in voids insulated with rigid foam.

3. For basements, apply at a rate of 4 gallons of dilution per 10 linear feet per foot of depth. Where footings are greater than 1 foot of depth from the grade to the top of the footing, application may be made by trenching and/or rodding at a rate of 4 gallons of dilution per 10 linear feet per foot of depth. When the footing is more than 4 feet below grade, the applicator must trench and rod into the trench or trench along the foundation wall 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 to exceed the bottom of the footing. However, in no case should a structure be treated below the footing. 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.

For the States of Louisiana, Mississippi and South Carolina -

For basements, apply the dilution at a rate of 4 gallons per 10 linear feet per foot of depth to the top of the footing unless the footer is more than 4 feet below grade, in which case the applicator may apply vertical barriers at the rate of 4 gallons per 10 linear feet per foot of depth to a minimum depth of 4 feet. However, in no case should a structure be treated below the footer. Rod holes should be spaced to provide a continuous barrier.

The actual depth of treatment may vary depending on soil type, degree of compaction, and location of termite activity. Certain construction types (e.g., deep hollow block foundations, brick veneers which disappear below grade, etc.) may require installation of a vertical barrier which is greater than the minimum 4 foot depth. In those cases, vertical barriers should be installed by trenching and/or rodding with an application rate of 4 gallons per 10 linear feet per foot of depth, while at the same time avoiding possible contamination of any adjacent environmentally sensitive areas (i.e., wells and/or surface water).

4. Accessible Crawl Spaces: For crawl spaces, apply vertical termiticide barriers at the rate of 4 gallons emulsion per 10 linear feet per foot of depth from grade to top of footing, or if the footing is more than 4 feet below grade, to a minimum depth of 4 feet.

For a 0.5% rate, apply 4 gallons of dilution or 5 1/3 fluid ounces of Gharda 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) per 10 feet per foot of depth.

For a 0.75% rate, apply 4 gallons of dilution or 8 fluid ounces of Gharda 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) per 10 feet per foot of depth.

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 Gharda 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 ensure complete coverage.

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.

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

b. Rod holes must be spaced so as to achieve a continuous chemical barrier but in no case more than 12 inches apart.

c. 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.

d. 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.

For the States of Louisiana, Mississippi and South Carolina -

Rodding and/or trenching applications should be made to reach the top of the footing, unless the footer is more than 4 feet below grade, in which case the applicator may apply vertical barriers at the dilution rate of 4 gallons per 10 linear feet per foot of depth to a minimum depth of 4 feet. However, in no case should a structure be treated below the footer. Rod holes should be spaced to provide a continuous barrier.

The actual depth of treatment may vary depending on soil type, degree of compaction, and location of termite activity. Certain construction types (e.g., deep hollow block foundations, brick veneers which disappear below grade, etc.) may require installation of a vertical barrier which is greater than the minimum 4 foot depth. In those cases, vertical barriers should be installed by trenching and/or rodding with an application rate of 4 gallons per 10 linear feet per foot of depth, while at the same time avoiding possible contamination of any adjacent environmentally sensitive areas (i.e., wells and/or surface water).

5. 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.

For a 0.5% rate, apply 4 gallons of dilution per 10 linear feet or 5 1/3 fluid ounces of Gharda TC per 10 linear feet in sufficient water (not less than 2 gallons or more than 8) to ensure complete coverage (refer to Application Volume section).

For a 0.75% rate, apply 4 gallons of dilution per 10 linear feet or 8 fluid ounces of Gharda TC per 10 linear feet in sufficient water (not less than 2 gallons or more than 8) to ensure complete coverage (refer to Application Volume section).

For a 1.0% rate, apply 4 gallons of dilution per 10 linear feet or 10 2/3 fluid ounces of Gharda TC per 10 linear feet in sufficient water (not less than 2 gallons or more than 8 gallons) to ensure complete coverage (See "Application Volume").

a. To establish a horizontal barrier, apply 1 gallon of emulsion per 10 sq. ft. to the soil surface. Use a nozzle pressure of less than 25 psi and a coarse application nozzle (e.g. Delavan Type RD Raindrop, RD-7 or larger, or Spraying Systems Co. 8010LP TeeJet or comparable nozzle). For an area that cannot be reached with the application wand, use one or more extension rods to make the application to the soil. Do not broadcast or powerspray with higher pressure.

b. 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.

c. In the presence of unsupported termite tubes, mechanically destroy each tube and apply approximately 1 pint of 0.5%-0.75-1.0% dilution to an area of no more than 18 inches in diameter where the tubes emerged from the soil.

d. 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 plenum type structures, which use a sealed underfloor space to circulate heated and/or cooled air within the structure, turn off the air circulation system of the structure until application has been completed and all termiticide has been absorbed by the soil. Apply the 0.5%-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 10 square feet 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.

7. Application using foam generating equipment: The emulsion may be converted to a foam and the foam used to control or prevent termite infestations.

Depending on circumstances, foam applications may be used alone or in conjunction 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 50 to 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 the label and use recommendations of the foam manufacturer and the foaming equipment manufacturer for adjuvant rates to produce the needed expansion ratio with the product.

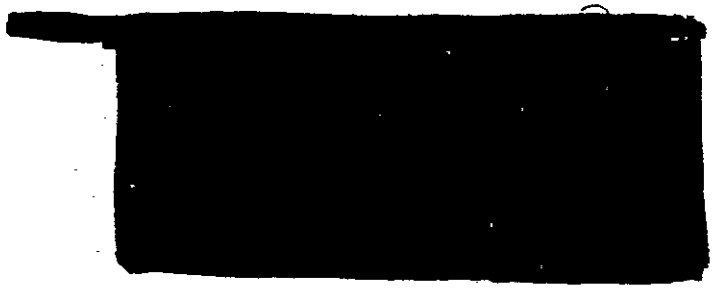
Foam applications are generally a good supplement to liquid treatments in difficult areas, but may be used alone in difficult spots.

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

For a 0.5% rate, apply 5 1/3 fluid ounces on Gharda TC per 10 linear feet using no less than 2 gallons, or more than 8 gallons, of prefoamed dilution.

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



Underground Utility Cable and Conduit

Preventative Treatment for Use Only In Guam, Hawaii, and Other Pacific Islands: Use a 1.0% to 2.0% dilution (See "Rate Determination Guidelines" and "Table 1" for dilution directions). After digging the trench, place approximately 6 inches of backfill or sand at the bottom and apply 2 gallons of the dilution per 10 linear

feet. Allow to dry then replace the cable backfill. Cover with an additional 6 inches of backfill or sand and apply another 2 gallons of emulsion per 10 linear feet. Finish filling trench with untreated soil.

Wherever cables emerge from the soil to enter poles, light frames, etc., treat the soil around the cable and pole or frame to establish a continuous 6 inch chemical barrier.

A continuous 6 inch chemical barrier must be established around the cable to insure protection from termite attack.

Utility Poles and Fence Posts

Preventative Treatment: Use a 1.0 to 2.0% dilution (See "Rate Determination Guidelines" and "Table 1" for dilution directions). After pole or post hole has been dug, mix the dilution with the soil as it is being replaced to a depth of approximately 10 inches. Place pole or post on top of this layer. The remaining soil fill and termiticide dilution should be mixed while backfilling the hole. The treated soil zone around the post or pole should be approximately 6 inches wide. Soil for the base layer and backfill of each pole or post should be treated at a rate of 4 gallons of dilution per 10 cubic feet of soil.

Remedial Treatment: To control existing infestations or to prevent infestation of posts and poles already in place, use a 1.0% to 2.0% dilution. The termiticide dilution should be injected into termite galleries or channels in the wood. For maximum protection, injection sites should be at or below grade.

Posts or poles may also be treated by rodding down to the base of the structure. Rod holes should be placed approximately 3 inches away from the pole and about 6 inches apart. Inject approximately 12 fluid ounces of dilution per foot of depth into each rod hole.

It may be appropriate to use one or both treatment techniques depending upon the specific circumstances at the work site e.g. soil type.

Retreatment Statement

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

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

Control of Wood Infesting Insects

Dosage and Mixing Directions
Gharda TC is recommended for use as an aqueous emulsion containing 0.5% to 1.0% chlorpyrifos. See "Table 1" for dilution directions.

Advisements
When spraying overhead interior living areas of homes, apartment buildings, etc., cover surfaces below the area being sprayed with plastic sheeting or other material.

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 insects such as powderpost beetles (*Lyctidae*), false powderpost beetles (*Bostrichidae*), deathwatch beetles (*Anobiidae*), old house borers (*Cerambycidae*) and ambrosia beetles (*Scolytidae*) in homes and other structures, treatments 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 avoiding 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 150 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 surfaces: Apply Gharda 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.

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

Gallons of Finished Dilution Desired	Gharda 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 0.75% to 1.0% termiticide rates remaining in the spray tank can be diluted as indicated in the following table and used to treat outside 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
0.75%	2 gallons	0.5 gallon
1.0%	3 gallons	1 gallon

Notice of Warranty and Disclaimer

Seller warrants that at the time of delivery the product in this container conforms to its chemical description contained hereon and reasonably fit for its intended purpose under normal conditions of use. This is the only warranty made on this product. Seller expressly disclaims any implied warranties of merchantability or fitness for any particular purpose and, except as set forth above, any other express or implied warranties. Any damages arising from breach of warranty or negligence shall be limited to direct damages not exceeding the purchase price paid for this product by Buyer, and shall not include incidental or consequential damages such as, but not limited to, loss of profits or values. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness, or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of the Seller. In no such case shall Seller be liable for the consequential, special or indirect damages resulting from the use or handling of this product. All such risks shall be assumed by the Buyer. Buyer acknowledges the use of its own independent skill and expertise in the selection and use of the product and does not rely on any oral or written statements or representations.