

8033-109

1/6/2014

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

OFFICE OF
CHEMICAL SAFETY AND
POLLUTION PREVENTION

John Reilly
Nippon Soda Co., Ltd.
c/o Nisso America Inc.
88 Pine St.
New York, NY 10005

JAN 06 2014

Subject: Notification of Addition of Argentine Ant to the label
F4688 50 WSP Insecticide Termiticide; F5688 11% ME Insecticide Termiticide
EPA Reg #s 8033-96 and 8033-109
Submission Date: November 26, 2013

Dear Mr. Reilly:

The Agency is in receipt of your Applications for Pesticide Notification under Pesticide Registration Notice (PRN) 98-10 dated November 26, 2013, for the products F4688 50 WSP Insecticide Termiticide and F5688 11% ME Insecticide Termiticide (EPA Reg #s 8033-96 and 8033-109). The Registration Division (RD) has conducted a review of these requests for their applicability under PRN 98-10 and finds that the actions requested fall within the scope of PRN 98-10. The labels submitted (drafts 11/19/13) have been stamped "Notification" and will be placed in our records.

If you have any questions, please contact me directly at 703-347-0156 or urbanski.jennifer@epa.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Jennifer Urbanski".

Jennifer Urbanski, Ph.D.
Registration Division (7505P)
Office of Pesticide Programs

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United States
Environmental Protection Agency
Washington, DC 20460

- Registration
- Amendment
- Other: Notification

OPP Identifier Number

Application for Pesticide - Section I

1. Company/Product Number 8033-109	2. EPA Product Manager V.Eagle/ J. Urbanski	3. Proposed Classification <input checked="" type="checkbox"/> None <input type="checkbox"/> Restricted
4. Company/Product (Name) F5688 11% ME Insecticide Termiticide	PM# Team 1	
5. Name and Address of Applicant (Include ZIP Code) Nippon Soda Co., Ltd. c/o Nisso America Inc. 88 Pine Street, 14 th Floor New York, NY 10005 <input type="checkbox"/> Check if this is a new address		6. Expedited Review. In accordance with FIFRA Section 3(c)(3) (b)(I), my product is similar or identical in composition and labeling to:

Section - II

<input type="checkbox"/> Amendment - Explain below.	<input type="checkbox"/> Final printed labels in response to Agency letter dated _____
<input type="checkbox"/> Resubmission in response to Agency letter dated _____	<input type="checkbox"/> "Me Too" Application
<input checked="" type="checkbox"/> Notification - Explain below.	<input type="checkbox"/> Other - Explain below.

Explanation: Use additional page(s) if necessary. (For Section I and Section II.)

Notification to include the pest Argentine Ants on the F5688 11% ME product label

This notification is consistent with the provisions of PR Notice 98-10 and EPA regulations at 40 CFR § 152.46 and no other changes have been made to the labeling or the Confidential Statement of Formula for this product. I understand that it is a violation of 18 U.S.C. Sec 1001 to willfully make any false statement to EPA. I further understand that if this notification is not consistent with the terms of PR Notice 98-10 and 40 CFR § 152.46, this product may be in violation of FIFRA and I may be subject to enforcement action and penalties under sections 12 and 17 of FIFRA.

Proposed Fee Category: Non-PRIA action, No Fee Required
Proposed Fee: Non-PRIA action, No Fee Required
Contact person email: j.reilly@nissoamerica.com

NOTIFICATION

JAN 06 2014

Section - III

1. Material This Product Will Be Packaged In:				2. Type of Container	
Child-Resistant Packaging <input type="checkbox"/> Yes* <input type="checkbox"/> No	Unit Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No	Water Soluble Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Metal	<input type="checkbox"/> Plastic
*Certification must be submitted		If "Yes" Unit Packaging wgt.	No. per container	If "Yes" Package wgt.	No. per container
3. Location of Net Contents Information <input type="checkbox"/> Label <input type="checkbox"/> Container		4. Size(s) Retail Container		5. Location of Label Directions <input type="checkbox"/> On Label <input type="checkbox"/> On labeling accompanying product	
6. Manner in Which Label is Affixed to Product <input type="checkbox"/> Lithograph <input type="checkbox"/> Paper glued <input type="checkbox"/> Stenciled <input type="checkbox"/> Other _____					

Section - IV

1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application)		
Name John Reilly	Title Registration Specialist	Telephone No. (include Area Code) 212-490-0317
Certification I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.		6. Date Application Received (Stamped)
2. Signature 	3. Title Registration Specialist	
4. Typed Name John Reilly	5. Date 11-26-2013	



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NISSO AMERICA INC.

88 Pine St., 14th FL.

New York, NY 10005

Phone: (212) 490-0350

Fax: (212) 972-9361

November 26, 2013

Document Processing Desk [NOTIF]
Office of Pesticide Programs (7504P)
U.S. Environmental Protection Agency
Rm S-4900, One Potomac Yard
2777 South Crystal Drive
Arlington, VA 22202-4501

Attn: Ms. Venus Eagle /Ms. Jennifer Urbanski/ PM Team 1

Re: NOTIFICATION of the Addition of the Pest Argentine Ants on the F5688 11% ME Insecticide
Termiticide (EPA Reg. No. 8033-109) Product Label

Dear Ms. Eagle and Ms. Urbanski:

Nippon Soda Co., Ltd., c/o Nisso America Inc., (Nisso) is hereby notifying US EPA of the inclusion of the pest Argentine ants on the F5688 11% ME Insecticide Termiticide (EPA Reg. No. 8033-109) Product Label. Since the Argentine ant is not deemed a public health pest in EPA's *List of Pests of Significant Public Health Importance (PRN 2002-1)*, this action is being submitted via notification. The revised label will indicate that Argentine ants, as household and food/feed handling establishment pests, are able to be controlled by F5688 11%ME Insecticide Termiticide.

No other changes to labels are being made at this time.

In support of this notification, Nisso is submitting a 8570-1 Notification Form, a highlighted copy of the revised label, a clean copy of the revised label, and the currently approved EPA-stamped label.

Thank you for processing this notification and should you have any questions please contact me at 212-490-0317 or e-mail at j.reilly@nissoamerica.com

Sincerely,

John Reilly
Registration Specialist
Nisso America Inc.

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NOTIFICATION

JAN 06 2014

F5688 5U WSP Insecticide Termiticide

DRAFT 11/19/13

Addition of Argentine Ants

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F5688 11% ME Insecticide Termiticide

To control termites and listed household pests indoors and around the exterior perimeter of residential institutional, public, commercial industrial buildings, non-commercial barns (i.e., non-commercial barns are storage structures not intended for housing livestock other than pets), and food/feed handling establishments.

When used as a termiticide, individuals/firms must be licensed by the state to apply this product. 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.

EPA Reg. No. 8033-109

EPA Est. No.: _____

Active Ingredients:	By Wt.
Acetamiprid.....	5 %
Bifenthrin*	6 %
Other Ingredients:	89 %
.....	100 %

This product contains 0.44 lb. acetamiprid and 0.53 lb. bifenthrin active ingredients per gallon.

*Cis isomers 97% minimum, trans isomers 3% maximum.

Net Contents: ___ fluid ounces

**KEEP OUT OF REACH OF CHILDREN
CAUTION**

FIRST AID	
If swallowed	<ul style="list-style-type: none"> -Call poison control center or doctor immediately for treatment advice. -Have person sip a glass of water if able to swallow. -Do not induce vomiting unless told to do so by the poison control center or doctor. -Do not give anything by mouth to an unconscious person.
If inhaled	<ul style="list-style-type: none"> -Move person to fresh air. -If person is not breathing, call 911 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.

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If on skin or clothing	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.
If in eyes	-Hold eye open and rinse slowly and gently with water for 15-20 minutes. -Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. -Call a poison control center or doctor for treatment advice.
HOTLINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For MEDICAL and TRANSPORTATION Emergencies Only Call CHEMTREC AT 1-800-424-9300.	
NOTE TO PHYSICIAN	
This product contains a pyrethroid. If large amounts have been ingested, the stomach and intestine should be evacuated. Treatment is symptomatic and supportive. Digestible fats, oils, or alcohol may increase absorption and so should be avoided. All treatments should be based on observed signs and symptoms of distress in the patient. Overexposure to materials other than this product may have occurred.	
For Information Regarding the Use of this Product Call 800-321-1FMC (1362)	

PRECAUTIONARY STATEMENTS
Hazards to Humans and Domestic Animals

CAUTION

Harmful if swallowed. Causes moderate eye irritation. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Remove contaminated clothing and wash before reuse.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

All pesticide handlers (mixers, loaders and applicators) must wear long-sleeved shirts, long pants, socks, shoes, and chemical-resistant gloves while mixing. 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 device 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.

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User Safety Recommendations

Users should wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

Use one of the following 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 using the product as a termiticide and treating adjacent to an existing structure, the applicator must check the area to be treated, as well as 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 cleanup is completed.

Environmental Hazards

This pesticide is extremely toxic to wildlife, 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 avoid run-off to water bodies or drainage systems.

This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops if bees are visiting the treatment area.

Physical and Chemical Hazards

Do not apply water-based dilutions of F5688 11% ME Insecticide Termiticide to electrical conduits, motor housings, junction boxes, switch boxes or other electrical equipment because of possible shock hazard.

DIRECTIONS FOR USE

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

This product can also be used to control ants and other household pests outdoors around the exterior perimeter of buildings and structures.

For the following public health pests, do not apply less than the application rates specified on the label: Ants (including Red Imported Fire Ants and Carpenter Ants), Bed Bugs, Bees, Biting Flies, Carpenter Bees, Centipedes, Chiggers, Clover Mites, Cockroaches, Fleas, Flies, Gnats, Ground-nesting (solitary) bees and wasps, Midges, Mosquitoes, Scorpions, Spider Mites, Spiders (including Black Widow and Brown Recluse), Ticks (including Brown Dog Ticks), Wasps

Subterranean Termite Control

Please note that annual inspections are recommended in any termite management program.

The insecticidal dilution must be adequately dispersed in the soil to establish an effective barrier between the wood and the termites in the soil. For effective termite management incorporate the following cultural practices: 1) remove all non-essential wood and cellulose containing materials from around foundation walls, crawl spaces, and porches; 2) Repairing faulty plumbing and/or construction grade to eliminate termite access to moisture. Treat soil around untreated structural wood 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, 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 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.

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 specific local conditions, consult resources in structural pest control and state cooperative extension and regulatory agencies.

DILUTION CHART FOR SUBTERRANEAN TERMITE TREATMENTS

Number of fluid ounces	Gals of Water	Concentration of Active Ingredient
1.25	1 gallon	0.11% Active Ingredient

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F5688 50 WSP Insecticide Termiticide
DRAFT 11/19/13
Addition of Argentine Ants

	62.5	50 gallons	0.11% Active Ingredient	
	125	100 gallons	0.11% Active Ingredient	
Restrictions	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. 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 (HUD) for guidance.			
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.			
Application Rate	1.25 ounces per 1 gallon of water. When properly mixed in water, the end use dilution after adding 1.25 ounces of F5688 to 1 gallon of water for termites is 0.11% active ingredient.			
Mixing Directions	<p>Fill tank 1/4 to 1/3 full with water.</p> <p>Start pump to begin by-pass agitation and place end of treating tool in tank to allow circulation through hose. Add F5688 11% ME Insecticide Termiticide.</p> <p>Add remaining amount of water. Let pump run and allow recirculation through the hose for 2 to 3 minutes.</p> <p>F5688 11% ME Insecticide Termiticide may also be mixed into full tanks of water.</p>			
Application Volume	<p>For control of termite infestations, apply the specified volume of the finished water dilution 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.</p> <p>Certain elements of a structure may not need to be treated, such as the drilling and treatment of basement slabs in northern states.</p> <p>Large reductions of application volume reduce the ability to obtain a continuous treated zone. Variance is allowed when volume and concentration are consistent with label directed rates and a continuous treated zone can still be achieved.</p> <p>Where desirable for pre and post construction treatments, the volume of the F5688 11% ME Insecticide Termiticide dilution may be reduced by 1/2 the labeled volume (and doubling the</p>			

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	<p>amount of F5688 11% Insecticide Termiticide).</p> <p>When volume is reduced, the hole spacing for sub-slab injection and soil rodding may require similar adjustment to account for lower volume dispersal of the termiticide in the soil.</p>
After Treatment	<p>All holes in commonly occupied areas into which F5688 11% ME Insecticide Termiticide has been applied must be plugged. Plugs must be of a non-cellulose material or covered by an impervious, non-cellulose material.</p>

Pre-Construction Subterranean Termite Control
<p>Effective pre-construction subterranean termite control is achieved by establishment of vertical and horizontal insecticidal barriers using a 0.11% dilution of F5688 11% ME Insecticide Termiticide.</p> <p>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.</p> <p>When treating foundations deeper than 4 feet, apply the F5688 11% ME Insecticide Termiticide dilution 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. When trenching, the trench should be about 6 inches wide and 6 inches deep. 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.</p>

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<p>Horizontal Barriers</p>	<p>Create a horizontal barrier wherever treated soil within the foundation will be covered by a slab, such as slab floors, carports, and the soil beneath basement slabs, stairs, and crawl spaces.</p> <p>Apply 1 gallon of dilution per 10 square feet, to provide thorough and continuous coverage of the area being treated.</p> <p>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.</p> <p>Apply using a low-pressure spray (less than 50 p.s.i.) using a coarse spray nozzle. If the slab will not be poured the same day as treatment, cover treated soil with a waterproof barrier such as polyethylene sheeting. This is not necessary if foundation walls have been installed around the treated soil.</p>
<p>Vertical Barriers</p>	<p>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.</p> <p>Apply 4 gallons of dilution per 10 linear feet per foot of depth from grade to top of footing to ensure complete coverage.</p> <p>a. When trenching and rodding into the trench, or trenching, it is important that the dilution reaches the top of the footing. Rod holes must be spaced so as to achieve a continuous termiticide barrier, but in no case more than 12 inches apart.</p> <p>b. Care must be taken to avoid soil washout around the footing.</p> <p>c. Trenches should be about 6 inches wide and 6 inches deep. The dilution must be mixed with the soil as it is being replaced in the trench.</p> <p>d. For a monolithic slab, an inside vertical barrier may not be required.</p> <p>Hollow block voids may be treated at a rate of 2 gallons of dilution per 10 linear feet so that the dilution will reach the top of the footing.</p>
<p>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.</p>	

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The treatment site must be covered prior to a rain event in order to prevent run-off of the pesticide into non-target areas. The applicator must either cover the soil him/herself or provide written notification of the above requirement to the contractor on site and to the person commissioning the application (if different than the contractor). If notice is provided to the contractor or the person commissioning the application, then they are responsible under FIFRA to ensure that: 1) if the concrete slab cannot be poured over the treated soil within 24 hours of application the treated soil is covered with a waterproof covering (such as polyethylene sheeting), and 2) the treated soil is covered if precipitation is predicted to occur before the concrete slab is scheduled to be poured.

Do not treat soil that is water-saturated or frozen. Do not treat when raining. Do not allow treatment to run-off 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 10 mph (at application site) at nozzle end height.

Post-Construction Subterranean Termite Control

Post-construction soil applications shall be made by injection, trenching and rodding into the trench or trenching, or coarse fan spray with pressures not exceeding 25p.s.i. at the nozzle. Care must be taken to avoid soil washout around the footing.

Important	Do not apply dilution 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. When trenching, the trench should be about 6 inches wide and 6 inches deep. 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.

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Slabs	<p>Vertical barriers may be established by sub-slab injection within the structure and trenching and rodding into the trench or trenching outside at the rate of 4 gallons of dilution per 10 linear feet per foot of depth. Special care must be taken to distribute the treatment evenly to establish a continuous barrier. Treatment must not extend below the bottom of the footing.</p> <p>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.</p> <ul style="list-style-type: none">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 dilution should be applied to the trench and soil at 4 gallons of dilution per 10 linear feet per foot of depth as the soil is replaced in the trench.c. For foundations deeper than 1 foot follow rates for basement.d. Exposed soil and wood in bath traps must be treated with the dilution.
Basements	<p>Where the footing is greater than 1 foot of 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 dilution per 10 linear feet per foot of depth. When the footer 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 to provide a continuous insecticidal 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. Structures must not be treated below the footer. 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.</p>

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 dilution 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 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.
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 dilution per 10 linear feet per foot of depth of the trench. Mix the dilution thoroughly into the soil taking care to prevent liquid from running off the sheeting. c. After the treated soil has absorbed the liquid dilution, replace the soil in the trench.

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<p>Accessible Crawl Spaces</p>	<p>For crawl spaces, apply vertical termiticide barriers at the rate of 4 gallons of dilution 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.</p> <ol style="list-style-type: none">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 dilution 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.
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Inaccessible Crawl Spaces	<p>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.</p> <ol style="list-style-type: none">1. To establish a horizontal barrier, apply to the soil surface, 1 gallon of dilution 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 power spray 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 dilution per 10 square feet. Drill spacing must be at intervals not to exceed 16 inches. Many States have smaller intervals, so check State regulations that may apply. <p>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.</p> <p>Note: Crawl spaces are to be considered inside of the structure.</p>
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FOAM APPLICATIONS FOR TERMITE CONTROL

The F5688 11% ME Insecticide Termiticide dilution may be converted to foam with expansion characteristics from 2 to 40 times for localized control or prevention of termites harboring in walls, under slabs or in other void areas.

Depending on the circumstances, foam applications may be used alone or in combination with liquid dilution 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 dilution 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.

Use dry foam (15:1 or greater expansion ratio) for applications to wall voids and stud walls.

Use wet foam (10:1 or lower expansion ratio) for applications to soil, including applications to filled porches or voids above soil.

Mixing Table for F5688 11% ME Insecticide Termiticide Foam for Termite Control

Desired Foam Expansion Ratio	F5688 Use Dilution for Termite Control	Number of Fluid Ounces	Gallons of Water	Finished Foam (Gallons)
5:1	0.11%	6.25	5.0	25
10:1		3.13	2.5	
15:1		2.08	1.66	
20:1		1.56	1.25	
25:1		1.25	1.0	

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<p>Application Under Slabs or to Soil in Crawlspace to Prevent or Control Termites and other Listed Indoor Household Pests (see Household Pest Control Indoor Section for Complete Pest List)</p>	<p>Application may be made using F5688 11% ME Insecticide Termiticide foam alone or in combination with liquid dilution. The equivalent of at least 4 gallons of dilution per 10 linear feet (vertical barrier), or at least 1 gallon of dilution per 10 square feet (horizontal barrier) must be applied either as dilution, foam, or a combination of both.</p>
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<p>Termite Control</p>	
<p>The purpose of the applications described below is to kill termite workers or winged reproductives that may be present at the time of treatment. These applications are intended as supplements to, and not substitutes for, mechanical alteration, soil treatment or foundation treatment.</p>	
<p>Exposed Workers and Winged Reproductives</p>	<p>To control exposed workers and winged reproductive termites in localized areas, apply 0.11% dilution of F5688 11% ME Insecticide Termiticide as a pinstream, spot, or crack and crevice spray on the outside of buildings, porches, wooden decks and patios, wooden fences around buildings, window frames, doorways, foundations, eaves, patios, garages, and other building where you may find these pests. Spray infested areas until thoroughly wet, avoiding dripping and runoff. Applications may also be made to inaccessible areas by drilling and then injecting the dilution or foam, with a suitable directional injector, into damaged wood or wall voids. All treatment holes drilled in construction elements in commonly occupied areas of structures must be securely plugged after treatment.</p>

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Termite Carton Nests in Building Voids	<p>To control termite carton nests in building voids, apply 0.11% dilution of F5688 11% ME Insecticide Termiticide as a liquid or foam using a pointed injection tool. Multiple injection points and varying depths of injection may be necessary to achieve control. When possible, the carton nest material should be removed from the building void after treatment.</p>
Termite Carton Nests in Trees	<p>Termite carton nests in trees may be injected with a dilution or sufficient volume of foam using a pointed injection tool. Multiple injection points to varying depths may be necessary. In some instances, a perimeter application of the dilution applied to soil around the root flare of the tree may be necessary to prevent re-infestation by termites in the soil. Apply liquid or foam to the voids in the tree to fill the voids.</p>
<p>Sand Barrier Installation and Treatment</p>	
<p>Termites can build mud tubes over treated surfaces as long as they have access to untreated soil and do not have to move F5688 11% ME Insecticide Termiticide treated soil. Susceptible cracks and spaces can be filled with builder's or play box sand and the sand treated with F5688 11% ME Insecticide Termiticide. The sand should be treated as soil following the termiticide rate listed on the F5688 11% ME Insecticide Termiticide label.</p>	
<p>Structures with Adjacent Wells/Cisterns and/or Other Water Bodies</p>	
<p>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</p> <ol style="list-style-type: none"> 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 in the Excavation Technique section above) can also be used to minimize off-site movement of termiticide. <p>Prior to using this technique near wells or cisterns, consult state, local or federal agencies for information regarding approved treatment practices in your area.</p>	

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Structures with Wells/Cisterns Inside Foundations	<p>Structures that contain wells or cisterns within the foundation of a structure can only be treated using the following techniques:</p> <ol style="list-style-type: none">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:<ol style="list-style-type: none">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 dilution per 10 linear feet per foot of depth of the trench, or 1 gallon per 1.0 cubic feet of soil. Mix thoroughly into the soil taking care to contain the liquid and prevent runoff or spillage.c. After the treated soil has absorbed the dilution, 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.
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Application in Conjunction with the Use of Termite Baits

As part of the integrated pest management (IPM) program for termite control, F5688 11% ME Insecticide Termiticide 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 as a spot treatment or complete barrier treatment. Applications may be made as described in the post-construction treatment section of this label.

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 that 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.

Restrictions
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 cleanup is completed.
When treating behind veneer, care must 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.
Not for use in voids insulated with rigid foam insulation.

Household Pest Control – Outdoor Pinstream, Spot, Crack and Crevice or Perimeter Treatment	
Controls	Ants (including Red Imported Fire Ants and Carpenter Ants and Argentine Ants) (but excluding Pharaoh and Argentine ants), Bees, Beetles* (*Not for use in California), Biting Flies, Boxelder Bugs, Carpenter Bees, Centipedes, Chiggers, Clover Mites, Cockroaches, Crickets, Earwigs, Elm Leaf Beetles, Firebrats, Fleas, Flies, Gnats, Ground-nesting (solitary) bees and wasps, Midges, Millipedes, Mosquitoes, Moths, Pillbugs, Scorpions, Silverfish, Sowbugs, Spider Mites, Spiders (including Black Widow), Springtails, Stink Bugs, Ticks (including Brown Dog Ticks), Wasps
Where to Apply	Apply as a pinstream, spot, crack and crevice, or perimeter spray on and around outside surfaces of residential and non-residential buildings and structures including, exterior siding, foundations, porches, window frames, eaves, patios, garages, areas adjacent or around private homes, duplexes, townhouses, condominiums, schools, non-commercial barns (i.e., non-commercial barns are storage structures not intended for housing livestock other than pets), house trailers, apartment complexes, carports, garages, storage sheds, and other structures, and other areas where pests congregate or have been seen. While this product is not for use on turf or lawns, adjacent (i.e., perimeter) treatment is permitted, as directed by the Perimeter Treatment Application Rate. Follow Additional Application Restrictions for Residential Outdoor Surface and Space Sprays.
Perimeter Treatment Application Rate	As a perimeter treatment, apply as a continual band up to 10 foot wide around the structure and upwards along the foundation to a height of up to 3 feet and around windows, doors, other penetrations and roof eaves, soffits and overhangs. Spot treatments may be applied beyond the 10 ft-wide band around structures in areas where pests congregate or have been seen. Apply F5688 11% ME Insecticide Termiticide in sufficient amount of water (see Dilution Chart) to adequately cover 1,000 square feet. Dilutions may be applied at either high or low

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	volumes. Do not apply more than 1.25 fluid ounces per 1,000 square feet.
Mixing Directions	<p>When using spray rigs, fill tank 1/4 to 1/3 full with water.</p> <p>Start pump to begin by-pass agitation and place end of treating tool in tank to allow circulation through hose. Add F5688 11% ME Insecticide Termiticide. Add remaining amount of water. Let pump run and allow recirculation through the hose for 2 to 3 minutes.</p> <p>For backpacks and handheld sprayers, fill the tank ¼ full with water. Add F5688 11% ME. Agitate tank gently before adding remaining water. Close application equipment.</p> <p>For other types of sprayers, F5688 11% ME Insecticide Termiticide may be mixed into full tanks of water.. Fill tank with the desired volume of water and add F5688 Insecticide. Close and gently shake before use to ensure proper mixing. Mix only the amount of dilution needed for application.</p>
Repeat Application	Retreatment may be necessary to achieve and/or maintain control during periods of high pest pressure. Repeat application is necessary only if there are signs of renewed insect activity.
Restrictions	<p>Do not water the treated area to the point of run-off. Do not make applications during rain.</p> <p>All outdoor applications, if permitted elsewhere on this label, must be limited to spot or crack-and-crevice treatments only, except for the following permitted uses, if allowed elsewhere on this label: 1) Applications to soil or vegetation, as listed on this label, around structures; 2) Applications to the side of a building, up to a maximum height of 3 feet above grade; 4) Applications to underside of eaves, soffits, doors, or windows permanently protected from rainfall by a covering, overhang, awning, or other structure; 5) Applications around potential pest entry points into buildings, when limited to a surface band not to exceed one inch in width; 6) Applications made through the use of a coarse, low pressure spray to only those portions of surfaces that are directly above bare soil, lawn, turf, mulch or other vegetation, as listed on this label, and not over an impervious surface, drainage or other condition that could result in runoff into storm drains, drainage ditches, gutters, or surface waters, in order to control occasional invaders or aggregating pests.</p> <p>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.</p> <p>Applications to vertical exterior surfaces (e.g., foundations) are permitted to a maximum height of 3 feet from ground level. Sections of vertical exterior surfaces that abut non-porous horizontal surfaces can only be treated if either 1) these sections are protected from rainfall and spray from sprinklers or 2) they do not drain into a sewer, storm drain, or curbside gutter (e.g., not to sections that abut driveways or sidewalks that drain into streets).</p>

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For sections of foundation that abut non-porous horizontal surfaces, the treated areas must be protected from rainfall and spray from sprinklers or they do not drain into a sewer, storm drain, or curbside gutter (e.g. not to sections that abut driveways or sidewalks that drain into streets).

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.

Dilution Chart for Listed Household Pest Perimeter Barrier Applications Around Structures

Application Volume per 1,000 sq. ft.	F5688 11% ME Insecticide Termiticide ounces to add (%a.i.)			
	Total Mix volume			
	1 Gallon	3 Gallons	5 Gallons	10 Gallons
1 gal/1,000 sq. ft	1.25 (0.11%)	3.75 (0.11%)	6.25 (0.11%)	12.5 (0.11%)
2 gal/1,000 sq. ft	0.635 (0.054%)	1.88 (0.054%)	3.13 (0.054%)	6.25 (0.054%)
2.5 gal/1,000 sq. ft	0.5 (0.043%)	1.5 (0.043%)	2.5 (0.043%)	5.0 (0.043%)
3 gal/1,000 sq. ft	0.42 (0.036%)	1.25 (0.036%)	2.1 (0.036%)	4.2 (0.036%)
5 gal/1,000 sq. ft	0.25 (0.022%)	0.75 (0.022%)	1.25 (0.022%)	2.5 (0.022%)

Outdoor Ant Control

Carpenter Ants Apply F5688 11% ME Insecticide Termiticide as a pinstream, spot, crack and crevice, or perimeter spray to carpenter ant trails around doors and windows and other places where carpenter ants have been observed or are expected to forage. For best results, locate and treat carpenter ant nests. Apply a perimeter treatment using either low or high volume applications described in the Household Pest Control - Outdoor section of

	<p>this label. The higher dilutions and/or application volumes, as well as more frequent applications, may be necessary when treating concrete surfaces for ant control. The following procedures must be followed to help achieve maximum control of the pest:</p> <ol style="list-style-type: none"> 1) Treat non-porous surfaces only in areas protected from rainfall and spray from sprinklers with low volume applications using a 0.11% dilution (see Dilution Chart) and applying at the rate of one gallon per 1,000 ft². 2) Treat porous surfaces and vegetation with high volume applications. 3) Treat the trunks of trees that have carpenter ant trails or upon which carpenter ants are foraging by applying dilution to thoroughly wet the bark from the base of the tree to as high as possible on the trunk.
<p>Nuisance Ants Outdoors and Fire Ants</p>	<p>For best results, locate and treat ant nests. Apply F5688 11% ME Insecticide Termiticide as a pinstream, spot, crack and crevice or perimeter treatment to ant trails around doors and windows and other places where ants have been observed or are expected to forage. Apply a perimeter treatment using either low or high volume applications described in the Household Pest Control - Outdoor section of this label. The higher dilutions and/or application volumes, as well as more frequent applications, may be necessary when treating concrete surfaces for ant control. The following procedures must be followed to help achieve maximum control of the pest:</p> <ol style="list-style-type: none"> 1) Treat non-porous surfaces only in areas protected from rainfall and spray from sprinklers with low volume applications using a 0.11% dilution (see Dilution Chart) and applying at the rate of one gallon per 1,000 ft². 2) Treat porous surfaces and vegetation with high volume applications.

Specific Outdoor Pest Control Applications	
<p>Ant and Fire Ant Mounds</p>	<p>Drench individual mounds with 1-2 gallons of F5688 11% ME Insecticide Termiticide at a 0.11% dilution (see Dilution Chart) to each mound area by sprinkling the mound until it is wet and treat 3-feet out 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.</p>
<p>Carpenter ants in trees, utility poles, fencing, deck materials and</p>	<p>Drill to locate the interior infested cavity and inject or foam 0.11% dilution (see Foam Applications section) into the cavity using a sufficient volume and an appropriate treatment tool with a splash-back guard.</p>

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<p>similar structural members</p>	
<p>Wood piles and stored lumber</p>	<p>To protect firewood piles or lumber from carpenter ants (and termites), make up a 0.11% dilution (see Dilution Chart) of F5688 11% ME Insecticide Termiticide and apply as a spot treatment to the soil beneath where the firewood or lumber will be stacked at the rate of one gallon of dilution per 8 square feet. Use a hose-end sprayer or sprinkling can to deliver a coarse drenching spray. Wood can be burned as firewood or used as lumber one month after treatment.</p>
<p>Underground Services</p>	<p>Underground Services such as: wires, cables, utility lines, pipes, conduits, etc. Services may be within structures or located outside of structures.</p> <p>Soil treatment may be made using F5688 11% ME Insecticide Termiticide dilution to prevent attack by Termites and Ants.</p> <p>Apply 2 gallons of 0.11% dilution (see Dilution Chart) per 10 linear feet to the bottom of the trench and allow liquid to soak into the soil. Lay services on the treated soil and cover with approximately 2 inches of fill soil. Apply another 2 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.</p> <p>Where soil will not accept the above-labeled volume, 1 gallon of 0.11% dilution of F5688 11% ME Insecticide Termiticide 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.</p> <p>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 0.11% dilution into the soil.</p>
<p>Posts, Poles, and Other Constructions</p>	<p>Create an insecticidal barrier in the soil around wooden constructions such as signs, fences and landscape ornamentation.</p> <p>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 0.11% dilution(see Dilution Chart) per foot of depth for poles and posts less than six inches in diameter. For larger poles, use 1.5 gallons of 0.11% dilution 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.</p>

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<p>Listed Pests Under Slabs</p>	<p>Infestations of Arthropods, such as Ants, Cockroaches and Scorpions under slab areas may be controlled by drilling and injecting or horizontal rodding and then injecting 1 gallon of 0.11% dilution (see Dilution Chart) per 10 square feet or 2 gallons of 0.11% dilution per 10 linear feet.</p>
<p>Listed Pest Control in Crawlspace and Voids</p>	<p>Apply F5688 11% ME Insecticide Termiticide 0.11% dilution (see Dilution Chart) to all surfaces in crawlspace and/or voids to control ants, fleas, roaches, scorpions, or other arthropods. Product may also be applied through insecticidal delivery systems such as piping or flexible tubing mounted under and/or around the structure as a crack and crevice or spot treatment. 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.</p>
<p></p>	<p></p>
<p>Foam Applications for Control of Listed Household Pests</p>	<p>The F5688 11% ME Insecticide Termiticide dilution may be converted to foam with expansion characteristics from 2 to 40 times for localized control or prevention of pests including ants, bees, wasps or other arthropods harboring in walls, under slabs or in other void areas.</p> <p>Depending on the circumstances, foam applications may be used alone or in combination with liquid dilution 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.</p> <p>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 dilution 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.</p> <p>Foam applications are generally a good supplement to liquid treatments in difficult areas, but may be used alone in difficult spots.</p> <p>Use dry foam (15:1 or greater expansion ratio) for applications to wall voids and stud walls.</p> <p>Use wet foam (10:1 or lower expansion ratio) for applications to soil, including</p>

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applications to filled porches or voids above soil.

Mixing Table for F5688 Insecticide Termiticide Foam for Listed Household Pest Control

Desired Foam Expansion Ratio	F5688 11% ME Use Dilution for Listed Household Pest Control	Gallons of Water	Finished Foam (Gallons)
5:1	0.054% or 0.11%	5.0	25
10:1		2.5	
15:1		1.66	
20:1		1.25	
25:1		1.0	

Household Pest Control - Indoor

Controls	Ants (including Red Imported Fire Ants and , Carpenter Ants <u>and Argentine Ants</u>) (but excluding Pharaoh and Argentine ants), Bed Bugs, Bees, Beetles* (including Carpet Beetles) (*Not for use in California), Boxelder Bugs, Centipedes, Cockroaches, Crickets, Earwigs, Firebrats, Fleas, Flies, Gnats, Midges, Millipedes, Moths, (including Cloth Moths), Pillbugs, Scorpions, Silverfish, Sowbugs, Spiders (including Black Widow and Brown Recluse), Springtails, Stink Bugs, Ticks, Wasps
Where to Apply	Apply for residual pest control in residential and non-residential buildings and structures. Apply either as a crack and crevice, pinstream, spot, coarse, low-pressure spray (25 p.s.i. or less) or with a paintbrush. Apply to areas where pests hide, such as baseboards, corners, storage areas, closets, around water pipes, doors and windows, attics and eaves, behind and under refrigerators, dishwashers, cabinets, sinks, furnaces, stoves, the underside of shelves, drawers and similar areas and other possible pest harborage sites. Do not use as a space or broadcast spray. Pay particular attention to cracks and crevices. Do not apply as a broadcast spray indoors.
Application	Apply F5688 11% ME Insecticide Termiticide in sufficient amount of water (see Dilution

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Rate	<p>Chart) to adequately to cover 1,000 square feet. Do not apply more than 1.25 fluid ounces per 1,000 square feet.</p> <p>For foaming directions, please refer to FOAM APPLICATIONS FOR CONTROL OF LISTED HOUSEHOLD PESTS in the SPECIFIC PEST CONTROL APPLICATIONS section.</p>
Mixing Directions	<p>When using spray rigs, fill tank ¼ to 1/3 full with water.</p> <p>Start pump to begin by-pass agitation and place end of treating tool in tank to allow circulation through house. Add F5688 11% ME Insecticide Termiticide. Add remaining amount of water. Let pump run and allow recirculation through the house for 2 to 3 minutes.</p> <p>For backpacks and handheld sprayers, fill the tank ¼ full with water. Add F5688 11% ME. Agitate tank gently before adding remaining water. Close application equipment.</p> <p>For other types of sprayers, F5688 11% ME Insecticide Termiticide may be mixed into full tanks of water. Fill tank with the desired volume of water and add F5688 11% ME. Close and shake before use to ensure proper mixing. Mix only the amount of dilution needed for application.</p>
Ants (including Carpenter Ants and, Nuisance Ants and Argentine Ants) (but excluding Pharaoh and Argentine ants)	<p>Apply to areas where ants have been observed or are expected to forage. Particular attention must be given to treating entry points into the home or premises such as around doors and windows and other places where ants and ant trails may be found.</p> <p>For added Carpenter Ant control, spray or foam into cracks and crevices or drill holes and spray, mist or foam into voids where Carpenter Ants or their nests are present.</p> <p>When using F5688 11% ME Insecticide Termiticide in combination with baits, apply F5688 11% ME Insecticide Termiticide as instructed above, and use baits in other areas that have not been treated with F5688 11% ME Insecticide Termiticide.</p>
Bed Bugs	<p>To control Bed Bugs, apply 1.25 fluid ounces per gallon water per 1000 square feet where evidence of bed bugs occurs.</p> <p>Thorough application must be made to crack and crevices where evidence of bed bugs occurs. This includes bed frames, box springs, mattresses, inside empty luggage, dressers and clothes closets and carpet edges, high and low wall moldings and wallpaper edges,</p>

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	<p>wall hangings, mirrors, pictures, electrical switch plates, furniture, door frames, bookcases, and window frames. For infested mattresses, remove linens and wash before reuse. Apply to tufts, seams, folds, and edges until moist. Allow to dry before remaking bed. When treating furniture, pay special attention to tufts, folds, seams, and difficult-to-access areas. On furniture, do not apply to seating areas, arms, or areas where direct skin contact can occur. Do not use this product on bed linens, pillows, or clothes. Remove all clothes and other articles from luggage, dressers, or clothes closets before application. Allow all treated areas to thoroughly dry before use. Not recommended for use as sole protection against bed bugs.</p>
Bees and Wasps	<p>To control Bees, Wasps, Hornets, and Yellow Jackets indoors, apply 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. Use 1.25 fluid ounces per gallon water per 1000 square feet.</p>
Occasional Invaders	<p>To control Boxelder Bugs, Centipedes, Earwigs, Beetles, Millipedes, Lady Beetles, Pillbugs, and Sowbugs, apply around doors and windows and other places where these pests may be found or where they may enter premises. Spray baseboards, storage areas and other locations.</p>
Crawling and Flying Insect Pests	<p>To control Cockroaches, Crickets, Firebrats, Flies, Gnats, Midges, Moths, Scorpions, Silverfish, and Spiders, apply as a coarse, low pressure spray to areas where these pests hide, such as baseboards, corners, storage areas, closets, around water pipes, doors and windows, attics and eaves, behind and under dishwashers, refrigerators, cabinets, sinks, furnaces, and stoves, the underside of shelves, drawers and similar areas. Pay particular attention to cracks and crevices.</p>
Restrictions	<p>Let surfaces dry before allowing people and pets to contact surfaces. It is recommended that a small surface compatibility test be performed before applying. Treat a small area and evaluate 30 minutes later to determine whether any change to the surface has occurred. Application equipment that delivers low volume treatments, such as the Micro-Injector® or Actisol® applicators, may also be used to make crack and crevice, deep harborage, spot and general surface treatments of F5688 11% ME Insecticide Termiticide. Wear protective clothing; unvented goggles, gloves and a respirator approved by NIOSH, when applying to overhead areas or in poorly ventilated or confined areas. 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.</p>

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Warehouses and Stores	F5688 11% ME Insecticide Termiticide may be applied as a spot or crack and crevice treatment in non-food storage warehouses and stores. Apply no more 1.25 fluid ounces of F5688 11% ME Insecticide Termiticide per 1,000 square feet in sufficient volume to provide adequate coverage. Apply to all areas that may harbor pests, including under and between pallets, bins and shelves. Do not apply directly to food grain bins (interior) or animals.
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Food/Feed Handling Establishment Applications	
Controls	Ants (including Red Imported Fire Ants and Carpenter Ants and Argentine Ants) (but excluding Pharaoh ants and Argentine ants) Bees, Bed Bugs, Bees, Beetles* (including Carpet Beetles) (*Not for use in California), Boxelder Bugs, Centipedes, Cockroaches, Crickets, Earwigs, Firebrats, Fleas, Flies, Gnats, Midges, Millipedes, Moths, (including Cloth Moths), Pillbugs, Scorpions, Silverfish, Sowbugs, Spiders (including Black Widow and Brown Recluse), Springtails, Stink Bugs, Ticks, Wasps
Where to Apply	<p>Applications of this product are permitted in both food/feed and non-food areas of food/feed establishments as a spot or crack and crevice treatment.</p> <p>Food/feed handling establishments are defined as places other than private residences in which exposed food/feed is held, processed, prepared or served. Including also are areas for receiving, storing, packaging (canning, bottling, wrapping, boxing), preparing, edible waste storage and enclosed processing systems (mills, edible oils, syrups) or food. Service areas where food is exposed and the facility is in operation are also considered food areas.</p> <p>Permitted non-food areas of use include, garbage rooms, lavatories, entries and vestibules, offices, locker rooms, machine rooms, garages, mop closets and storage (after canning or bottling).</p> <p>Permitted use sites include : aircraft (do not use in aircraft cabins), apartment buildings, bakeries, bottling facilities, breweries, buses, cafeterias, candy plants, canneries, dairy product processing plants, food manufacturing plants, food processing plants, food service establishments, granaries, grain mills, grocery stores (do not apply directly to the interior of food grain bins) hospitals, hotels, industrial buildings, laboratories, meat/poultry/egg processing plants, mobile/motor homes, nursing homes, offices, pet stores (do not apply directly to the interior of food grain bins or animals), railcars, restaurants, schools, ships, trailers, trucks, vessels, warehouses and wineries.</p>
Application Rate	Apply F5688 11% ME Insecticide Termiticide in a sufficient amount of water (see Dilution Chart) to adequately cover 1,000 square feet. Do not apply more than 1.25 ounces of F5688 11% ME Insecticide Termiticide per 1,000 square feet. To control Bed Bugs, apply 1.25 fluid ounces per gallon water per 1000 square feet where evidence of bed bugs

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	occurs.
Spot, Crack and Crevice Application	Spot or crack and crevice applications may be made while the facility is in operation; however, cover or remove food from area being treated. Do not apply directly to food.
Mixing Directions	<p>When using spray rigs, fill tank ¼ to 1/3 full with water.</p> <p>Start pump to begin by-pass agitation and place end of treating tool in tank to allow circulation through house. Add F5688 11% ME Insecticide Termiticide. Add remaining amount of water. Let pump run and allow recirculation through the house for 2 to 3 minutes.</p> <p>For backpacks and handheld sprayers, fill the tank ¼ full with water. Add F5688 11% ME. Agitate tank gently before adding remaining water. Close application equipment.</p> <p>For other types of sprayers, F5688 11% ME Insecticide Termiticide may be mixed into full tanks of water. Fill tank with the desired volume of water and add F5688 11% ME. Close and shake before use to ensure proper mixing. Mix only the amount of dilution needed for application.</p>
Foam Applications	For foaming directions, please refer to FOAM APPLICATIONS FOR CONTROL OF LISTED HOUSEHOLD PESTS in the SPECIFIC PEST CONTROL APPLICATIONS section.

RESTRICTIONS

- Do not apply as a perimeter treatment to areas beyond 10 feet from the foundation of the structure unless using a spot treatment.
- Do not use as a space or broadcast spray.
- Do not use in and around the exterior perimeter of commercial barns, stables, and paddocks. Do not use in grazing areas, feed lots or other similar areas used for housing, boarding, and/or rearing animals. This product may be used around barns and stables on residential property.
- Do not apply by air.
- Do not apply as a broadcast spray indoors or as a broadcast spray on lawns and turf.
- Do not apply in greenhouses or nurseries.
- Not for use on plants being grown for sale or other commercial use, or for commercial seed production, or for research purposes.
- Do not apply this product through any kind of irrigation system.

- Not for use on sod farm turf, golf course turf, or grass grown for seed.
- Do not apply to pets, crops, or sources of electricity.
- Do not treat electrically active underground services.
- Do not treat areas when food is exposed. Cover or remove food from area being treated. Do not allow spray to contact food, foodstuffs, food contacting surfaces, food utensils or water supplies.

STORAGE AND DISPOSAL

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

Pesticide Storage: Keep out of reach of children and animals. Store in original container only. Store in a cool, dry place and avoid excess heat. Do not store at temperatures below 32oF (0oC). Do not put concentrate or diluted 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.

To Confine Spill: Dike surrounding area or absorb with sand, cat litter or commercial clay. Place damaged package in a holding container. Identify contents.

Pesticide Disposal: Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. Dispose of excess or waste pesticide by use according to label directions, or contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

Container Disposal: Non-refillable container. Do not reuse or refill this container. Triple rinse container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ 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. Offer for recycling, if available.

Conditions of Sale 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

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consequences may result because of such factors as manner of use or application, weather or crop conditions beyond the control of Nippon Soda Co., Ltd. or Seller. All such risks shall be assumed by Buyer and User, and Buyer and User agree to hold Nippon Soda Co., Ltd. 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 allowable by applicable laws, Nippon Soda Co., Ltd. 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 TO THE EXTENT ALLOWED BY STATE LAW. 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 Nippon Soda Co., Ltd., and buyer assumes the risk of any such use.

To the extent allowed by applicable laws, Nippon Soda Co., Ltd. or seller shall not be liable for any incidental, consequential or special damages resulting from the use or handling of this product. THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF Nippon Soda Co., Ltd. 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 Nippon Soda Co., Ltd. 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.

Batch No.: _____

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Nippon Soda Co., Ltd.
c/o Nisso America Inc.
88 Pine St., 14th Fl.
New York, NY 10005
212-490-0350