

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

205-250081  
17/

OCT 16 1989

Dr. Charles Shaw  
EPA Registration  
Systematic Insecticide Group  
1000 Market Street  
Philadelphia, PA 19104

Dear Dr. Shaw:

Subject: Amendment - Acute Toxicity Testing on New Formulation  
Draconet FT Termiticide  
EPA Registration No. 279-3062  
Your Application Dated August 4, 1989

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

1. To the Statement of Practical Treatment, add "If On Skin: Wash with plenty of soap and water. Get medical attention if irritation persists."
2. Due to the formulation change, the labeling needs to be updated with regards to the storage and disposal section. Refer to PR Notice 83-3 for guidance.

The results of the submitted studies are as follows:

<u>Study</u>	<u>Toxicity Category</u>	<u>Core Grade</u>
Acute Oral	III	Guideline
Acute Dermal	III	Guideline
Acute Inhalation	III	Guideline
Dermal Irritation	IV	Guideline
Dermal Sensitization	--	Minimum

55346:I:Richards:LLR-10:KENCO:10/02/89:11/14/89:aw:SW.VO:EK:DD  
R:55359:Richards:LLR-10:KENCO:10/11/89:11/24/89:de

CONCURRENCES

SYMBOL	SURNAME	DATE						

Code 1223

Net Contents

**DRAGNET<sup>R</sup> FT TERMITICIDE**

Only for sale to, Use and Storage by Professional Pest Control Operators

EPA Reg. No. 279-3062

EPA Est. 279-

**Active Ingredients:**

*Permethrin**.....	36.8%
Inert Ingredients.....	63.2%
	100.0%

\*(3-Phenoxyphenyl) methyl (+)cis-trans 3-(2,2-dichloroethenyl)-2,2-dimethylcyclopropanecarboxylate  
 \*\*cis/trans ratio: Max. 55% (+) cis and min. 45% (+)trans

Contains 3.2 pounds permethrin per gallon.

U.S. Patent No.4,024,163

**KEEP OUT OF REACH OF CHILDREN**

**CAUTION**

See other panels for additional precautionary information.

**STATEMENT OF PRACTICAL TREATMENT**

**If swallowed:** Call a physician or Poison Control Center. Do not induce vomiting because of aspiration hazard.

**If inhaled:** Remove to fresh air. If discomfort or breathing difficulty occurs, obtain medical attention.

For Emergency Assistance Call 716-735-3765

**PRECAUTIONARY STATEMENTS**

**Hazards to Humans (and Domestic Animals)**

**Caution**

Harmful if swallowed, inhaled, or absorbed through the skin. Avoid contact with skin, eyes or clothing. Avoid breathing dust (vapor or spray mist). Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

**Environmental Hazards**

This product is highly toxic to bees exposed to direct treatment or residues on crops or weeds. Do not apply this product or allow it to drift to crops or weeds on which bees are actively foraging.

ACCEPTED  
with COMMENTS  
in EPA Letter Dated:

OCT 16

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

279-3062

Additional information may be obtained from your Cooperative Extension Service.

This product is extremely toxic to fish. Use with care when applying in areas adjacent to any body of water. Do not apply directly to water. Do not apply when weather conditions favor draft from treated areas. Do not contaminate water when disposing of equipment washwaters.

#### Physical/Chemical Hazards

Do not use or store near heat or open flame.

#### DIRECTION FOR USE

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

Shake well before using

#### STORAGE AND DISPOSAL

##### Pesticide Storage

Store at temperatures above 40°F (5°C)

If separation occurs, and less than entire contents of container are to be used, allow to warm to 55°F (13°C) at room temperature by room heating only and shake well to make uniform.

If crystals form, warm to 70°F (21°C) at room temperature by room heating only for 24-48 hours and shake occasionally until crystals dissolve and product appears uniform. Do not use external source of heat for warming container.

Do not use or store near heat, open flame or hot surfaces.

Keep out of reach of children and animals. Store in original containers only. Store in a cool, dry place and avoid excess heat. Carefully open containers. After partial use, replace lids and close tightly. Do not put concentrate or dilute material into food or drink containers. Do not contaminate other pesticides, fertilizers, water, food or feed by storage or disposal.

In case of spill, avoid contact, isolate area and keep out animals and unprotected persons. Confine spills. Call FMC collect: (716)735-3765.

To confine spill: If liquid, dike surrounding area or absorb with sand, cat litter or commercial clay. If dry material, cover to prevent dispersal. Place damaged package in a holding container. Identify contents.

### **Pesticide Disposal**

Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

### **Container Disposal**

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

**Metal Containers:** 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. Do not cut or weld metal containers.

## General Information on the Use of This Product

This product controls and establishes a preventive treatment zone against subterranean termites. It also controls subterranean and drywood termites in localized areas of structures and constructions.

Chemicals for soil treatment are used to establish a barrier against 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. As a good practice, all non-essential wood and cellulose containing materials, including scrap wood and form boards, should be removed from around foundation walls, crawl spaces, and porches. Soil around untreated structural wood in contact with soil should be treated as described below. Effective termite control also includes elimination of termite access to moisture by recommending repair of faulty construction grade and/or plumbing.

It is necessary for the effective use of this product that the service technician be familiar with current control practices including soil trenching, rodding, sub-slab injection, low pressure spray applications to soil and crack and crevice (void) injection, brushing, and spraying applications to infested or susceptible wood. These techniques must be correctly employed to prevent or control infestations by subterranean termite species of *Reticulitermes*, *Zootermopsis*, *Heterotermes* and *Coptotermes*. The biology and behavior of the species involved are important factors to be known as well as suspected location of the colony and severity of the infestation within the structure to be protected.

Choice of appropriate procedures should include consideration of such variable factors as the design of the structure, location of heating, ventilation, and air conditioning (HVAC) systems, water table, soil type, soil compaction, grade conditions, and location and type of domestic water supplies and utilities.

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

## SUBTERRANEAN TERMITE CONTROL DIRECTIONS FOR USE

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

**Important:** Contamination of public and private water supplies must be avoided by following these precautions. Use anti-backflow equipment or procedures to prevent siphonage of pesticide back into water supplies. Do not treat soil beneath structures that contain cisterns or wells. Do not treat soil that is water-saturated or frozen. Consult state and local specifications for recommended distances of wells from treated areas, and refer to Federal Housing Administration Specifications (H.U.D.) for advice on well placement during new construction.

**Mixing:** For soil applications, apply a 0.5% emulsion of Dragnet FT. Up to 1.0% emulsion may be used in areas of heavy infestation or where re-treatment will be difficult. To prepare a 0.5% emulsion, mix 1.25 gallons of Dragnet FT in 98.75 gallons of water. To prepare a 1.0% emulsion, mix 2.5 gallons of Dragnet FT in 97.5 gallons of water. For termite control operations requiring smaller volumes, use 1.5 fluid ounces of Dragnet FT per gallon of water to achieve 0.5% concentration. Where soil conditions will not accept application of specified volume (gallons) of 0.5% emulsion, the 1.0% emulsion may be applied at one half the application rate or 2 gallons per 10 linear feet.

### Pre-Construction Subterranean Termite Treatment

Effective pre-construction subterranean termite control is achieved by the establishment of vertical and/or horizontal chemical barriers using 0.5%-1.0% emulsion of Dragnet FT. To meet termite proofing requirements, follow the procedures in the latest edition of the Housing and Urban Development Minimum Property Standards (refer to U.S.D.A. Home and Garden Bulletin No. 64).

**Horizontal Barriers:** Before footings are poured, horizontal barriers may be established in footing trenches. After site grading is completed and prior to the pouring of slab floors, slab supported constructed porches, patios, carports, or entrance platforms, make the following treatments:

To produce a horizontal chemical barrier, apply the emulsion at the rate of 1 gallon per 10 square feet to fill dirt. If fill is washed gravel or other coarse material, apply at 1.5 gallons per 10 square feet. It is important that the emulsion reaches the soil substrate and that even coverage is obtained. Applications shall be made by a low pressure spray (less than 50 p.s.i.) using a coarse spray nozzle. If concrete slabs cannot be poured over soil the same day (24 hours) it has been treated, a water-proof cover, such as polyethylene sheeting, should be placed over the soil. This is not necessary if foundation walls have been installed around the treated soil.

**Vertical Barriers:** Vertical barriers may be established in areas such as around the base of foundations, plumbing, utility entrances, back-filled soil against foundation walls and other critical areas.

To produce a vertical barrier in soil, apply the emulsion at the rate of 4 gallons per 10 linear feet. Where footings are greater than 1 foot of depth from 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. If soil will not accept the volumes specified, a 1.0% emulsion may be applied at one half the application rate, 2 gallons per 10 linear feet. Distribute the treatment evenly.

- Rodding and/or trenching applications should not be made below the top of the footing except when the footing is exposed at or above grade. Special care should be taken to avoid soil wash-out around the footing.
- When rodding, it is important that emulsion reaches the footing. Rod holes should be spaced to provide a continuous chemical barrier.
- Trench need not be wider than 6 inches. Emulsion should be mixed with the soil as it is being replaced in the trench. Cover treated soil with a thin layer of untreated soil, or other suitable barrier such as polyethylene sheeting.

**Hollow Masonry Units of the Foundation Walls:** In pre-construction situations in which horizontal barrier application is not made to soil prior to pouring the footing, treatment may be made through masonry voids to establish a continuous chemical barrier at the top of the footing. Apply at the rate of 2 gallons of emulsion per 10 linear feet.

**Crawl Spaces:** For crawl spaces, vertical chemical barriers may be established using the rate of 4 gallons of emulsion per 10 linear feet per foot of depth. Application may be made by rodding and/or trenching. If the footing is exposed at or above grade, application should be made with special care to avoid soil wash-out around the footing. Treatment should include both sides of foundation and around all piers and pipes extending from the soil. If soil will not accept the volumes specified, a 1.0% emulsion may be applied at one half the application rate, 2 gallons per 10 linear feet.

- Rod holes should be spaced to provide a continuous chemical barrier.
- Trench need not be wider than 6 inches nor below the foundation. The emulsion should be mixed with the soil as it is being replaced in the trench. Cover the treated soil with a thin layer of untreated soil or other suitable barrier such as polyethylene sheeting.

**Monolithic Slabs:** In the case of a single pour monolithic slab, which does not have a separate foundation or footing, an overall horizontal barrier should be created before the concrete grade beam and floor are poured, using a rate of 1 gallon of emulsion per 10 square feet. If fill is washed gravel or other coarse material, apply at the rate of 1.5 gallons per 10 square feet. Critical areas beneath the slab such as utility pipe entries may be treated at the rate of 4 gallons per 10 linear feet around the pipes. Exterior vertical barriers should be created after the concrete has been poured and final exterior grade established. Apply the emulsion at the rate of 4 gallons per 10 linear feet per foot of depth to the bottom of the concrete.

### Post-Construction Treatments

Use a 0.5% emulsion for post-construction treatment. Up to 1.0% emulsion may be used in areas of heavy infestation and areas which will be difficult to re-treat. Post-construction soil applications shall be made by injection, rodding, and/or trenching or coarse fan spray with pressures not exceeding 25 p.s.i. at the nozzle. Rod holes or trenches should not extend below the footing because of the possibility of soil wash-out by the emulsion.

Do not apply emulsion until location of radiant heat pipes, water and sewer lines and electrical conduits are known and identified. Caution must be taken to avoid puncturing and injection into these structural elements.

**Concrete Slabs:** Vertical barriers may be established by sub-slab injection inside and rodding and/or trenching outside at the rate of 4 gallons of emulsion per 10 linear feet. If soil will not accept the volumes specified, a 1.0% emulsion may be applied at one half the application rate, 2 gallons per 10 linear feet. Special care must be taken to distribute the treatment evenly. Injectors should not extend below the tops of the footings.

Treat along the outside of the foundation and where necessary beneath the slab on the inside of foundation walls. Treatment may also be required beneath the slab along both sides of interior footing-supported walls, one side of interior partitions and along all cracks and expansion joints. Horizontal barriers may be established where necessary by long-rodding or by grid pattern injection vertically through the slab using a rate of 1-1.5 gallons of emulsion per 10 square feet depending upon fill type and conditions.

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

- b 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 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 in the trench with a thin layer of untreated soil.
- c For foundations deeper than 1 foot follow rates for basements

**Hollow Masonry Units of the Foundation Walls:** Treatment may be made through masonry voids to establish a continuous chemical barrier at the top of the footing. Apply at the rate of 2 gallons of emulsion per 10 linear feet. Where this treatment is necessary, access holes must be drilled below the sill plate and as close as possible to the footing as is practical.

**Basements:** For basement and slab foundations, perimeter vertical barriers may be applied at a rate of 4 gallons of emulsion per 10 linear feet.

Where footings are greater than 1 foot of depth from grade to the bottom of the foundation, application can be made by trenching and/or rodding at the rate of 4 gallons of emulsion per 10 linear feet per foot of depth. The outside of the foundation may be treated by trenching and/or rodding. Sub-slab injection may be necessary along the inside of foundation walls, along cracks, along partitions, around sewer pipes, conduits, and piers, and along both sides of interior footing-supported walls.

**Crawl Spaces:** In crawl spaces vertical barriers may be applied at the rate of 4 gallons of emulsion per 10 linear feet per foot of depth from grade to top of footing. Application may be made by rodding and/or trenching. If adequate ventilation is not available in the crawl space, see point c. below; wear a respirator approved by the Mine Safety and Health Administration during treatment. Rod holes or trenches should not extend below the footing. Treat both sides of foundation and around all piers and pipes.

- Rod holes should be spaced to provide a continuous chemical barrier.
- Trench need not be wider than 6 inches and not below the footing. The emulsion should be mixed with the soil as it is replaced in the trench. Cover the treated soil with a thin layer of untreated soil.
- It is recommended that inadequately ventilated crawl spaces be brought into compliance with FHA Minimum Property Standards specifying 1 square foot of ventilator opening per 150 square feet of crawl space area.

To prevent subterranean termites from constructing mud tubes from soil to crawl space wood members above, an overall soil treatment of this product may be applied. Remove all cellulose debris before application of 1 gallon per 10 square feet overall. Use fans to exhaust crawl space air when working in a confined space. Wear appropriate protective clothing, gloves, unvented goggles, and respiratory protection. When treating plenums, turn off the air circulation system of the structure and exhaust the crawl space air to the outside until application-generated dust or spray mist has settled.

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

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

### Posts, Poles, and Other Constructions

Application may be made to create a chemical barrier in the soil around wooden constructions of value such as signs and landscape ornamentation.

Use 1 gallon of emulsion per foot of depth for poles and posts less than six inches in diameter. For larger poles, use 1.5 gallons of emulsion per foot of depth. For larger constructions, use 4 gallons per 10 linear foot per foot of depth.

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

**Excavation Technique:** If treatment must be made in difficult situations such as near wells, cisterns, along fieldstone or rubble walls, along faulty foundation walls, and around pipes and utility lines which lead downward from the structure to a well or pond, application may be made in the following manner:

- Trench and remove soil to be treated onto heavy plastic sheeting or similar material.
- Treat the soil at the rate of 4 gallons of emulsion per 10 linear feet per foot of depth of the trench. Mix the emulsion thoroughly into the soil taking care to prevent liquid from running off the liner.

- c After the treated soil has absorbed the liquid emulsion, replace the soil in the trench. Cover the treated soil with a thin layer of untreated soil.

Prior to using this technique near wells or cisterns, consult state, local or federal agencies for information regarding approved treatment practices in your area.

**After Treatment:** Securely plug all holes drilled in construction elements of commonly occupied areas of structures.

### Treatment of Wood in Place for Control of Termites (Localized areas in Structures)

In addition to sub-surface applications, this product may be used for treating infested wood in place. It can be applied to wood by crack and crevice tool, coarse fan spray or injection. For control of termites (localized areas of infested wood in structures), apply a 0.20% emulsion to voids and channels in damaged wood and in spaces between wooden 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, then injecting the emulsion. Use a sufficient amount of coarse spray to cover the area to the point of runoff. Treatment of localized areas is intended to kill winged reproductive and worker forms of termites in the treated areas and to prevent infestation 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.

Do not use in food areas of food handling establishments, restaurants or other areas where food is commercially prepared or processed. Do not use in serving areas while food is exposed or facility is in operation. Serving areas are areas where prepared foods are served such as dining rooms but excluding areas where foods may be prepared or held.

Nonfood areas are areas such as garbage rooms, lavatories, floor drains (to sewers) entries and vestibules, offices, locker rooms, machine rooms, boiler rooms, garages, mop closets and storage (after bottling or canning).

**Termites Above Ground:** For control of termites, subterranean aerial colonies, Formosan aerial colonies, or drywood termites in localized areas of infested wood in structures, apply a 0.2% emulsion to voids and galleries in damaged wood and in spaces between wooden members of a structure and between wood and foundations where wood is vulnerable. Application may be made to inaccessible areas by drilling and then injecting emulsion with a crack and crevice injector into the damaged wood or void spaces. Application to attics, crawl spaces, unfinished basements, or man made voids may be made with a coarse fan spray of 0.2% emulsion to control workers and winged reproductive forms of termites in mud sheiter tubes. This type of application is not intended to be a substitute for soil treatment or mechanical alteration to control subterranean termites, or fumigation for extensive infestation of drywood termites or other wood-infesting insects.

For termites active inside trees, utility poles and/or fence posts, drill to find the interior infested cavity and inject 0.2% emulsion using treatment tool with a splashback guard.

Termite carton nests in trees or building voids may be injected with 0.5% emulsion using a pointed injection tool. Multiple injection points to varying depths may be necessary. It is desirable to physically remove carton nest material from building voids when such nests are found.

**Mixing:** For above ground treatments use a 0.2% concentration. To prepare a 0.2% emulsion add 0.5 fluid ounce (1 Tablespoon) of Dagnet FT to 1 gallon of water. To prepare 50 gallons of emulsion add 0.25 gallon (1 quart) of Dagnet FT to 49.75 gallons of water. To prepare 100 gallons of emulsion add 0.5 gallon (2 quarts) of Dagnet FT to 99.5 gallons of water. Use this spray at a rate of 1 gallon of diluted spray per 1000 square feet of surface area.

**Control of Bees and Wasps Indoors:** To control bees, wasps, hornets, and yellow jackets apply a 0.5% emulsion. Application should be made in the late evening when insects are at rest. Spray liberally into hiding and breeding places, especially under attic rafters, contacting as many insects as possible. Repeat as necessary.

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

In the home, all food processing surfaces and utensils in the treatment area should be covered during treatment or thoroughly washed before re-use. Remove pets, birds, and cover aquariums before spraying. Do not permit humans or pets to contact treated surfaces until the spray has dried.

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

Wear protective clothing, goggles, rubber gloves, and respirator, when applying to overhead areas or in poorly ventilated areas. Avoid touching sprayed surfaces until spray has completely dried.

### Re-Treatment Restrictions

If 0.5% rate is used the property should be inspected annually for possible reinfestation and re-treatment if necessary. Re-treatment 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.

Re-treatments may be made to critical areas in accordance with the application techniques described above. Complete re-treatment of the site should be made if any signs of reinfestation are noted. Routine or annual re-treatment of the entire premises should be avoided.

### Dealers Should Sell in Original Packages Only.

**Terms of Sale or Use:** On purchase of this product buyer and user agree to the following conditions:

**Warranty:** FMC makes no warranty, expressed or implied, concerning the use of this product other than indicated on the label. Except as so warranted, the product is sold as is. Buyer and user assume all risk of use and/or handling and/or storage of this material when such use and/or handling and/or storage is contrary to label instructions.

**Directions and Recommendations:** Follow directions carefully. Timing and method of application, weather, mixture with other chemicals not specifically recommended and other influencing factors in the use of this product are beyond the control of the seller and are assumed by buyer at his own risk.

**Use of Product:** FMC's recommendations for the use of this product are based upon tests believed to be reliable. The use of this product being beyond the control of the manufacturer, no guarantee, expressed or implied, is made as to the effects of such or the results to be obtained if not used in accordance with directions or established safe practice.

**Damages:** Buyer's or user's exclusive remedy for damages for breach of warranty or negligence shall be limited to direct damages not exceeding the purchase price paid and shall not include incidental or consequential damages.