



HELENA CHEMICAL COMPANY

CORPORATE OFFICE

3150 South - Clark Tower
5100 Poplar Avenue
Memphis, Tennessee 38137
Telephone 901-251-0250
Telex 910,911-535

HELENA

4 LB CHLORDANE F.C.

Only For Sale To And Use And Storage By Commercial Pest Control Applicators
For The Control of Subterranean Termites

ACTIVE INGREDIENTS:	(BY WT)
Technical Chlordane*.....	45.6%
Kerosene.....	40.8%
INERT INGREDIENTS.....	4.6%
TOTAL.....	100.0%

*Equivalent to 27.36% Octachloro-4-7,-methanotetrahydroindane,
18.24% related compounds.

This product contains 4 LB Chlordane per gallon.

KEEP OUT OF REACH OF CHILDREN
CAUTION
SEE PRECAUTIONARY STATEMENT
AND OTHER WARNINGS ON SIDE PANEL

Manufactured By
Helena Chemical Company
Memphis, TN 38137

ACCEPTED
with COMMENTS
by EPA

DEC 21 1982

FIVE

PRELIMINARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

May be fatal if swallowed. Contact with skin can cause toxic symptoms. Avoid breathing spray mist. In case of contact with skin, wash with soap and water. Avoid contamination of food and foodstuffs. Keep out of reach of children.

Keep children or pets off treated turf until material has been washed into the soil by watering or rain and grass is dry.

STATEMENT OF PRACTICAL TREATMENT

If Swallowed - Call a physician or Poison Control Center immediately. Drink one or two glasses of water and induce vomiting by touching the back of throat with finger. If possible, vomiting should be induced under medical supervision. DO NOT induce vomiting or give anything by mouth to an unconscious person.

If Inhaled - Remove victim to fresh air. Apply artificial respiration if indicated.

If on Skin - Remove contaminated clothing and wash affected areas with soap and water.

If in Eyes - Flush eyes with plenty of water. Call a physician if irritation persists.

ENVIRONMENTAL HAZARDS

This product is toxic to fish, shrimp, crab, birds, and other wildlife. Keep out of lakes, streams, ponds, tidal marshes and estuaries. Do not contaminate water by cleaning of equipment or disposal of wastes. Apply this product only as specified on this label.

PHYSICAL OR CHEMICAL HAZARDS

Do not use, pour, spill or store near heat or open flame.

STORAGE AND DISPOSAL

Do not reuse empty drum. Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other approved state and local procedures.

Pesticide, spray mixture, or rinse water that cannot be used according to label instructions must be disposed of according to Federal or approved state procedures under subtitle C of the Resource Conservation and Recovery Act.

DIRECTIONS FOR USE

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

SUBTERRANEAN TERMITE CONTROL
INSTRUCTIONS FOR USE
CONTENTS AND STORAGE BY CATEGORY
OF CONTROL OPERATIONS*

Chemicals for soil treatment are used to establish a barrier which is repellent 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 necessary for the effective use of this product that the service technician be familiar with current control practices including trenching, rodding, sub-slab 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 Cryptotermes. Choice of appropriate procedures includes consideration of such variable factors as the design of the structure, existence of air circulation in sub-floor crawl space, 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.

Contamination of public and private water supplies must be avoided by following these precautions: Use antiback-flow equipment or procedures to prevent siphonage of pesticide back into water supplies. Do not treat structures that contain cisterns or wells within the foundation. Soil around structures with well or cistern close to the foundation can be treated as follows: Do Not Apply Under Pressure. Soil should be removed to an area safe from well or domestic water contamination, treated, allowed to stand undisturbed for two to four hours then returned to the trench which has been lined with 4 mil. plastic sheeting. Be careful not to puncture plastic sheeting when returning soil to the trench. Do not treat soil that is water saturated or frozen. Consult state and local specifications for recommendal distances of treatment areas from wells, and refer to Federal Housing Administration Specifications for further guidance.

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

PRECONSTRUCTION SUBTERRANEAN TERMITE TREATMENT

Effective preconstruction subterranean termite control requires the establishment of an unbroken vertical and/or horizontal chemical barrier between wood in the structure and the termite colonies in the soil. To meet F.H.A. termite preconstruction requirements, refer to the latest edition of the Housing and Urban Development (H.U.D.) National Property Standards.

Use a 1.2 to 2.0 water to dry matter ratio in termite treatment. Mix 0.5 to 2.0 gallons of 1.2 to 2.0 water to 1 gallon of 1.2 to 2.0 water emulsion.

After grading is completed and prior to the pouring of the slab, slab supported (constructed) porches or entrance platforms, make the following treatments. Applications shall be made by a low pressure spray for horizontal barriers over areas intended for covering floors, porches and other critical areas.

Establish a vertical barrier in areas such as around the base of foundations, plumbings, back-filled soil against foundation walls and other critical areas.

1. Where it is necessary to produce a horizontal barrier, apply the emulsion (or solution) at the rate of 1 gallon per 10 square feet to fill dirt. If fill is washed gravel or other coarse material, apply at 1-1/2 gallons per 10 square feet. It is important that the emulsion (or solution) reaches the soil substrate.
 - a. If concrete slabs cannot be poured over soil the same day it has been treated, a water-proof cover, such as a polyethylene sheeting, should be placed over the soil. This is not necessary if foundation walls have been installed around the treated soil.
2. To produce a vertical barrier, apply the emulsion at the rate of 4 gallons per 10 linear feet per foot of depth.
 - a. Rooding and/or trenching applications should not be made below the top of the footing.
 - b. Trench need not be wider than 6 inches.
 - c. Rod holes should extend from the base of the trench to the top of the footing, and should be spaced (about a foot) to provide a continuous barrier.
 - d. Emulsion (or solution) should be mixed with the soil as it is being replaced in the trench. Cover treated soil with a layer of untreated soil, or other suitable barrier such as polyethylene sheeting.
3. Hollow block foundations or voids of masonry should be treated to make a continuous chemical barrier in voids. Apply at the rate of 2 gallons of emulsion (or solution) per 10 linear feet so it will reach the ceiling.
4. For crawl spaces apply at the rate of 4 gallons of emulsion (or solution) per 10 linear feet and foot of depth from grade to bottom of foundations. Application may be made by rooding 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 (or solution) should be mixed with the soil as it is being replaced in the trench. Cover the treated soil with a layer of untreated soil or other suitable barrier such as polyethylene sheeting.

POSTCONSTRUCTION TREATMENTS

Use a 1/2 to 2 water emulsion for subterranean termites. Mix 0.5 to 2.0 gallons of 4 lb Chlorbrom in 95 gallons of water to produce a 1/2 to 2% water emulsion.

Postconstruction applications shall be made by injection, rodding, and/or trenching (using low pressure spray).

Do not apply emulsion (or solution) 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 (or solution) per 10 linear feet. Applications may be made by sub-slab injection and/or trenching. Injectors should not extend beyond the tops of the footings. Treat along the outside of the foundation and where necessary just beneath the slab on the inside of foundation walls. Treatment may also be required just beneath the slab along one side of interior partitions and along all cracks and expansion joints.
 - a. Drill holes about 12 to 36 inches apart in the slab to provide a continuous chemical barrier.
 - b. Where necessary, drill through the foundation walls from the outside and force the emulsion (or solution) 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 emulsions (or solution) 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. Hollow block foundations or voids or masonry should be treated to make a continuous chemical barrier in voids. Apply at the rate of 2 gallons of emulsion (or solution) per 10 linear feet.
3. For basements apply at the rate of 4 gallons of emulsion (or solution) 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 (or solution) per 10 linear feet per foot of depth. Treat outside of foundation walls, and if necessary beneath the basement floor along cracks in basement floors, along interior load-bearing walls, round sewer pipes, chimneys, and pipes.

4. In crawl space apply at the rate of 4 gallons of emulsion (or solution) 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.
 - c. For inaccessible crawl spaces, treat soil by an alternate method such as drilling and rodding through foundation walls from the outside.

All treatment holes drilled in construction elements in commonly occupied areas of structures must be securely plugged.

RETREATMENT RESTRICTIONS

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

Annual retreatment of the entire premises must be avoided.

WARRANTY AND LIMITATION OF DAMAGES

Helena Chemical Company warrants that this material conforms to the chemical description on the label and is reasonably fit for the purpose referred to in the Directions for Use and Conditions of Sale, subject to the inherent risks referred to therein. Helena Chemical Company makes no other express or implied warranty, including any other express or implied warranty of FITNESS or of MERCHANTABILITY, and no agent of Helena Chemical Company is authorized to do so except in writing, with a specific reference to this warranty. Any damages arising from a breach of this warranty shall be limited to direct damages, and shall not include consequential commercial damages such as loss of profits or value, etc.

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DEC 27 1982

Helena Chemical Company
Suite 3200 - Clark Tower
5100 Poplar Avenue
Memphis, TN 38137

11/27/82

Attention: Mr. Washburn

Gentlemen:

Subject: Amendment - Label Improvement Program Termiticide
Helena Branch 4 lb. Chlordane E.C.
EPA Registration No. 5985-102
Your Application Dated October 21, 1982

The labeling referred to above, submitted in connection with registration under FIFRA Sec. 2(e)(2)(A), is acceptable provided that you submit and/or cite all data required for registration/reregistration of your product under FIFRA, Sec. 3(e)(5) when the agency requires all registrants of similar products to submit such data.

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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 bearing the updated labeling constitutes acceptance of these conditions.

Please note that "continuous" is misspelled in 4a. of your use directions.

Sincerely yours,

George T. LaRocca
Product Manager (15)
Insecticide-Acetic Acid Branch
Registration Division (TS-767C)