



TERMITICIDE INSECTICIDE

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

EPA REG. NO. 279-3062

EPA Est. 279-NY-1

Active Ingredient:

Permethrin**36.8%

Other Ingredients:*** 63.2%

100.0%

**cis/trans ratio: Max. 55% (±) cis and min. 45% (±) trans

***Contains petroleum distillates.

Contains 3.2 pounds permethrin per gallon.

KEEP OUT OF REACH OF CHILDREN

CAUTION

See other panels for additional precautionary information.



FMC Corporation
Agricultural Products Group
1735 Market Street
Philadelphia PA 19103

Net Contents: 1.25 Gallon

03-17-10

Table with sections: FIRST AID (If swallowed, If inhaled, If on skin or clothing, If in eyes), HOTLINE NUMBER, NOTE TO PHYSICIAN, and For Information Regarding the Use of this Product Call 1-800-321-1FMC (1362).

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.

All pesticide handlers (mixers, loaders and applicators) must wear long-sleeved shirt and long pants, socks, shoes and chemical-resistant gloves. After the product is diluted in accordance with label directions for use, and/or when mixing and loading using a closed spray tank transfer system (such as U-Turn®), or an in-line injector system, shirt, pants, socks, shoes and waterproof gloves are sufficient. In addition, all pesticide handlers must wear a respiratory protection device¹ when working in a non-ventilated space. All pesticide handlers must wear protective eyewear when working in non-ventilated space or when applying termiticide by rodding or sub-slab injection.

¹Use one of the following Mine Safety and Health Administration (MSHA) /National Institute for Occupational Safety and Health (NIOSH) air purifying respirator types with approval number prefixes such as: TC-23C, TC-21C, TC-19C, TC-13F and TC-14G.

or a NIOSH approved respirator with any R, P or HE filter.

or a NIOSH approved respirator with an organic vapor (OV) cartridge or canister with any R, P or HE prefilter.

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

Environmental Hazards

This 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. Additional information may be obtained from your Cooperative Extension Service.

This product is extremely toxic to fish and aquatic invertebrates. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water by cleaning of equipment or disposal of equipment washwaters. Do not apply when weather conditions favor drift from treated areas.

Physical/Chemical Hazards

Do not use or store near heat or open flame.

DIRECTIONS 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, remix by agitation. For the 1.25 and 2.5 gallon containers, invert and shake several times until contents are homogeneous. For the 5 gallon U-Turn[®] container, grasp handle and rock container forward and backward vigorously until contents are homogeneous.

If crystals form, warm to room temperature 70°F (21°C) 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 **CHEMTREC (Transportation and spills): (800) 424-9300**.

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

Pesticide Disposal

Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

Container Disposal

Metal or Plastic Container: Non-refillable container. Do not reuse or refill this container. **Triple rinse as follows:** Empty the contents into application equipment or a mix tank and drain for 10 seconds after flow begins to drip. Fill container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or mix tank or store rinsate for later use or disposal. Drain for 10 seconds after flow begins to drip. Repeat this procedure two more times. Then offer for recycling, if available or reconditioning, if appropriate, or puncture and dispose of in a sanitary landfill.

General Information on the Use of This Product

Not for use on plants being grown for sale or other commercial use, or for commercial seed production, or for research purposes. For use on plants intended for aesthetic purposes or climatic modification and being grown in interior landscapes, ornamental gardens or parks, or lawns and grounds.

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 state cooperative extension and regulatory agencies.

SUBTERRANEAN TERMITE CONTROL

The use of this product prevents and controls termite infestations in and around structures and constructions.

The dilute insecticidal emulsion must be adequately dispersed in the soil to establish a barrier between the wood and the termites in the soil. As a good practice: 1) all non-essential wood and cellulose containing materials should be removed from around foundation walls, crawl spaces and porches; 2) eliminate termite access to moisture by repairing faulty plumbing and/or construction grade. Soil around untreated structural wood in contact with soil should be treated as described below.

To establish an effective insecticidal barrier with this product the service technician must be familiar with current termite control practices such as: trenching, rodding, sub-slab injection, coarse fan spraying of soil surfaces, crack and crevice (void) injection, excavated soil treatment, and brush or spray applications to infested or susceptible wood. These techniques must be correctly employed to prevent or control infestations by subterranean termites such as: *Coptotermes*, *Heterotermes*, *Reticulitermes* and *Zootermopsis*. The biology and behavior of the species involved should be considered by the service technician in determining which control practices to use to eliminate or prevent the termite infestation.

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 insecticide into water supplies. Do not contaminate cisterns or wells. Do not treat soil that is water saturated or frozen or in any conditions where runoff or movement from the treatment area (site) is likely to occur.

Permethrin the active ingredient in Dragnet[®] SFR termiticide/insecticide, is extremely toxic to fish and aquatic invertebrates. Care should be used when making applications near bodies of water. As part of FMC's stewardship program, refer to available support literature on well water, ponds and stream concerns. Locate sources of water discharge from structures, such as french drains and sump systems. Turn off discharge pumps until after application is complete. Observe for any change in color or odor of effluent discharge. Consult state and local specifications for recommended distances of wells from treated areas, or if such regulations do not exist, refer to Federal Housing Administration Specifications (H.U.D.) for guidance.

Note: Crawlspace are to be considered inside of the structure.

Critical Areas: Critical areas include areas where the foundation is penetrated by utility services, cracks and expansion joints, bath traps and areas where cement constructions have been poured adjacent to the foundation such as stairs, patios, and slab additions.

Structures with Wells/Cisterns Inside Foundations

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

1. Do not treat soil while it is beneath or within the foundation or along the exterior perimeter of a structure that contains a well or cistern. The treated backfill method must be used if soil is removed and treated outside/away from the foundation. The treated backfill technique is described as follows:
 - a. Trench and remove soil to be treated onto heavy plastic sheeting or similar material or into a wheelbarrow.
 - b. Treat the soil at the rate of 4 gallons of dilute emulsion per 10 linear feet per foot of depth of the trench, or 1 gallon per 1.0 cubic feet of soil. See "Mixing Directions section of the label. Mix thoroughly into the soil taking care to contain the liquid and prevent runoff or spillage.
 - c. After the treated soil has absorbed the diluted emulsion, replace the soil into the trench.
2. Treat infested and/or damaged wood in place using an injection technique such as described in the "Control of Wood Infesting Insects" section of this label

Structures with Adjacent Wells/Cisterns and/or Other Water Bodies

Applicators must inspect all structures with nearby water sources such as wells, cisterns, surface ponds, streams, and other bodies of water and

evaluate, at a minimum, the treatment recommendations listed below prior to making an application

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

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

Application Rate: Use a 0.5% emulsion for subterranean termites. For other pests on the label use specific listed rates.

Mixing Directions: Mix the termiticide use dilution in the following manner: Fill tank 1/4 to 1/3 full. Start pump to begin by-pass agitation and place end of treating tool in tank to allow circulation through hose. Add appropriate amount of Dragnet SFR. Add remaining amount of water. Let pump run and allow recirculation through the hose for 2 to 3 minutes.

Dragnet SFR may also be mixed into full tanks of water, but requires substantial agitation to insure uniformity of the emulsion.

To prepare a 0.5% water emulsion, ready to use, dilute 1.25 gallons of Dragnet SFR with 94.75 gallons of water.

Mixing: For the desired application rate, use the chart below to determine the amount of Dragnet SFR for a given volume of finished emulsion:

Amount of Dragnet® SFR termiticide/insecticide (Gallons except where noted)			
Emulsion Concentration	Amount of Dragnet SFR	Amount of Water	Desired Gallons of Finished Emulsion
0.5%	1 2/3 fl. oz.	7.9 pints	1
	6 2/3 fl. oz.	31.6 pints	4
	8 1/3 fl. oz.	39.5 pints	5
	16 2/3 fl. oz.	9.9	10
	0.25	18.75	19
	0.5	37.5	38
	0.75	57.25	58
	1.25	94.75	96
	2.5	189.5	192
	1.0%*	1 2/3 fl. oz.	62 1/3 fl. oz.
3 1/3 fl. oz.		7.8 pints	1
6 2/3 fl. oz.		15.6 pints	2
16 2/3 fl. oz.		4.9	5
33 1/3 fl. oz.		9.7	10
0.5		18.5	19
1		37	38
1.5		56.5	58
2.5		91	96
5		187	192
2.0*	1 2/3 fl. oz.	30 1/3 fl. oz.	.25
	6 2/3 fl. oz.	7.6 pints	1
	33 1/3 fl. oz.	4.74	5
	66 2/3 fl. oz.	9.5	10
	1	18	19
	2	36	38
	3	55	58
	5	91	96
	10	182	192

Common units of measure:

1 pint = 16 fluid ounces (oz.)

1 gallon = 4 quarts = 8 pints = 128 fluid ounces (oz.)

*For termite applications, only use these rates in conjunction with the application volume adjustments as listed in the section below or in the foam or underground service application sections.

Pre-Construction Subterranean Termite Treatment

Pre-Construction Treatment: Do not apply at a lower dosage and/or concentration than specified on this label for applications prior to the installation of the finished grade.

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

Effective pre-construction subterranean termite control is achieved by the establishment of vertical and/or horizontal insecticidal barriers using 0.5% emulsion of Dragnet SFR. To meet termite proofing requirements, follow the procedures in the latest edition of the Housing and Urban Development Minimum Property Standards.

Horizontal Barriers: Create a horizontal barrier wherever treated soil will be covered, such as footing trenches, slab floors, carports, and the soil beneath stairs and crawlspaces.

For a 0.5% rate, apply 1 gallon of dilution per 10 square feet, or use 1.6 fluid ounces of Dragnet SFR 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.

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.

Applications shall be made by a low pressure spray (less than 50 p.s.i.) using a coarse spray nozzle. If slab will not be poured the same day as treatment, cover treated soil with a water-proof barrier such as polyethylene sheeting. This is not necessary if foundation walls have been installed around the treated soil.

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

For a 0.5% rate, apply 4 gallons of dilution per 10 linear feet per foot of depth or 6.4 fluid ounces of Dragnet SFR 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.

a. When trenching and rodding into the trench, or trenching, it is important that emulsion reaches the top of the footing. Rod holes must be spaced so as to achieve a continuous termiticidal barrier, but in no case more than 12 inches apart.

b. Care should be taken to avoid soil wash-out around the footing.

c. Trenches need not be wider than 6 inches. Emulsion should be mixed with the soil as it is being replaced in the trench.

d. For a monolithic slab, an inside vertical barrier may not be required.

Hollow block voids may be treated at a rate of 2 gallons of emulsion per 10 linear feet so that the emulsion will reach the top of the footing.

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.

Post-Construction Subterranean Termite Treatment

Application Volume: To provide maximum control and protection against termite infestation apply the specified volume of the finished water emulsion and active ingredient as set forth in the directions for use section of this label. If soil will not accept the labeled application volume, the volume may be reduced provided there is a corresponding increase in concentration so that the amount of active ingredient applied to the soil remains the same.

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

Where desirable for post construction treatments, the volume of the 1.0% emulsion may be reduced by 1/2 the labeled volume or a 2.0% emulsion may be applied at 1/4 the labeled volume (see Volume Adjustment Chart). Volume adjustments at 2.0% are not recommended for subslab injection. See Volume Adjustment Chart below.

Note: When volume is reduced, the hole spacing for subslab injection and soil rodding may require similar adjustment to account for lower volume dispersal of the termiticide in the soil.

Volume Adjustment Chart			
Rate (% emulsion)	0.5%	1.0%	2.0%
Volume allowed			
Horizontal (gallons emulsion/10 sq. ft.)	1.0 gallons	0.5 gallons	0.25 gallons*
Vertical (gallons emulsion/10 lin. ft.)	4.0 gallons	2.0 gallons	1.0 gallons*

*Not recommended for subslab injection.

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

Use a 0.5% emulsion for post-construction treatment. 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. Care should be taken to avoid soil wash-out around the footing.

Do not apply emulsion until location of wells, 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 elements.

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

Slabs: Vertical barriers may be established by sub-slab injection within the structure and rodding and/or trenching outside at the rate of 4 gallons of emulsion per 10 linear feet per foot of depth. Special care must be taken to distribute the treatment evenly. Treatment should not extend below the bottom of the footing.

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.

- a. Drill holes in the slab and/or foundation to allow for the application of a continuous insecticidal barrier.
- 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 footing. The emulsion should be applied to the trench and soil at 4 gallons of emulsion per 10 linear feet per foot of depth as the soil is replaced in the trench.
- c. For foundations deeper than 1 foot follow rate for basement.
- d. Exposed soil and wood in bath traps may be treated with a 0.5% emulsion.

Basements: Where the footing is greater than 1 foot in depth from grade to the bottom of the foundation, application must be made by trenching and rodding into the trench, or trenching at the rate of 4 gallons of emulsion per 10 linear feet per foot of depth. When the footing is more than four feet below grade, the applicator may trench and rod into the trench, or trench along foundation walls at the rate prescribed for four feet of depth. Rod holes must be spaced so as to achieve a continuous termiticide barrier, but in no case more than 12 inches apart. The actual depth of treatment will vary depending on soil type, degree of compaction, and location of termite activity. However, in no case should a structure be treated below the footing. Sub-slab injection may be necessary along the inside of foundation walls, along cracks and partition walls, around pipes, conduits, piers, and along both sides of interior footing-supported walls.

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

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

Inaccessible Crawl Spaces: For inaccessible interior areas, such as areas where there is insufficient clearance between floor joists and ground surfaces to allow operator access, excavate if possible, and treat according to the instructions for accessible crawl spaces. Otherwise, apply one or a combination of the following two methods.

1. To establish a horizontal barrier, apply to the soil surface, 1 gallon of emulsion per 10 square feet overall using a nozzle pressure of less than 25 p.s.i. and a coarse application nozzle (e.g., Delavan Type RD Raindrop, RD-7 or larger, or Spraying Systems Co. 8010LP TeeJet or comparable nozzle). For an area that cannot be reached with the application wand, use one or more extension rods to make the application to the soil. Do not broadcast or powerspray with higher pressures.
2. To establish a horizontal barrier, drill through the foundation wall or through the floor above and treat the soil perimeter at a rate of 1 gallon of emulsion per 10 square feet. Drill spacing must be at intervals not to exceed 16 inches. Many States have smaller intervals, so check State regulations which may apply.

When treating plenums and 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.

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

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

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

Excavation Technique: If treatment must be made in difficult situations, 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:

- a. Trench and remove soil to be treated onto heavy plastic sheeting or similar material.
- b. 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.

Foam Applications

Dragnet® SFR termiticide/insecticide emulsion, from 0.5 to 2.0%, may be converted to a foam with expansion characteristics from 2 to 40 times.

Localized Application

Foam Applications: The emulsion may be converted to a foam and the foam used to control or prevent termite infestations.

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

Foam and liquid application must be consistent with volume and active ingredient instructions in order to insure proper application has been made. The volume and amount of active ingredient are essential to an effective treatment. At least 75% of the labeled liquid emulsion volume of product must be applied, with the remaining percent delivered to appropriate areas using foam application. Refer to label and use recommendations of the foam manufacturer and the foaming equipment manufacturer.

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

Note location of electrical sources prior to foaming voids to avoid possible shock hazard.

Application Under Slabs or to Soil in Crawlspaces to Prevent or Control Termites

Application may be made using Dragnet SFR foam alone or in combination with liquid emulsion. The equivalent of at least 4 gallons (6.4 ounces of Dragnet concentrate) of 0.5% emulsion per 10 linear feet (vertical barrier), or at least 1 gallon (1.6 ounces of Dragnet concentrate) of 0.5% emulsion per 10 square feet (horizontal barrier) must be applied either as emulsion, foam, or a combination of both. For a foam only application, apply Dragnet SFR concentrate in sufficient foam concentration and foam volume to deposit 6.4 ounces of concentrate per 10 linear feet or 1.6 ounces of concentrate per 10 square feet. For example, 1 gallon of 2% emulsion generated as foam to cover 10 linear feet is equal to the application of 4 gallons of 0.5% emulsion per 10 linear feet.

Sand Barrier Installation and Treatment

Termites can build mud tubes over treated surfaces as long as they have

access to untreated soil and do not have to move Dragnet SFR treated soil. Fill in cracks and spaces with builder's or playbox sand and treat the sand with Dragnet SFR. The sand should be treated as soil following the termiticide rate listed on the Dragnet SFR label.

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.

APPLICATION IN CONJUNCTION WITH THE USE OF FIRSTLINE® TERMITE BAITS

As part of the integrated pest management (IPM) program for termite control, Dragnet® SFR termiticide/insecticide may be applied to critical areas of the structure including plumbing and utility entry sites, bath traps, expansion joints, foundation cracks and areas with known or suspected infestations at a rate of 0.5% as a spot treatment or complete barrier treatment. Applications may be made as described in the Postconstruction treatment section of this label.

SPECIFIC PEST CONTROL APPLICATIONS

Underground services

Such as: wires, cables, utility lines, pipes, conduits, etc. Services may be within structures or located outside structures, in right-of-ways or to protect long range (miles) of, installations of services.

Soil treatment may be made using 0.5% to 1.0% Dragnet SFR emulsion to prevent attack by termites and ants.

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

Where soil will not accept the above labeled volume, 1 to 2 gallons of 1.0% Dragnet SFR may be used per 10 linear feet of trench both to the bottom of the trench and over the soil on top of the services.

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

Precautions:

Do not treat electrically active underground services.

Posts, Poles, and Other Constructions

Create an insecticidal barrier in the soil around wooden constructions such as signs, fences and landscape ornamentation by applying a 0.5% emulsion.

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 insecticidal barrier around the pole. 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. Apply to a depth of 6 inches below the bottom of the wood. For larger constructions, use 4 gallons per 10 linear feet per foot of depth.

Treatment of Wood-in-Place for Control of Wood-Infesting Insects

(Localized Areas in Structure)

For the control of insects such as termites, ants, carpenter ants, and wood-infesting beetles such as Old House Borer and Powder Post in localized areas of infested wood in and around structures, apply a 0.5% 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. Paint on or fan spray applications may also be used. Plastic sheeting must be placed immediately below overhead areas that are spot treated except for soil surfaces in crawlspaces. 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. This type of application is not intended to be a substitute for soil treatment, mechanical alteration or fumigation to control extensive infestation of wood-infesting insects.

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.

Termite carton nests in trees or building voids may be injected with 0.5% to 1.0% emulsion. 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.

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.

GENERAL INFORMATION

Dragnet SFR is to be used for residual pest control in and on buildings and structures and their immediate surroundings and on modes of transport. Permitted areas of use include, but are not limited to industrial buildings, houses, apartment buildings, laboratories, buses, greenhouses and the non-food/feed areas of stores, warehouses, vessels, railcars, trucks, trailers, aircraft (Do not use in aircraft cabins), schools, nursing homes, hospitals (non-patient areas), restaurants, hotels, and food manufacturing, processing and servicing establishments.

Do not tank mix this product with dichlorvos (DDVP) containing products. Can be tank-mixed with Insect Growth Regulators (IGR's) or pyrethrin-containing products. When mixing Dragnet SFR with other products, observe all precautions and limitations on the labels of each product. To prepare the emulsion, dilute Dragnet SFR with water only. To prepare a 0.50% emulsion, mix 1.6 oz. (50 ml) in 1 gallon of water.

Dragnet SFR is an emulsifiable concentrate to be diluted with water and used to control pests in and around homes and other structures. The pests controlled are listed in the accompanying tables.

Dragnet SFR may be used as a broadcast or spot application to carpeting, wood, lawns and soil (crawl space and perimeter) and as a crack and crevice injection, or paint-on treatment. Crawlspaces are considered inside the structure. Consult tables for specific use instructions.

Broadcast Treatment of Wood for the Control of Wood-Infesting Insects and Nuisance Pests Outside of Structure

Apply a 0.5% emulsion with a fan spray using a maximum of 25 psi. Treatment should be made just to the point of runoff.

To control wood-infesting insects active inside trees, utility poles and/or fence posts, drill to find the interior infested cavity and inject a 0.5% emulsion. To control bees, wasps, hornets, and yellow-jackets, apply in late evening when insects are at rest. Aim spray at nest openings in ground, bushes and in cracks and crevices which may harbor nests, saturating nest openings and contacting as many insects as possible.

Pests Under Slabs

Infestations of Arthropods, such as ants, cockroaches and scorpions inhabiting under slab area may be controlled by drilling and injecting or horizontal rodding and then injecting 1 gallon of a 0.5% to 1.0% emulsion per 10 square feet or 2 gallons per 10 linear feet.

Pest Control in Crawlspaces

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

Pest Control on Outside Surfaces and Around Buildings

Apply Dragnet SFR using a 0.5% emulsion as a residual spray to outside surfaces of buildings including, but not limited to, exterior siding, foundations, porches, window frames, eaves, patios, garages, refuse dumps, lawn areas adjacent or around private homes, duplexes, townhouses, condominiums, house trailers, apartment complexes, carports, garages, fence lines, storage sheds, barns, other residential structures, commercial, industrial and institutional buildings, soil, trunks of woody ornamentals and other areas where pests congregate or have been seen. Repeat treatment as necessary to maintain effectiveness.

Vinyl and Aluminum Siding: The application of Dragnet SFR to vinyl and aluminum siding (particularly lightly colored, aged, weathered or otherwise damaged) may result in staining, bleaching or discoloration. Factors such as extreme heat and direct sunlight can promote damage when using emulsifiable concentrates. Before applying Dragnet SFR to vinyl or aluminum siding, treat a small area and evaluate 30 minutes later to allow any potential staining to occur. Regardless of the test results, do not apply to vinyl or aluminum siding while exposed to direct sunlight or during the heat of the day.

Perimeter Treatment: Apply to a band of soil and vegetation 6 to 10 feet wide around and adjacent to the structure. Also, treat the foundation of the structure to a height of 2 to 3 feet. Use a spray volume of 2 to 10 gallons of emulsion per 1000 square feet. Higher volumes of water may be needed if mulch or leaf litter is present or foliage is dense. House siding may be treated if pests such as Gypsy moth adults and caterpillars, boxelder bugs, elm leaf beetles, earwigs or silverfish are present.

Pest	Specific Instructions																										
Ants ⁴	Apply as a pinstream, as a fine/coarse spray, as a spot treatment or with a paintbrush. Treat where pests are found or entry points of the structure such as window and door frames and along the foundation. Do not apply to structures with high pressure sprayers such as air blast sprayers.																										
Ant Mounds ^{1,4}																											
Armyworm ⁴	1 Drench Method: Apply 1-2 gallons of emulsion to each mound area by sprinkling the mound until it is wet and treat a 4 foot diameter circle around the mound. Use the higher volume for mounds larger than 12". For best results, apply in cool weather, such as in early morning or late evening hours, but not in the heat of the day.																										
Fire Ants ⁴																											
Bees	2 Boxelder Bugs, Elm Leaf Beetles, Gypsy Moth Caterpillars: Spray tree trunks, building siding or wherever pests congregate, to the point of runoff.																										
Carpenter Bees																											
Bark Beetles ³	3 Borers and Bark Beetles: To prevent infestation of trees and woody ornamentals, spray the bark to the point of runoff.																										
Borers ³																											
Boxelder Bugs ^{2,4}	4 Apply Dragnet [®] SFR termiticide/insecticide at the rate 0.4 to 0.8 fluid ounce per 1000 square feet in a volume of water sufficient for uniform coverage such as 4 to 25 gallons. Use the lower rate to knock down existing pests and the higher rate where faster knock-down or greater residual is desired. For example:																										
Centipedes																											
Cockroaches ⁴	<table border="1"> <thead> <tr> <th>Lawn</th> <th>(Sq. Ft.)</th> <th>Oz of Dragnet[®] SFR</th> <th>Gals of Water</th> </tr> </thead> <tbody> <tr> <td rowspan="2">Small</td> <td>1,000</td> <td>0.4 to 0.8</td> <td>4 to 25</td> </tr> <tr> <td>2,000</td> <td>0.8 to 1.6</td> <td>8 to 50</td> </tr> <tr> <td rowspan="2">Medium</td> <td>3,000</td> <td>1.2 to 2.4</td> <td>12 to 75</td> </tr> <tr> <td>6,000</td> <td>2.4 to 4.8</td> <td>24 to 150</td> </tr> <tr> <td rowspan="2">Large</td> <td>12,000</td> <td>4.8 to 9.6</td> <td>48 to 300</td> </tr> <tr> <td>1 Acre</td> <td>44,000</td> <td>17.0 to 34.0</td> <td>176 to 1,100</td> </tr> </tbody> </table>	Lawn	(Sq. Ft.)	Oz of Dragnet [®] SFR	Gals of Water	Small	1,000	0.4 to 0.8	4 to 25	2,000	0.8 to 1.6	8 to 50	Medium	3,000	1.2 to 2.4	12 to 75	6,000	2.4 to 4.8	24 to 150	Large	12,000	4.8 to 9.6	48 to 300	1 Acre	44,000	17.0 to 34.0	176 to 1,100
Lawn		(Sq. Ft.)	Oz of Dragnet [®] SFR	Gals of Water																							
Small	1,000	0.4 to 0.8	4 to 25																								
	2,000	0.8 to 1.6	8 to 50																								
Medium	3,000	1.2 to 2.4	12 to 75																								
	6,000	2.4 to 4.8	24 to 150																								
Large	12,000	4.8 to 9.6	48 to 300																								
	1 Acre	44,000	17.0 to 34.0	176 to 1,100																							
Asian Cockroaches	Lawn should not be longer than 3 inches at the time of application. Repeat application if necessary. Application in combination with compatible surfactants may enhance penetration. Arid climates generally require the higher volumes.																										
Crickets ⁴																											
Mole Crickets ⁴	5 Residual treatment for control of Deer tick (<i>Ixodes dammini</i>), western black-legged tick (<i>Ixodes pacificus</i>) and other Ticks (important vectors for Lyme Disease, Rocky Mountain Spotted Fever).																										
Earwigs																											
Elm Leaf Beetles ²																											
Firebrats																											
Fleas ⁴																											
Ground Beetles ⁴																											
Gypsy Moths (adults & Caterpillars) ²																											
Millipedes																											
Scorpions																											
Silverfish																											
Sod Webworm ⁴																											
Sowbugs																											
Spiders ¹																											
Wasps																											
Ticks ^{4,5}																											
Flies																											
Carpenter Ants																											
Chinchbugs ⁴																											
Pill Bugs																											

Ornamental and Lawn Use

Not for use on plants being grown for sale or other commercial, or for commercial seed production, or for research purposes. For use on plants intended for aesthetic purposes or climatic modification and being grown in interior plantscapes, ornamental gardens or parks, or lawns and grounds.

Dragnet SFR may be used to control insect pests on ornamentals and lawns in landscaped areas around residential, institutional, public, commercial and industrial buildings, parks, recreational areas and athletic fields.

General Application Instructions

Dragnet SFR is a 3.2 pounds per gallon formulation of the insecticide permethrin. Apply Dragnet SFR when insects appear or feeding is noticed. The higher rate should be used as pest populations increase. Repeat the application as necessary to maintain control. Dragnet SFR may be applied by ground equipment only. Use sufficient water to obtain full coverage.

Do not apply more than 2.0 lb. a.i./A/year.

Dragnet SFR has demonstrated excellent plant safety; however, not all cultivars have been tested. Before treating large numbers of plants of a particular cultivar, treat a few plants and observe prior to full scale application.

Spray Drift Precautions:

All ground application equipment must be properly maintained and calibrated using appropriate carriers.

Do not make ground applications during temperature inversions.

Make ground applications when the wind velocity favors on target product disposition (approximately 3 to 10 mph). Do not apply when wind velocity exceeds 15 mph.

Do not apply by ground equipment within 25 feet of lakes, reservoirs, rivers, permanent streams, marshes or natural ponds, estuaries, and commercial fish farm ponds.

Recommended Application Rates

CROP	PEST	RECOMMENDED RATE	SPECIFIC INSTRUCTIONS
Ornamentals in interiorscapes, in residential landscaped areas and landscaped areas around institutional, public, commercial and industrial buildings, parks, recreational areas and athletic fields (including foliage and flowering plants, woody and herbaceous non-edible ornamentals and non-bearing plants of fruiting species)	Ants Aphids Bagworm Beet Armyworm Birch Leafminer Cabbage Looper Cankerworms Citrus Thrips Fungus Gnat Gypsy Moth Caterpillars Heliothis spp. Japanese Beetles Lace Bug Leaf Feeding Caterpillars Leafhoppers Leafminers Lygus Bugs Mealybugs Pine Sawflies Plant Bugs Root Weevils (Adult) Tent Caterpillars Webworms Whiteflies Zimmerman Pine Moths	4 to 8 Fl. Oz. per 100 Gals.	Apply sufficient volume of water to adequately cover foliage. Use higher rate for moderate to high infestations. Direct application to blooms may cause browning of petals. Marginal leaf burn may occur on Salvia, Dieffenbachia and Pteris Fern.
		— or — Broadcast 4 to 8 Fl. Oz. per Acre	
Ornamental Trees	Bark Beetles Borers (Including but not limited to Dendroctonus spp., Ips spp., Scolytus spp., Ash Borer, Bronze Birch Borer, Elm Bark Beetles, Rhododendron borer and Turpentine Beetles)	1 to 2 qts. per 100 Gals.	Apply to the lower branches and trunk directly prior to adult emergence. Emergence varies according to host tree, environmental conditions and geography of the country. Complete, heavy uniform coverage of bark on scaffold limbs to the ground level of the trunk is recommended for best control.
Conifers	Nantucket Pine Tip Moth Coneworms*	4 to 8 Fl. Oz. per 100 Gals. — or — Broadcast 4 to 8 Fl. Oz. per Acre	Begin application when adults appear. Repeat applications may be made on 5–7 day intervals as needed.
Lawns around residential, institutional, public, commercial and industrial buildings, parks, recreational areas and athletic fields.	Chinchbugs Pillbugs Sod Webworm (See also list of pests under "Pest control on outside surfaces and around buildings")	0.4 to 0.8 fl. oz. per 1,000 sq. ft.	Apply using sufficient water to provide adequate coverage.

*To control Coneworm —Use Dragnet SFR at the following rates:

For high volume sprayers: Use 8 ounces in 100 gallons of water. Apply 5 to 10 gallons of finished spray per tree.

For low volume sprayers: Use 42 ounces in 100 gallons of water. Apply 100 gallons per acre.

To control Webbing Coneworm—make first application within 1 week of female flower closure or peak pollen flight.

To control other coneworms —make first application within 30 days following flower closure.

Applications to Agricultural Structures For Agricultural use only

General Application Instructions

Dragnet® SFR termiticide/insecticide can be used for residual pest control in and on buildings and structures used for agricultural purpose, their immediate surroundings.

Dragnet SFR is an emulsifiable concentrate to be diluted with water and applied as an emulsion to control pests in and around agricultural structures. Pests controlled are listed in the accompanying tables.

Agricultural Structures

Spray directly or spot treatment to walls and ceiling as residual surface treatment only. Do not treat manure or litter. Avoid contamination of feed and water. Do not apply directly to livestock or poultry.

For Application in	Target Insects	Method of Applic.	Dilute	Applic. Rate
Dairies, Barns, feed-lots, stables, poultry houses, swine and livestock houses	House flies, stable flies and other manure breeding flies. Also aids in the reduction of cockroaches, mosquitoes and spiders.	Sprayer	4 ounces to 12.5 gallons water	1 gallon per 750 square feet of surface

Pest Control Indoors

Food Handling Establishments: Places other than private residences in which food is held, processed, prepared or served.

Non-Food/Feed Areas: Includes garbage rooms, lavatories, floor drains (to sewers), entries and vestibules, offices, locker rooms, machine rooms, garages, mop closets, and storage (after canning or bottling). All areas where insects hide or through which insects may enter should be treated.

Food/Feed Areas: Dragnet is not labeled for use in food/feed areas. Do not use in food/feed areas of food/feed handling establishments, restaurants or other areas where food/feed is commercially prepared or processed. Do not use in serving areas while food is exposed or facility is in operation. Serving areas are areas where prepared foods are served such as dining rooms but excluding areas where foods may be prepared or held. In the home, all food processing surfaces and utensils should be covered during treatment or thoroughly washed before use. Exposed food should be covered or removed. Not for use in USDA Meat and Poultry Plants.

Use Dragnet SFR to control pests listed in the following table by application of a 0.5% emulsion.

Pest	Specific Instructions
Fleas	Prior to treatment, carpets and furniture should be vacuumed thoroughly and vacuum cleaner bag discarded in an outdoor trash container. Evenly apply a broadcast spray at a rate of 1 gallon/per 800 to 1600 square feet to infested areas such as crawlspaces, rugs, carpets, pet beds and other pet resting areas. Avoid wetting or soaking. For crawlspace applications, the applicator must wear a respirator recommended by NIOSH for filtering spray mists and organic vapors. When treating upholstered furniture take care to treat between and under cushions. Pay particular attention to areas which are frequented by pets. Old pet bedding should be replaced with clean, fresh bedding after treatment. To control the source of flea infestations, pets inhabiting the treated premises should be treated with a flea-control product registered for application to animals.
Pest	Specific Instructions
Centipedes Ants* Carpenter Ants* Fire Ants Bat Bugs Bed Bugs Bees and Wasps Carpenter Bees Boxelder Bugs Cockroaches Asian Cockroaches Crickets Flies—such as Drain, Cluster, House Earwigs Firebrats Ground Beetles Leaf Beetles Millipedes Pantry Pests** Such as: Flour Beetles, Indian Meal Moths Larder Beetles Pillbugs Scorpions Silverfish Sowbugs Spiders Carpet Beetles	Apply crack and crevice, as a pinstream, as a fine/coarse, low pressure spray (20 psi or less), spot application or with a paint brush. Treat where pests are found or normally occur, such as crack and crevices in walls, in and around kitchen cabinets and drawers, along baseboards, behind sinks and around plumbing and other utility installations. *Ant infested wood may be drilled and injected with Dragnet SFR. **Remove all utensils, uncovered foodstuffs (or any having original package opened), shelf paper and other objects before spraying. Allow treated surfaces to dry and cover shelves with clean paper before replacing any utensils, foodstuff or other items. Any foodstuff accidentally contaminated with spray solution should be discarded.
Brown Dog Ticks	For the control of carpet beetles, evenly apply the spray to rugs, carpets, along baseboards and edges of carpeting, under carpeting, rugs and furniture, in closets, on shelving, and wherever else these insects are seen or suspected. Avoid wetting or soaking. For the control of Brown Dog Ticks, evenly apply the spray to infested areas, such as pet beds and resting quarters, nearby cracks and crevices, along baseboards, windows and doorframes, and areas of floor and floor coverings where these pests may be present. Avoid wetting or soaking. Old bedding should be removed and replaced with clean, fresh bedding after treatment.

Attention

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

Do not allow people or pets on treated surfaces, such as carpets until the spray has dried.

Do not use concentrate or emulsion in fogging equipment.

Firewood is not to be treated.

During any application to overhead areas of structure, cover surfaces below with plastic sheeting or similar material (except where exempt).

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

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

Do not treat areas where food is exposed.

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

Do not apply this product in patient rooms or in any rooms while occupied by the elderly or infirm.

Do not apply when occupants are present in the immediate area in institutions such as libraries, sport facilities, etc.

Do not apply to classrooms when in use.

Do not touch treated surface until dry.

Not for use in voids insulated with rigid foam.

Conditions of Sale and Limitation of Warranty and Liability:

Notice: Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

The Directions for Use of this product must be followed carefully. 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 manner of use or application, weather or crop conditions beyond the control of FMC or Seller. All such risks shall be assumed by Buyer and User, and Buyer and User agree to hold FMC and Seller harmless for any claims relating to such factors.

Seller warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the Directions for Use when used in accordance with the directions under normal conditions of use. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE, NOR ANY OTHER EXPRESS OR IMPLIED WARRANTIES WITH RESPECT TO THE SELECTION, PURCHASE, OR USE OF THIS PRODUCT. Any warranties, express or implied, having been made are inapplicable if this product has been used contrary to label instructions, or under abnormal conditions, or under conditions not reasonably foreseeable to (or beyond the control of) seller or FMC, and to the extent consistent with applicable law, buyer assumes the risk of any such use.

To the extent consistent with applicable law, FMC or seller shall not be liable for any incidental, consequential or special damages resulting from the use or handling of this product. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF FMC AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF FMC OR SELLER, THE REPLACEMENT OF THE PRODUCT.

This Conditions of Sale and Limitation of Warranty and Liability may not be amended by any oral or written agreement.

Dragnet and FMC—FMC trademarks

© 2010 FMC Corporation All rights reserved.

U.S. Patent No. 6,251,415 (SFR chemical technology).

Material Safety Data Sheet

DRAGNET® SFR TERMITICIDE/INSECTICIDE

MSDS #: 1784-A
Revision Date: 2014-02-21
Version 1.03



This MSDS has been prepared to meet U.S. OSHA Hazard Communication Standard 29 CFR 1910.1200 And Canadian Workplace Hazardous Materials Information System (WHMIS) requirements.

1. PRODUCT AND COMPANY IDENTIFICATION

Product name	DRAGNET® SFR TERMITICIDE/INSECTICIDE
Formula code	1784
Active Ingredient(s)	Permethrin
Alternate Commercial Name	Dragnet®
Synonyms	FMC 33297; 3-phenoxybenzyl (1RS,3RS;1RS,3SR)-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate; (3-phenoxyphenyl)methyl 3-(2,2-dichloroethenyl)-2,2-dimethylcyclopropanecarboxylate
Chemical Family	Pyrethroid Pesticide
Recommended use:	Insecticide
Manufacturer	<u>Emergency telephone number</u>
FMC Corporation Agricultural Products Group 1735 Market Street Philadelphia, PA 19103 General Information: Phone: (215) 299-6000 E-Mail: msdsinfo@fmc.com	Medical Emergencies: 1 800 / 331-3148 (PROSAR - U.S.A. & Canada) 1 651 / 632-6793 (PROSAR - All Other Countries - Collect) For leak, fire, spill or accident emergencies, call: 1 800 / 424 9300 (CHEMTREC - U.S.A.) 1 703 / 527 3887 (CHEMTREC - Collect - All Other Countries)

2. HAZARDS IDENTIFICATION

<u>Appearance</u>	amber liquid
<u>Physical state</u>	Liquid
<u>Odor</u>	Faint hydrocarbon
<u>Physical or Chemical Hazards</u>	
Flammable properties	Combustible liquid
<u>Potential health effects</u>	
Acute effects	
Eyes	May cause slight irritation.
Skin	Irritating to skin.
Inhalation	Inhalation of vapors in high concentration may cause irritation of respiratory system. May cause drowsiness and dizziness.

Ingestion

Harmful if swallowed. Potential for aspiration if swallowed. May cause drowsiness and dizziness. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Chronic effects

May cause adverse kidney effects. May cause adverse liver effects.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous ingredients

Chemical Name	CAS-No	Weight %
Permethrin	52645-53-1	36.8
1,1'-Biphenyl, bis(1-methylethyl)-	69009-90-1	20-30
Petroleum distillates, hydrotreated light	64742-47-8	10-20

4. FIRST AID MEASURES

Eye contact

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

Skin contact

Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

Inhalation

Move person to fresh air. If person is not breathing, call 911 (within the U.S. and Canada) or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

Ingestion

Immediately call a poison control center or doctor. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give any liquid to the person. Do not induce vomiting or give anything by mouth to an unconscious person.

Notes to physician

Contains petroleum distillate. Vomiting may cause aspiration pneumonia. This product is a pyrethroid. If large amounts have been ingested, the stomach and intestines should be evacuated. Treatment is symptomatic and supportive. Digestible fats, oils, or alcohol may increase absorption and so should be avoided.

5. FIRE-FIGHTING MEASURES

Flammable properties

Combustible liquid

Flash Point

66-68 °C / 151-154 °F

Method

Tag Closed Cup

Sensitivity to Mechanical Impact

Not applicable

Sensitivity to Static Discharge

Not applicable

Suitable extinguishing media

Foam. Carbon dioxide (CO₂). Dry chemical. Water spray or fog.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus and full protective gear. Isolate fire area. Evaluate downwind.

NFPA

Health Hazard	0
Flammability	1
Stability	0
Special Hazards	-

6. ACCIDENTAL RELEASE MEASURES

Personal precautions	Isolate and post spill area. Wear suitable protective clothing, gloves and eye/face protection. For personal protection see section 8.
Environmental precautions	Keep people and animals away from and upwind of spill/leak. Keep material out of lakes, streams, ponds, and sewer drains.
Methods for cleaning up	Sweep up and shovel into suitable containers for disposal. Clean and neutralize spill area, tools and equipment by washing with bleach water and soap. Absorb rinsate and add to the collected waste. Waste must be classified and labeled prior to recycling or disposal. Dispose of waste as indicated in Section 13.
Other	For further clean-up instructions call FMC Emergency Hotline number listed in Section 1 "Product and Company Identification" above.

7. HANDLING AND STORAGE

Handling	Do not contaminate other pesticides, fertilizers, water, food or feed by storage or disposal.
Storage	Keep in a dry, cool and well-ventilated place. Keep away from open flames, hot surfaces and sources of ignition. Keep out of reach of children and animals. Store in original container only.

8. EXPOSURE CONTROL / PERSONAL PROTECTIONExposure guidelines

Chemical Name	British Columbia	Quebec	Ontario TWAEV	Alberta
Petroleum distillates, hydrotreated light 64742-47-8	TWA: 200 mg/m ³ Skin			

Occupational exposure controls

Engineering measures	Apply technical measures to comply with the occupational exposure limits. Ensure adequate ventilation, especially in confined areas. When working in confined spaces (tanks, containers, etc.), ensure that there is a supply of air suitable for breathing and wear the recommended equipment.
Personal Protective Equipment	
General Information	If the product is used in mixtures, it is recommended that you contact the appropriate protective equipment suppliers. These recommendations apply to the product as supplied.
Respiratory protection	For dust, splash, mist or spray exposures wear full-face elastomeric half mask respirator with appropriate cartridges and/or filters, which is approved for pesticides (U.S. NIOSH/MSHA, EU CEN or comparable certification organization).
Eye/face protection	For dust, splash, mist or spray exposure, wear chemical protective goggles or a face-shield
Skin and body protection	Wear long-sleeved shirt, long pants, socks, shoes, and gloves.
Hand protection	Protective gloves
Hygiene measures	Clean water should be available for washing in case of eye or skin contamination. Wash skin prior to eating, drinking, chewing gum or using tobacco. Shower or bathe at the end of working. Remove and wash contaminated clothing before re-use. Launder work clothing separately from regular household laundry.

9. PHYSICAL AND CHEMICAL PROPERTIESInformation on basic physical and chemical properties

Appearance	amber liquid
Color	amber
Physical state	Liquid
Odor	Faint hydrocarbon
pH	4 @ 25 °C (5% solution)
Melting Point/Range	No information available.
Freezing point	No information available
Boiling Point/Range	Not applicable
Flash Point	66-68 - 68 °C / 151-154 154 °F Tag Closed Cup
Evaporation rate	Not applicable
Flammable properties	Combustible liquid
Vapor pressure	No information available
Vapor density	No information available
Density	8.61 lb/gal
Specific Gravity	1.033 @ 20 °C
Water solubility	Emulsifies
Percent volatile	No information available
Partition coefficient	Not applicable
Viscosity	No information available

10. STABILITY AND REACTIVITY

Stability	Stable.
Conditions to avoid	Excessive heat, Extreme risk of explosion by shock, friction, fire or other sources of ignition
Hazardous decomposition products	Chlorine, Hydrogen chloride, Carbon oxides, Aldehydes.
Hazardous polymerization	Hazardous polymerization does not occur.

11. TOXICOLOGICAL INFORMATION

Acute effects

Eye contact	May cause slight irritation
Skin contact	Irritating to skin
Ingestion	Large toxic doses of the formulated product, administered to laboratory animals, have produced central nervous system effects with symptoms that include hypersensitivity to touch and sound, tremors, and clonic convulsions. Vomiting after ingestion of this product may cause aspiration of aromatic hydrocarbons into the lungs, which may result in fatal pulmonary edema.
Inhalation	In animals overexposure has produced symptoms such as squinting eyes, irregular and rattling breathing, and ataxia. Inhalation of hydrocarbon vapors may cause headaches, dizziness, disturbances in vision, drowsiness, respiratory irritation, anesthesia, unconsciousness, and other central nervous system effects.
LD50 Dermal	> 2,000 mg/kg (rabbit)
LD50 Oral	998 mg/kg (Rat)
LC50 Inhalation	> 4.3 mg/L 4 hr (Rat)
Sensitization	May cause sensitization of susceptible persons.

Chronic effects

Chronic Toxicity	May cause adverse kidney effects. May cause adverse liver effects.
Carcinogenicity	Not recognized as carcinogenic by Research Agencies (IARC, NTP, OSHA, ACGIH).
Mutagenicity	Permethrin: Did not show mutagenic effects in animal experiments.
Reproductive toxicity	Permethrin: No toxicity to reproduction in animal studies.

Neurological Effects Permethrin: Clinical signs of neurotoxicity include altered motor activity and FOB effects, with no signs of histopathology

Developmental Toxicity Permethrin: Not teratogenic in animal studies

Target Organ Effects Permethrin: Long-term feeding studies in animals resulted in increased liver and kidney weights, induction of the liver microsomal drug metabolizing enzyme system and histopathological changes in the lungs and liver.

Chronic Toxicity - Other Ingredient(s) Chronic exposure to aromatic hydrocarbons may cause headaches, dizziness, loss of sensations or feelings (such as numbness), and liver and kidney damage.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Permethrin (52645-53-1)				
Active Ingredient(s)	Duration	Species	Value	Units
Permethrin	LC50	aquatic arthropods	0.02 - 7.6	µg/L
	LC50	Fish	0.05 - 315	µg/L
	LD50 Oral	Bobwhite quail	>5200	mg/kg
	LD50 Oral	Mallard duck	>5200	mg/kg
	LD50	Bee	0.026 - 0.17	µg/bee

Environmental Fate

Permethrin (52645-53-1)		
Active Ingredient(s)	Type of Test	Result
Permethrin	Bioconcentration factor (BCF) <i>Lepomis macrochirus</i> (Bluefill sunfish)	535
	Half-life in soil	~30 days
	log Pow	6.1
	Mobility in soil	Not expected to reach groundwater
	Stability in water	Stable to hydrolysis over a wide range of pH values.

13. DISPOSAL CONSIDERATIONS

Waste disposal methods Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is prohibited. If these wastes cannot be disposed of by use according to label instructions, contact appropriate disposal authorities for guidance.

Contaminated packaging Containers must be disposed of in accordance with local, state and federal regulations. Refer to the product label for container disposal instructions.

14. TRANSPORT INFORMATION

DOT The classification below pertains to the shipment in bulk and non-bulk packaging.

Packaging Type	Bulk,
Proper shipping name	Combustible liquid, n.o.s.
UN/ID No	NA1993
Hazard Class	Combustible
Packing group	III

DRAGNET® SFR TERMITICIDE/INSECTICIDE**MSDS #: 1784-A**
Revision Date: 2014-02-21
Version 1.03**Description** NA1993, Combustible liquid, n.o.s. (Aromatic hydrocarbons), III**TDG**

Classification below is only applicable when shipped by vessel and is not applicable when shipped by road or rail only.

UN/ID No UN3082
Proper shipping name Environmentally hazardous substance, liquid, n.o.s.
Hazard Class 9
Packing group III
Marine pollutant Permethrin.
Description UN3082, Environmentally hazardous substance, liquid, n.o.s. (permethrin), 9, PGIII, Marine Pollutant**ICAO/IATA****UN/ID No** UN3082
Proper shipping name Environmentally hazardous substance, liquid, n.o.s.
Hazard Class 9
Packing group III
Marine pollutant Permethrin
Description UN3082, Environmentally hazardous substance, liquid, n.o.s. (permethrin), 9, PGIII, Marine Pollutant**IMDG/IMO****UN/ID No** UN3082
Proper shipping name Environmentally hazardous substance, liquid, n.o.s.
Hazard Class 9
Packing group III
EmS No. F-A, S-F
Marine pollutant Permethrin
Description UN3082, Environmentally hazardous substance, liquid, n.o.s. (permethrin), 9, PGIII, Marine Pollutant

15. REGULATORY INFORMATION

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Chemical Name	CAS-No	Weight %	SARA 313 - Threshold Values %
Permethrin	52645-53-1	38.85	1.0

SARA 311/312 Hazard Categories

Acute Health Hazard	yes
Chronic Health Hazard	yes
Fire Hazard	yes
Sudden Release of Pressure Hazard	no
Reactive Hazard	no

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

Component	U.S. - TSCA (Toxic Substances Control Act) - Section 8(d) - 716.120(a) - Health and Safety Reporting - List of Substances
1,1'-Biphenyl, bis(1-methylethyl)- 69009-90-1 (20-30)	06/28/1984

International Regulations

Mexico - Grade

No information available

Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

WHMIS Hazard Class

D2B Toxic materials



16. OTHER INFORMATION

Revision Date: 2014-02-21
Reason for revision: 14.

Disclaimer

FMC Corporation believes that the information and recommendations contained herein (including data and statements) are accurate as of the date hereof. **NO WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE, WARRANTY OF MERCHANTABILITY OR ANY OTHER WARRANTY, EXPRESSED OR IMPLIED, IS MADE CONCERNING THE INFORMATION PROVIDED HEREIN.** The information provided herein relates only to the specified product designated and may not be applicable where such product is used in combination with any other materials or in any process. Use of this product is regulated by the U.S. Environmental Protection Agency (EPA). It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Further, since the conditions and methods of use are beyond the control of FMC Corporation, FMC corporation expressly disclaims any and all liability as to any results obtained or arising from any use of the products or reliance on such information.

Prepared By

FMC Logo and Dragnet - Trademarks of FMC Corporation

© 2014 FMC Corporation. All Rights Reserved.

End of Material Safety Data Sheet