

5481-550

10/18/2012

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

OCT 18 2012

OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION

Christopher Davis  
Registration Manager  
Amvac Chemical Corporation  
4695 MacArthur Court, Suite 1200  
Newport Beach, CA 92660

Subject: Amendment – Revised Environmental Hazards Section  
Prelude® Termiticide/Insecticide  
EPA Reg. No. 5481-550  
Your submission dated June 22, 2012


Dear Mr. Davis:

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended, is acceptable subject to the comments listed below. Two (2) copies of the finished labeling must be submitted prior to releasing the product for shipment. A stamped copy of the label is enclosed for your records.

1. Revise the following label heading to read:
  - a. Replace "GENERAL INFORMATION ON THE USE OF THIS PRODUCT FOR TERMITE CONTROL" with "INFORMATION ON THE USE OF THIS PRODUCT FOR TERMITE CONTROL".
  - b. Replace "GENERAL INFORMATION FOR INDOOR/OUTDOOR PEST CONTROL" with "INFORMATION FOR INDOOR/OUTDOOR PEST CONTROL".
  - c. Replace "GENERAL INFORMATION FOR CONTROL OF WOOD-INFESTING INSECTS AND NUISANCE PESTS OUTSIDE OF STRUCTURES" with "INFORMATION FOR CONTROL OF WOOD-INFESTING INSECTS AND NUISANCE PESTS OUTSIDE OF STRUCTURES".
  - d. Replace "RECOMMENDED APPLICATION RATES" with "APPLICATION RATES".
  - e. Replace "GENERAL APPLICATION INSTRUCTIONS" with "APPLICATION INSTRUCTIONS".
  - f. Replace "GENERAL PRECAUTIONS AND RESTRICTIONS" with "PRECAUTIONS AND RESTRICTIONS".
2. Replace "Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum or using tobacco" with "Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet" in the Precautionary Statement.

- 3. On page 11 under *General Information For Indoor/Outdoor Pest Control*, replace "Permitted areas of use include, but are not limited to, industrial building, houses ... etc" with "Permitted areas of use include, industrial building, houses ... etc".
- 4. On page 12 under *Landscaped Lawn and Ornamental Areas*, replace "Prelude Termiticide/Insecticide may be used to control insect pests on ornamentals and lawns ... etc" with "Prelude Termiticide/Insecticide may be used to control listed insect pests on ornamentals and lawns ... etc". Also under *General Application Instructions*, replace "Prelude Termiticide/Insecticide can be used for residential pest control in and on buildings ... etc" with "Prelude Termiticide/Insecticide can be used for listed residential pest control in and on buildings ... etc".
- 5. On page 13 under *Outside Surfaces and Around Buildings*, replace "Apply Prelude Termiticide/Insecticide using a 0.50% emulsion as a residual treatment to outside surfaces of buildings including, but not limited to, exterior siding ... etc" with "Apply Prelude Termiticide/Insecticide using a 0.50% emulsion as a residual treatment to outside surfaces of buildings including, exterior siding ... etc".

If you have any questions regarding this action, please contact BeWanda Alexander at [Alexander.bewanda@epa.gov](mailto:Alexander.bewanda@epa.gov) or (703) 305-7460.

Sincerely,  
  
 Richard Gebken  
 Product Manager 10  
 Insecticide Branch  
 Registration Division (7505P)

3/19

# PRELUDE<sup>®</sup> TERMITICIDE/INSECTICIDE

For Use by Individuals/Firms Licensed or Registered by the State to Apply Pesticide Products. States May Have More Restrictive Requirements Regarding Qualifications of Persons Using This Product. Consult the Pest Control Regulatory Agency of Your State Prior to Use of This Product.

An Insecticide for control of termites and other insects or arthropod pests.

### ACTIVE INGREDIENT:

Permethrin <sup>1</sup>	By Weight
(3-Phenoxyphenyl)methyl(±)- <i>cis, trans</i> -3-(2,2-dichloroethenyl)-2,2-dimethylcyclopropanecarboxylate*	25.6%

<b>INERT INGREDIENTS<sup>2</sup>:</b>	<b>74.4%</b>
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<b>TOTAL</b>	<b>100.0%</b>
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<sup>1</sup>Synthetic pyrethroid

<sup>2</sup>Contains petroleum distillates

\**Cis, trans* ratio: Min. 35% (±) *cis* and Max 65% (±) *trans*

Prelude Termiticide/Insecticide contains 2 lbs. active ingredient per gallon.

ACCEPTED  
 with COMMENTS  
 In EPA Letter Dated  
 OCT 18 2012  
 Under the Federal Insecticide,  
 Fungicide, and Rodenticide Act,  
 as amended, for the pesticide  
 registered under EPA Reg. No.  
 5481-550

## KEEP OUT OF REACH OF CHILDREN

### CAUTION

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.  
(If you do not understand the label, find someone to explain it to you in detail.)

FIRST AID	
<b>If in eyes:</b>	<ul style="list-style-type: none"> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If on skin or clothing:</b>	<ul style="list-style-type: none"> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If swallowed:</b>	<ul style="list-style-type: none"> <li>Call a poison control center or doctor immediately for treatment advice.</li> <li>Do not give any liquid to the person.</li> <li>Do not induce vomiting unless told to do so by the poison control center or doctor.</li> <li>Do not give anything by mouth to an unconscious person.</li> </ul>
<b>If inhaled:</b>	<ul style="list-style-type: none"> <li>Move person to fresh air.</li> <li>If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.</li> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>
EMERGENCY INFORMATION	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	
<b>FOR THE FOLLOWING EMERGENCIES, PHONE 24 HOURS A DAY:</b>	
For Medical Emergencies, phone:	1-888-661-4261
For Transportation Emergencies, including spill, leak or fire, phone: CHEMTREC	1-800-424-9300
For Product Use Information, phone: AMVAC	1-888-462-6822
NOTE TO PHYSICIAN	
Contains petroleum distillate – vomiting may cause aspiration pneumonia.	

SEE SIDE/BACK PANEL FOR ADDITIONAL PRECAUTIONARY STATEMENTS AND DIRECTIONS FOR USE.

EPA Reg. No. 5481-550

EPA Est. No.

Net Contents:

As Marked on Container



4100 E. Washington Blvd.  
Los Angeles, CA 90023 U.S.A

**PRECAUTIONARY STATEMENTS****HAZARDS TO HUMANS AND DOMESTIC ANIMALS****CAUTION**

Harmful if swallowed, absorbed through skin or inhaled. Causes eye irritation. Avoid contact with eyes, skin or clothing. Avoid breathing vapor or spray mist. Wash thoroughly with soap and water after handling and before eating, drinking or using tobacco. Remove and wash contaminated clothing before reuse.

**PERSONAL PROTECTIVE EQUIPMENT (PPE)**

All pesticide handlers (mixers, loaders, and applicators) must wear a waterproof apron or long-sleeved shirt and long pants, socks, shoes and chemical-resistant gloves. Regular work shirts, pants, socks, shoes and waterproof gloves are sufficient 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, or an in-line injector system. In addition, all pesticide handlers must wear a respiratory protection device<sup>1</sup> when working in a non-ventilated space; all pesticide handlers must wear protective eyewear (goggles and/or a face shield and/or shielded safety glasses with front, brow and temple protection) when working in a non-ventilated space or when applying termiticide by rodding or sub-slab injection.

<sup>1</sup>Use a NIOSH approved respirator with an organic vapor (OV) cartridge or canister with any R, P or HE prefilter; or a supplied air respirator with a NIOSH approval number prefix TC-19C; or a self contained breathing apparatus (SCBA) with a NIOSH approval number TC-13F.

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 pesticide is extremely toxic to fish and aquatic invertebrates. Drift and run-off from treated areas may be hazardous to aquatic organisms in neighboring areas. Care should be used when spraying to avoid fish and reptile pets in/around ornamental ponds.

To protect the environment, do not allow pesticide to enter or run off into storm drains, drainage ditches, gutters or surface waters. Applying this product in calm weather when rain is not predicted for the next 24 hours will help to ensure that wind or rain does not blow or wash pesticide off the treatment area. Rinsing application equipment over the treated area will help to avoid run off to water bodies or drainage systems.

This product is highly toxic to bees exposed to direct treatment or residues on crops or weeds. Do not apply Prelude Termiticide/Insecticide, or allow it to drift, to crops or weeds on which bees are actively foraging. Additional information may be obtained from Cooperative Extension Service. Apply this product only as specified on this label.

**PHYSICAL OR 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.

Do not use in commercial greenhouses or nurseries. Not for use on plants or turf being grown for sale or other commercial use, or for commercial seed production, or for research purposes. Do not use on food or feed crops. For use on plants intended for aesthetic purposes or climate modification and being grown in interior plantscapes, ornamentals, gardens or parks, or lawns and grounds.

Do not water treated area to the point of run-off.

Do not make applications during rain. Application is prohibited directly into sewers or drains, or to any area like a gutter where drainage to sewers, storm drains, water bodies, or aquatic habitat can occur. Do not allow the product to enter any drain during or after application.

**Additional Application Restrictions for Residential Outdoor Surface and Space Sprays:**

All outdoor applications must be limited to spot or crack-and-crevice treatments only, except for the following permitted uses:

- (1) Treatment to soil or vegetation around structures;
- (2) Applications to lawns, turf, and other vegetation;
- (3) Applications to building foundations, up to a maximum height of 3 feet.

Other than applications to building foundations, all outdoor applications to impervious surfaces such as sidewalks, driveways, patios, porches and structural surfaces (such as windows, doors, and eaves) are limited to spot and crack-and-crevice applications, only.

**GENERAL INFORMATION ON THE USE OF THIS PRODUCT FOR TERMITE CONTROL**

Chemicals for soil treatment are used to establish a barrier against termite attack. 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.

For the effective use of this product, it is necessary that the service technician be familiar with current control practices including trenching, rodding, subslab injection, and low-pressure spray applications. These techniques must be correctly employed to prevent or control infestations by subterranean termite species, including *Reticulitermes*, *Zootermopsis*, *Heterotermes* and *Coptotermes* (Formosan termite). Choice of appropriate procedures should include consideration of such variable factors as the design of the structure, water table, soil type, soil compaction, grade conditions, location and type of domestic water supplied and drainage systems. The biology and behavior of the termite 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.

Effective termite control also includes elimination of termite access to moisture by recommending repair of faulty construction grade and/or plumbing. It is recommended to remove all wood and cellulose containing debris in contact with soil from crawl spaces, porches, and around foundations.

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

**STAINING**

Each year prior to an application to vinyl siding, treat a small area on all sides of the structure where weathering is most severe, and allow to dry. Observe for staining. Some types of vinyl siding, particularly if aged or weathered, may show some staining after application of an emulsifiable concentrate product. To completely eliminate the potential risk associated with staining, it is suggested that a water-based product such as Demand® CS be used.

**SUBTERRANEAN TERMITE CONTROL**

**USE DIRECTIONS**

Apply 0.50%-1% emulsion to establish subsurface termite control barriers specified on product labeling. Avoid contamination of public and private water supplies 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 wells or cisterns.
- Care must be taken to avoid runoff. Do not treat soil that is water-saturated or frozen. Do not treat while precipitation is occurring.
- Care should be taken that the treatment solution is not introduced into the gravel and/or pipe drainage system which may be located on the exterior of the foundation in close proximity to the footing of the structure.

Consult State and local specifications for recommended distance of treatment areas from wells. Refer to Federal Housing Administration Specifications for guidance on preconstruction treatments if no State or local government recommendations are available.

**MIXING DIRECTIONS**

Mix the termiticide use dilution in the following manner:

1. Fill tank 1/4 to 1/3 full with water.
2. Start pump to begin by-pass agitation and place end of treating tool in tank to allow circulation through hose.
3. Add appropriate amount of Prelude Termiticide/Insecticide.
4. Add remaining amount of water.
5. Let pump run and allow recirculation through the hose for 2-3 minutes.

To prepare a 0.50% water emulsion, ready for use, dilute 2 gal. of Prelude Termiticide/Insecticide with 98 gals. of water. To prepare a 1% water emulsion, ready to use, dilute 4 gal. of Prelude Termiticide/Insecticide with 98 gals. of water. For termite control operations requiring smaller volumes use 2.6 fl. oz. of Prelude Termiticide/Insecticide per gal. of water to achieve a 0.50% concentration.

**After Treatment**

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

**APPLICATION VOLUMES**

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.

**Note:** When volume is reduced, the hole spacing for subslab injection and soil rodding may require similar adjustments to account for lower volume dispersal of the termiticide in the soil. Volume adjustments at 2% are not recommended for subslab injection.

<b>Volume Adjustment Chart</b>			
<b>Volume Allowed</b>	<b>Rate (% Emulsion)</b>		
	<b>0.50%</b>	<b>1%</b>	<b>2%</b>
Horizontal (gal. emulsion/10 ft. <sup>2</sup> )	1 gal.	0.5-1 gal.	0.25-0.5 gal.*
Vertical (gal. emulsion/10 lin. ft.)	4 gal.	2-4 gal.	1-2 gal.*

\*Not recommended for subslab injections.

**PRECONSTRUCTION SUBTERRANEAN TERMITE TREATMENT**

The treatment site must be covered prior to a rain event in order to prevent run-off of the pesticide into non-target areas.

Do not treat soil that is water saturated or frozen. Do not treat when raining. Do not allow treatment to runoff from the target area. Do not apply within 10 feet of storm drains. Do not apply within 25 feet of aquatic habitats (such as, but not limited to, lakes; reservoirs; rivers; permanent streams; marshes or ponds; estuaries; and commercial fish farm ponds). Do not make on-grade applications when sustained wind speeds are above 10mph (at application site) at nozzle end height.

Effective preconstruction subterranean termite control, including Formosan termites, requires the establishment of an unbroken vertical and/or horizontal chemical barrier between wood in the structure and the termite colonies in the soil.

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.

To meet F.H.A. termite-proofing requirements, follow the latest edition of the Housing and Urban Development (H.U.D.) Minimum Property Standards.

**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.**

After grading is completed and prior to pouring of the slab, slab-supported or constructed porches, and other critical areas, make the following treatments:

**HORIZONTAL BARRIERS**

Before footings are poured, horizontal barriers may be established in footing trenches. Then, after interior grading is completed and prior to the pouring of concrete slabs, horizontal barriers may be established on soil that will be covered by construction. To provide a horizontal barrier, apply the emulsion at the rate of 1 gal./10 sq. ft. to dirt fill. If fill is washed gravel or other coarse material, apply at 1.5 gal./10 sq. ft.

- Applications shall be made with low pressure (less than 50 p.s.i. at the nozzle) using a coarse-spray nozzle when establishing horizontal barriers.
- If concrete slabs cannot be poured over soil the same day it has been treated, a waterproof cover, such as polyethylene sheeting, should be placed over the soil to prevent erosion. This is not necessary if foundation walls have been installed around the treated soil.

**VERTICAL BARRIERS**

After the foundation walls have been poured or built, vertical barriers may be established around the perimeters of floating or supported slabs, around utilities penetrating the slab, and in other critical areas. After the final exterior grading is completed, vertical barriers may be created in back-filled soil against foundation walls. To produce a vertical barrier, apply the emulsion at the rate of 4 gal./10 lin. ft./ft. of depth from grade to the top of the footing. For example, a footing 3 ft. deep would require 12 gal. of emulsion/10 lin. ft.

When treating foundations deeper than 4 ft., 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 ft. 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 ft. 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.**

A trench need not be wider than 6 inches. Rod from the base of a shallow trench to the top of the footings. Low-pressure spray (less than 50 p.s.i. at the nozzle) may be used to treat soil which will be replaced in the trench. Mix the emulsion with the soil as it is being replaced in the trench.

Soil should be treated around sewer lines, plumbing, or around any other utility extending from the soil through a slab.

**HOLLOW MASONRY UNITS OF THE FOUNDATION**

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 gal. of emulsion/10 lin. ft. of footing using a nozzle pressure of less than 25 p.s.i. When using this treatment, access holes must be drilled below the sill plate and should be as close as possible to the footing as is practical. Treatment of voids in block or rubble foundation walls must be closely examined: Applicators must inspect areas of possible runoff as a precaution against application leakage in the treated areas. Some areas may not be treatable or may require mechanical alteration prior to treatment.

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

Not for use in voids insulated with rigid foam.

Do not treat in this manner through voids in walls constructed on interior slabs such as basement floors.

**CRAWL SPACES**

For crawl spaces, apply at the rate of 4 gal. of emulsion/10 lin. ft./ft. of depth from grade to the top of the footing. When the footer is more than 4 ft. below grade, the applicator should treat along foundation wall to 4 ft. of depth.

Application may be made by trenching and rodding into the trench, or trenching. If the footing is exposed at or above grade, application should be made with special care to avoid washout around the footing. Treatment should include both sides of foundation and around all piers and pipes extending from the soil.

- 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.

**MONOLITHIC SLABS**

In the case of a single-pour monolithic slab that does not have a separate foundation or footing, an overall horizontal barrier should be created before the concrete is poured using a rate of 1 gal. of emulsion/10 sq. ft. If fill is washed gravel or other coarse material, apply at the rate of 1.5 gal./10 sq. ft. Critical areas beneath the slab such as utility pipe entries may be treated at the rate of 4 gal./10 lin. ft. around the pipe.

Exterior vertical barriers should be created after the concrete has been poured and final grade established. Apply the emulsion at the rate of 4 gal./10 lin. ft./ft. of depth to the bottom of the concrete.

**POSTCONSTRUCTION TREATMENTS**

Postconstruction applications shall be made by subslab injection, trenching and rodding into the trench, or trenching using low-pressure spray not exceeding 25 p.s.i. at the nozzle.

For applications made after the final grade is installed, the applicator must trench and rod into the trench, or trench along the foundation walls and around pillars and other foundation elements, at the rate prescribed from grade to the top of the footing. When the footing is more than 4 ft. 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 4 ft. 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 depth not to exceed the bottom of the footing. However, **in no case should a structure be treated below the footing.**

Rodholes or trenches should not extend below the footing because of the possibility of soil washout by the emulsion.

Do not apply emulsion until location of heat or air-conditioning ducts, vents, and water and sewer (or plumbing) lines are known and identified. Extreme caution must be taken to avoid contamination of these structural elements and airways.

**SLAB-ON-GROUND**

Vertical barriers may be established by subslab injection inside, and trenching and rodding into the trench or trenching outside, at the rate of 4 gal. of emulsion/10 lin. ft./ft. of depth. Special care must be taken to distribute the treatment evenly. Injectors should not extend below the tops of the footings.

Treat the soil from grade to the top of the footing along the outside and, where necessary, along the inside of the foundation perimeter. Treatment may also be required along one side of a partition wall (especially where the wall is connected to the floor by fixtures inserted in the slab) and along cracks, expansion joints, and other critical areas.

Horizontal barriers may be established where necessary by long rodding or by a grid pattern injection using a rate of 1 to 1.5 gal. of emulsion/10 sq. ft. depending on fill type and condition.

Drill holes should be spaced in a manner that will allow for application of a continuous chemical barrier.

Where necessary, drill through the foundation walls from the outside and inject the chemical just beneath the slab or along the inside of the foundation.

Along the outside of the foundation walls where shallow foundations exist (1 ft. or less), dig a narrow trench approximately 6 in. wide and not below the top of the footing. Apply the emulsion at the rate of 2 gal./10 lin. ft. As the soil is being replaced into the trench, apply another 2 gal./10 lin. ft. to the backfill.

When making soil applications to the foundations extending deeper than 1 ft., follow instructions under **BASEMENTS – Outside Perimeter.** (See exception for monolithic slabs.)

**HOLLOW MASONRY UNITS OF FOUNDATION WALLS**

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 gal. of emulsion/10 lin. ft. of footing using a nozzle pressure of less than 25 p.s.i. When using this treatment, access holes must be drilled below the



sill plate and should be as close as possible to the footing as is practical. Treatment of voids in block or rubble foundation walls must be closely examined: Applicators must inspect areas of possible runoff as a precaution against application leakage in the treated areas. Some areas may not be treatable or may require mechanical alteration prior to treatment.

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

Not for use in voids insulated with rigid foam.

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.

**BASEMENTS**

Apply the emulsion at the rate of 4 gal./10 lin. ft./ft. of depth from the grade to the top of the footing. For example, a footing 3 ft. deep would require 12 gal. of emulsion/10 lin. ft. Application shall be made by subslab injection, trenching and rodding into the trench, or trenching.

**Inside**

Treatment may be required along inside of foundation walls and along one side of interior partition walls especially where the wall is connected by fixtures inserted in the floor. Application may also be necessary around sewer pipes, floor drains, conduits, or any cracks in the basement floor. Drill holes should be spaced in a manner that will allow for application of a continuous chemical barrier.

**Note:** Sandy soils will tend to give less lateral dispersion than clay soils. Spacing should be determined by soil type.

**Outside Perimeter**

Applications must be made by trenching and rodding into the trench, or trenching. When rodding from grade or from the bottom of a shallow trench, rod holes should be spaced in a manner that will allow for application of a continuous chemical barrier. Rod holes should not extend beneath the top of the footings.

A trench need not be wider than 6 inches. Rod from the base of a shallow trench to the top of the footings. Low-pressure spray (not exceeding 25 p.s.i.) may be used to treat soil which will be replaced in the trench. Mix the emulsion with the soil as it is being replaced in the trench.

When the footer is more than 4 ft. below grade, the applicator may trench, or trench and rod into the trench along foundation wall to 4 ft. of depth.

**ACCESSIBLE CRAWL SPACES**

For crawl spaces, apply vertical termiticide barriers at the rate of 4 gal. of emulsion/10 lin. ft./ft. of depth from grade to the top of the footing, or if the footing is more than 4 ft. below grade, to a minimum depth of 4 ft. 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.

- Rod holes and trenches must not extend below the bottom of the footing.
- Rod holes must be spaced so as to achieve a continuous chemical barrier but in no case more than 12 in. apart.
- 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.
- When treating crawl spaces, turn off the air circulation system of the structure until application has been completed and all termiticide has been absorbed by the soil.

**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.

- To establish a horizontal barrier, apply to the soil surface, 1 gal. of emulsion/10 sq. ft. overall using a nozzle pressure of less than 25 p.s.i. and a coarse application nozzle (e.g., Delavan Type RD Raindrop, RD-7 or larger, or Spraying Systems Co. 8010LP TeeJet or comparable nozzle). For an area that cannot be reached with the application wand, use one or more extension rods to make the application to the soil. Do not broadcast or power spray with higher pressures.
- 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 gal. of emulsion/10 sq. ft. Drill spacing must be at intervals not to exceed 16 in. Many states have smaller intervals so check state regulations which may apply.

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

**Note:** Children and pets should be kept out of the treated area until surface is dry.

It is recommended that inadequately ventilated crawl spaces be brought into compliance with FHA Minimum Property Standards specifying 1 sq. ft. of ventilated opening/150 sq. ft. of crawl space area.

**BATH TRAPS**

Where there is exposed soil beneath and around plumbing/waste pipe entrances through a concrete slab, this soil may be treated with 0.50% emulsion 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 (from board materials) or cellular debris, treat the soil by rodding and/or drenching with 0.50% emulsion of this product.

**FOAM APPLICATIONS**

Prelude Termiticide/Insecticide emulsion may be converted to a foam and the foam used to treat voids to control or prevent termite, ant, bee, wasp infestations or other arthropods harboring under slabs and in other void areas.

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

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

Rates: Use a 0.50%-2.0% emulsion converted to a foam with expansion characteristics from 2-20 times.

**Note:** When using a foaming product be sure that it is compatible with Prelude Termiticide/Insecticide.

**Applications Under Slabs or to Soil in Crawl Spaces**

- Applications should be made using Prelude Termiticide/Insecticide foam in combination with liquid emulsion applications.
- The total amount of product applied with the combination of foam and liquid emulsion should be equivalent to that of an application using a liquid emulsion only.

**Applications to Other Areas**

- Applications may be made using either Prelude Termiticide/Insecticide foam alone or in combination with a liquid emulsion.
- Applications may be made behind veneers, piers (concrete or wood), chimney bases, into rubble foundations, into block voids, structural voids (i.e., between stud walls), poles, stumps, and wood in crawl spaces.
- Applications may be made in other areas, which include but are not limited to:
  - Foundations penetrated by utility services
  - Cracks and expansion joints

- o Bath traps
- o Areas where cement constructions have been poured adjacent to the foundation such as stairs, patios and slab additions

**POSTS, POLES AND OTHER CONSTRUCTIONS**

Application may be made to create a chemical barrier in the soil around wooden construction such as signs and landscape ornamentation by applying a 0.50%-1.0% emulsion. Treat on all sides to create a continuous barrier around posts and poles.

Use 1 gal. of emulsion/ft. of depth for poles and posts less than 6 in. in diameter. For larger poles, use 1.5 gal. of emulsion/ft. of depth. For large constructions, use 4 gal./lin. ft./ft. 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 subsurface 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 6 inches below the bottom of the wood.

Do not contaminate wells or cisterns.

**STRUCTURES WITH WELLS/CISTERNS INSIDE FOUNDATIONS**

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

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 gal. of dilute emulsion per 10 lin. ft./ft. of depth of the trench, or 1 gal./1.0 cu. ft. 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 **TREATMENT OF WOOD IN PLACE FOR CONTROL OF TERMITES AND WOOD INFESTING BEETLES** 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 ft. 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.

**POST-CONSTRUCTION AFTER TREATMENT**

Before leaving the job site, securely plug all holes drilled in construction elements of commonly occupied areas of structures, including unfinished basements, enclosed porches, garages, and workshops.

**UNDERGROUND SERVICES**

Examples of underground services are wires, cables, utility lines, pipes and conduits. Services may be within structures or located outside structures, in right-of-ways or to protect long range (miles) or installations of services.

Soil treatment may be made using a 0.50%-1% Prelude Termiticide/Insecticide emulsion to prevent attack by termites and ants.

Apply 2-4 gal. of emulsion/10 lin. ft. to the bottom of the trench and allow to soak into the soil. Lay services on the treated soil and cover with approximately 2 in. of fill soil. Apply another 2-4 gal./10 lin. ft. over the soil surface to complete the treatment barrier.

In wide trenches, only treat the soil in the area near the service. It is important to establish a continuous barrier of treated soil surrounding the services.

Where soil conditions will not accept application of specified volume of 0.50% emulsion, the 1% emulsion may be applied at 1/2 the application rate or 2 gal./10 lin. ft.

Finish filling the trench with untreated fill soil. The soil where each service protrudes from the ground may be treated by trenching and rodding into the trench, or trenching of no more than 1-2 gal. of emulsion into the soil.

**Precaution:** Do not treat electrically-active underground services.

**RETREATMENT**

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.

**TREATMENT OF WOOD IN PLACE FOR CONTROL OF TERMITES AND WOOD INFESTING BEETLES**

(Localized areas in Structures). In addition to subsurface 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. Overall broadcast spray applications must be limited to attics, crawl spaces, unfinished basements and similar generally unoccupied areas. In occupied indoor areas, treat wood trim and exposed beams by brush or coarse spray directed only into the wood to be treated.

**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 reuse. Remove pets, birds, and cover aquariums before spraying indoors. 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.

**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 0.25%-0.50% 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 0.25%-0.50% emulsion to control workers and winged reproductive forms of termites in mud shelter 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. Make treatments at a rate of 1 gal. of the emulsion/1,000 sq. ft. of surface area.

For termites active inside trees, utility poles and/or fence posts, drill to find the interior infested cavity and inject 0.25%-0.50% emulsion using treatment tool with a splashback guard.

Termite carton nests in trees or building voids may be injected with 0.50% 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.

**CONTROL OF WOOD-INFESTING BEETLES**

To control wood infesting insects such as powderpost beetles (Lyctidae), false powderpost beetles (Bostrichidae), deathwatch beetles (Anobiidae), old house borers (Cerambycidae) and ambrosia beetles (Scolytidae) in homes and other structures, apply as an emulsion containing 0.50% Prelude Termiticide/Insecticide. For treatment of small areas, apply by brushing the emulsion evenly on wood surfaces. For large or overhead areas, apply as a coarse spray. When making applications to overhead interior areas of homes, apartment buildings, etc., cover all surfaces below the area being treated, except soil surfaces in crawl spaces, with plastic sheeting or other material which could be disposed of by placing in trash if contamination from dripping occurs. Treated surfaces should be avoided until application has completely dried. 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.

**GENERAL INFORMATION FOR INDOOR/OUTDOOR PEST CONTROL**

Prelude Termiticide/Insecticide 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, noncommercial greenhouses and the nonfood/feed areas of stores, warehouses, vessels, railcars, trucks, trailers, aircraft (cargo areas only), 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 Prelude Termiticide/Insecticide with other products, observe all precautions and limitations on the labels of each product. To prepare the emulsion, dilute Prelude Termiticide/Insecticide with water only.

Prelude Termiticide/Insecticide 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.

**Prelude Termiticide/Insecticide may be used as a broadcast or spot application to carpeting (such as for flea control).**

Other areas for broadcast or spot application include, wood, lawns and soil (crawl space and perimeter) and as a crack and crevice injection, or paint-on treatment. Crawl spaces are considered inside the structure. Consult tables for specific use instructions.

**CONTROL OF BEES AND WASPS INDOORS**

To control bees, wasp, hornets and yellow jackets, apply a 0.50% emulsion. Application should be in late evening when insects are at rest. Spray liberally into hiding and breeding places, especially under attic rafters, contacting as many insects as possible. Base need for treatment upon results of monitoring for pest presence.

**CONTROL OF BEES AND WASPS OUTDOORS**

To control bees, wasps, hornets, and yellow jackets, apply a 0.50% emulsion. Application should be made 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.

**GENERAL INFORMATION FOR CONTROL OF WOOD-INFESTING INSECTS AND NUISANCE PESTS OUTSIDE OF STRUCTURES**

Prelude Termiticide/Insecticide may be diluted with water for use to control pests in and around homes and other structures. Pests controlled are listed in the following tables.

**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 gal. of a 0.50%-1% emulsion/10 sq. ft. or 2 gal. of emulsion/10 lin. ft.

**IN CRAWL SPACES**

Broadcast Prelude Termiticide/Insecticide at 0.50%-1% to all surfaces in crawl spaces to control ants, fleas, cockroaches, 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 thoroughly, but not to point of runoff. Keep children and pets off surface until dry.

**LANDSCAPED LAWN AND ORNAMENTAL AREAS**

Prelude Termiticide/Insecticide 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.

Apply Prelude Termiticide/Insecticide when insects appear or feeding is noticed. The higher rate should be used as pest populations increase. Base need for treatment upon results of monitoring for pest presence. Use sufficient water to obtain full coverage.

Prelude Termiticide/Insecticide 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.

**Precautions:** All application equipment must be properly maintained and calibrated using appropriate carriers.

**RECOMMENDED APPLICATION RATES**

Use	Pest	Recommended Rate	Specific Instructions
Ornamentals in Residential Landscaped Areas and Landscaped Areas Around Institutional, Public, Commercial and Industrial Buildings, Parks, Recreational Areas and Athletic Fields (Including Trees, Shrubs, Flowers, Evergreens, Foliage Plants and Ground Covers)	Ants Aphids Bagworm Beet Armyworm Cabbage Looper Citrus Thrips Fungus Gnat Heliothis spp. Japanese Beetles Lace Bug Leaf Feeding Caterpillars Leafminers Leafhoppers Leafrollers Lygus Bugs Mealybugs Root Weevils (Adult) Whiteflies	6.4 – 12.8 fl. oz./100 gal.	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.
Lawns around Residential, Institutional, Public, Commercial and Industrial Buildings, Parks, Recreational Areas and Athletic Fields	Chinch Bug Grubs* Pill Bugs Sod Webworm* (See also list of pests under Outside Surfaces and Around Buildings)	0.64 – 1.28 fl. oz./1,000 ft <sup>2</sup>	Apply using sufficient water to provide adequate coverage.  Do not apply more than 2 lbs. a.i. per acre per year.

\*Not approved for use in California.

**APPLICATIONS TO AGRICULTURAL STRUCTURES**

**For Agricultural Use Only**

**GENERAL APPLICATION INSTRUCTIONS**

Prelude Termiticide/Insecticide can be used for residential pest control in and on buildings and structures used for agricultural purposes, and their immediate surroundings.

Prelude Termiticide/Insecticide 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. Prelude Termiticide/Insecticide may be applied as a spray or spot treatment to walls and ceilings as a residual surface treatment. Do not treat manure or litter. Avoid contamination of feed and water. Do not apply directly to livestock or poultry. To avoid the development of resistance in flies, alternate use of Prelude with non-pyrethroid insecticides, or

tank-mix an insect growth regulator (such as Archer®) with Prelude or apply an IGR as a supplemental treatment. Activity of Prelude may also be enhanced by the addition of synergists such as products containing piperonyl butoxide (PBO), MGK-264 or other synergist.

**AGRICULTURAL STRUCTURES**

Spray directly to walls and ceilings 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 Application	Dilute	Application Rates
Dairies, barns, feedlots, stables, poultry houses, swine and livestock houses	House flies, stable flies and other manure breeding flies. Also aids in the reduction of cockroaches, darkling beetles, mosquitoes and spiders.	Sprayer	6 oz. – 11.5 gal. water	1 gal./750 sq. ft. of surface

**OUTSIDE SURFACES AND AROUND BUILDINGS**

Apply Prelude Termiticide/Insecticide using a 0.50% emulsion as a residual treatment to outside surfaces of buildings including, but not limited to, exterior siding, foundations, porches, window frames, eaves, patios, garages, refuse dumps, lawn or grass adjacent or around private homes, duplexes, townhouses, condominiums, house trailers, apartment complexes, carports, garages, fence lines, storage sheds, barns, and other residential structures, commercial, industrial and institutional buildings, soil, trunks of woody ornamentals and other areas where pests congregate or have been seen. Base need for treatment upon results of monitoring for pest presence.

Keep children and pets off treated areas until dry.

Each year prior to an application to vinyl siding, treat a small area on all sides of the structure where weathering is most severe, and allow to dry. Observe for staining. Some types of vinyl siding, particularly if aged or weathered, may show some staining after application of an emulsifiable concentrate product. To completely eliminate the potential risk associated with staining, it is suggested that a water-based product such as Demand® CS be used.

**BARRIER TREATMENT**

Apply 0.50% to a band of soil and vegetation 6-10 ft. wide around and adjacent to the structure. Also, treat the foundation of the structure to a height of 2-3 ft. Use a treatment volume of 2-10 gal./1,000 sq. ft. Higher volumes of water may be needed if mulch or leaf litter is present or dense foliage. House siding may be treated if Gypsy moth adults and caterpillars, boxelder bugs, elm leaf beetles, earwigs, silverfish or other similar pests are present.

Pest	Specific Instructions
Ants Ant Mounds <sup>1</sup> Fireants <sup>1</sup> Carpenter Ants Bark Beetles <sup>3</sup> Bees Carpenter Bees Borers <sup>3</sup> Boxelder Bugs <sup>2</sup> Centipedes Chinch Bugs Cockroaches Asian Cockroaches Crickets	<p>Apply as a pin stream, as a fine/course, low pressure spray (20 psi or less), 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.</p> <p><sup>1</sup> Drench Method: Apply 1-2 gal. of emulsion to each mound area by sprinkling the mound until it is wet and treat a 4 ft. 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.</p> <p><sup>2</sup> Boxelder Bugs, Elm Leaf Beetles, Gypsy Moth Caterpillars, Seed Bugs: Spray tree trunks, building siding or wherever pests congregate, thoroughly, but not to the point of runoff.</p> <p><sup>3</sup> Borers and Bark Beetles: To prevent infestation of trees and woody ornamentals, spray the bark thoroughly, but not to the point of runoff.</p> <p><sup>4</sup> Fleas and Ticks: Mix 2.5-5.0 oz. of Prelude Termiticide/Insecticide in 16-100 gal. of</p>

Mole Crickets Earwigs Elm Leaf Beetles <sup>2</sup> Firebrats Fleas <sup>4</sup> Flies Ground Beetles Gypsy Moths (Adult & Caterpillars) <sup>2</sup>	water and apply to 4,000 sq. ft. of lawn. Use the lower rate to knock down existing fleas and the higher rate where faster knockdown or greater residual is desired.			
Millipedes Pill Bugs Scorpions Seed Bugs <sup>2</sup> Silverfish Sowbugs Spiders Ticks <sup>4</sup> Wasps	For residential lawns, apply Prelude Termiticide/Insecticide at the rate of 0.64-1.28 fl. oz./1,000 ft <sup>2</sup> in a volume of water sufficient for uniform coverage such as 3-20 gal. Use the lower rate to knock down pests and the higher rate where faster knockdown or greater residual is desired. For example, refer to table below:			
	<b>Lawn</b>	<b>Sq. Ft.</b>	<b>Oz. of Prelude</b>	<b>Gals. of Water</b>
	Small	1,000	0.64 – 1.28	3 – 20
		2,000	1.25 – 2.50	8 – 50
		4,000	2.50 – 5.00	16 – 100
	Medium	6,000	3.75 – 7.50	24 – 150
	Large	12,000	7.50 – 15.0	48 – 300
	1 Acre	44,000	20.8 – 41.6	176 – 1,100
	Lawn should not be longer than 3 in. at the time of application. Base need for retreatment upon results of monitoring for pest presence. Application in combination with compatible surfactants may enhance penetration. Arid climates generally require the higher volume.			
	Do not apply more than 2 lbs. a.i./A per year.			

**PEST CONTROL INDOORS**

**Food Handling Establishments**

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

**Food/Feed Areas**

Prelude Termiticide/Insecticide 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 service areas while food is exposed or facility is in operation. Service areas are areas where prepared foods are served such as dining rooms but excluding areas where food 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 Federally inspected Meat and Poultry Plants.

**Nonfood/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.

Use Prelude Termiticide/Insecticide to control pests listed in the following table by application of a 0.50% 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 gal./800-1,600 sq. ft. to infested areas such as crawl spaces, rugs, carpets, pet beds and other pet resting areas. Avoid wetting or soaking. For crawl space 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. Surface application of an IGR to control immature forms of the flea is recommended (e.g. Archer). 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.
House Dust Mites	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 gal./200-800 sq. ft. to infested areas such as rugs, carpets, along baseboards,



	furniture, in closets, on shelving, and other areas likely to harbor dust mites. Avoid wetting or soaking.
Ants* Carpenter Ants* Fire Ants Bat Bugs Bed Bugs Bees and Wasps Carpenter Bees Boxelder Bugs Centipedes 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 Seed Bugs Silverfish Sowbugs Spiders	Apply crack and crevice, as a pin stream, 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 cracks 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 Prelude Termiticide/Insecticide.  ** 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, foodstuffs or other items. Any foodstuffs accidentally contaminated with spray solution should be discarded.
Carpet Beetles	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.
Brown Dog Ticks	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 door frames, 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.

**GENERAL PRECAUTIONS AND RESTRICTIONS**

Do not use in food or feed areas of food handling establishments, restaurants or other areas where food or 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 food is served such as dining rooms but excluding areas where food may be prepared or held.

Nonfood/feed 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).

Not for use in federally inspected meat and poultry plants.

**DO NOT APPLY THIS PRODUCT TO EDIBLE CROPS.**

Do not apply in warehouses where raw or cured tobacco is stored.

Do not apply in warehouses while raw agriculture commodities for food or feed are being stored.

Do not allow spray to contact food, foodstuffs, food contacting surface, 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 apply to pets, crops, firewood 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.

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

Do not apply this product in any rooms being used as living, eating, sleeping or recovery area by patients, the elderly, or infirm when they are in the room.

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.

**SPRAY DILUTIONS\***

Concentration of A.I.	Amount of Prelude	Amount of Water
0.25%	1.3 fl. oz.	1 gal.
0.25%	2 qts.	49.5 gal.
0.25%	1 gal.	99 gals.
0.50%	2 gals.	98 gals.
0.50%	2.6 fl. oz.	1 gal.
1.0%	4 gals.	98 gals.
2.0%	10.4 fl. oz.	1 gal.
2.0%	8 gals.	98 gals.

\*Fill sprayer with the desired volume of water and add Prelude Termiticide/Insecticide. Close spray container and shake or agitate before use to ensure proper mixing. Make up diluted material only as required.

**STORAGE AND DISPOSAL**

**PROHIBITIONS:** Do not contaminate water, food or feed by storage or disposal. Open dumping is prohibited. Do not reuse empty container.

**PESTICIDE STORAGE:** Keep container closed when not in use. Do not store near food or feed. Protect from freezing. In case of spill or leak on floor or paved surfaces, soak up with sand, earth or synthetic absorbent. Remove to chemical waste area.

**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:** Nonrefillable container. Do not reuse or refill this container. Triple rinse container(or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling or reconditioning if available, or puncture and dispose of in a sanitary landfill, or, by other procedures allowed by state and local authorities.

**LIMITED WARRANTY AND DISCLAIMER**

The manufacturer warrants (a) that this product conforms to the chemical description on the label; (b) that this product is reasonably fit for the purposes set forth in the directions for use, subject to the inherent risks referred to herein, when it is used in accordance with such directions; and (c) that the directions, warnings, and other statements on this label are based upon responsible experts' evaluations of reasonable tests of effectiveness, of toxicity to laboratory animals and to plants and residues on food crops, and upon reports of field experience. Tests have not been made on all varieties of food crops and plants, or in all states or under all conditions.

**THERE ARE NO EXPRESS WARRANTIES OTHER THAN THOSE SET FORTH HEREIN. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW THE MANUFACTURER NEITHER MAKES NOR INTENDS, NOR DOES IT AUTHORIZE ANY AGENT OR REPRESENTATIVE, TO MAKE ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, AND IT EXPRESSLY EXCLUDES AND DISCLAIMS ALL IMPLIED WARRANTIES OF MERCHANTABILITY OF FITNESS FOR A PARTICULAR PURPOSE, OR ANY WARRANTY OF QUALITY OR PERFORMANCE. THIS WARRANTY DOES NOT EXTEND TO, AND THE BUYER SHALL BE SOLELY RESPONSIBLE FOR, ANY AND ALL LOSS OR DAMAGE WHICH RESULTS FROM THE USE OF THIS PRODUCT IN ANY MANNER WHICH IS INCONSISTENT WITH THE LABEL DIRECTIONS, WARNINGS OR CAUTIONS.**

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