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

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

John J. Wrubel Nippon Soda Co., Ltd. c/o Nisso America Inc. 45 Broadway, Suite 2120 New York, NY 10006

Dear Mr. Wrubel:

Subject:

Label Amendment; General Revisions F4688 50 WSP Insecticide Termiticide EPA Registration No. 8033-96 Submission Date: March 5, 2008

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, is acceptable. A stamped copy is enclosed for your records. Please submit one (1) final printed copy for the above mentioned label before releasing the product for shipment. If you have any questions regarding this label, please contact me at (703) 306-0415.

Sincerely yours,

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Kable Bo Davis Entomologist Insecticide-Rodenticide Branch Registration Division (7505P)

Enclosure



# F4688 50 WSP Insecticide Termiticide

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.

For the control and prevention of subterranean termites in structures and for the control of termites and general household pests outdoors around the exterior perimeter of residential, institutional, public, commercial, and industrial buildings.

EPA Reg. No. 8033-96	EPA Est. No.:
Active Ingredients:	By Wt.
Acetamiprid	
Bifenthrin*	
Inert Ingredients:	<u>50.00 %</u>
	100.00%

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

## 7.5 ounce water soluble bag 0.3 ounce water soluble bag

**Net Contents:** 

# KEEP OUT OF REACH OF CHILDREN CAUTION

the second s				
FIRST AID				
If swallowed	Call poison control center or doctor immediately for			
	treatment advice.			
	<ul> <li>Have person sip a glass of water if able to swallow.</li> </ul>			
	<ul> <li>Do not induce vomiting unless told to do so by the poison</li> </ul>			
	control center or doctor.			
	<ul> <li>Do not give anything by mouth to an unconscious person.</li> </ul>			
If inhaled	<ul> <li>Move person to fresh air.</li> </ul>			
	<ul> <li>If person is not breathing, call 911 or an ambulance, then</li> </ul>			
	give artificial respiration, preferably by mouth-to-mouth, if			
	possible.			
	<ul> <li>Call a poison control center or doctor for further treatment</li> </ul>			
If on skin or	advice.			
clothing	Take off contaminated clothing.			
ciotining	<ul> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> </ul>			
	<ul> <li>Call a poison control center or doctor for treatment</li> </ul>			
	advice.			
If in eyes	<ul> <li>Hold eye open and rinse slowly and gently with water for</li> </ul>			
	15-20 minutes.			
	<ul> <li>Remove contact lenses, if present, after the first 5</li> </ul>			
	minutes, then continue rinsing eye.			
	<ul> <li>Call a poison control center or doctor for treatment</li> </ul>			
_	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				

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 Cail 1-212-490-0350

# PRECAUTIONARY STATEMENTS Hazards to Humans (and Domestic Animals)

#### CAUTION

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

All pesticide handlers (mixers, loaders and applicators) must wear long-sleeved shirt and long pants, socks, shoes and chemical-resistant gloves. After the product is diluted in accordance with label directions for use, and/or whan mixing and loading using a closed spray tank transfer system (such as U-Turn<sup>-</sup>), 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.

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 as 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 clean up is completed.

### **Environmental Hazards**

This pesticide is extremely toxic to wildlife, fish, and aquatic invertebrates. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Drift and run-off from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment wash waters. Care should be used when spraying to avoid fish and reptile pets in/around ornamental ponds.

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 F4688 50 WSP 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 a range of other general household pests outdoors around the exterior perimeter of buildings and structures.

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APPLICATION RATE CHART

#### If Using a 7.5 Ounce Bag

Number of		Termite Uses		General House	hold Pest Uses
Gallons Desired		Number of 7.5 Ounce Bags	Dilution Rate (% active ingredient)	Number of 7.5 Ounce Bags	Dilution Rate (% active ingredient)
25		11	0.11%	- 1	0.11%
50		2	0.11%	1	0.06%
75_		3	. 0.11%	1	0.04%
100		4	0.11%	1	0.03%

#### If Using a 0.3 Ounce Bag

Application Rate: Number of F4688 50WP Water-Soluble Packets <sup>1</sup>	Gals of Water	Concentration of Active Ingredient
∖ packe <u>t (0.3</u> oz)	1 gallon	0.11%Active Ingredient
packet (0.3 oz)	2 gallons	0.06%Active Ingredient
1 packe <u>t (0.3 oz)</u>	3 gallons	0.04%Active Ingredient
1 packet (0.3 oz)	4 gallons	0.03%Active Ingredient

Note: For General Household Pest Uses – Under conditions of severe pest infestation or when quicker knockdown and/or longer residual control is needed, use 0.11% dilution of F4688 50 WSP per 1,000 sq. ft. Do not dilute further than one (1) 7.5 ounce bag in 100 gallons of water or one (1) 0.3 ounce bag in 4 gallons of water.

## **DILUTION CHART**

#### Dilution Chart for Perimeter Barrier Applications Around Structures

		VP 0.30 ounce volume bags to add	water	
Application Volume per 1,000 sq. ft.	Tota	al Mix volume		
	1 Gallon	3 Gallons	5 Gallons	10 Gallons
)gal/1,000 _sq. ft	1 packet	3 packets	5 packets	10 packets
2 gal/1,000 sq. ft				5 packets
2.5 gal/1,000 sq. ft			2 packets	
3 gal/1,000 sq. ft		1 packet		
5 gal/1,000 sq. ft			1 packet	2 packets

		VP 7.5 ounce w le bags to add	vater	
Application Volume per 1,000 sq. ft.	Total Mix volume			
	25 Gallon	50 Gallon	75 Gallon	100 Galion
1 gal/1,000 sq. ft	1 packet	2 packets	3 packets	4 packets

# 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 the following cultural practices should be incorporated into the management program: 1) all non-essential wood and cellulose containing materials should be removed from around foundation walls, crawl spaces, and porches; 2) Repairing faulty plumbing and/or construction grade to eliminate termite access to moisture. Soil around untreated structural wood in contact with soil be treated as described below.

To establish an effective insecticidal barrier with this product the service technician must be familiar with current termite control practices such as: trenching, rodding, sub-slab injection, 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.

Large numbers of termites may be killed by the treatment of infested termite monitor stations, tree roots, stumps, fence posts, wooden barrels, planters, trellises, mailbox posts, mulch and other infested articles. These treatments should not be considered as a replacement for a structural protection treatment but as an augmentation to it.

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.

Important	Contamination of public and private water supplies must be avoided by following these precautions: Use anti-backflow equipment or procedures to prevent siphonage of insecticide into water supplies. Do not contaminate cisterns or wells. Do not treat soil that is water saturated or frozen or in any conditions where runoff or movement from the treatment area (site) is likely to occur. 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	One (1) 7.5 ounce WSP per 25 gallons of water. When properly mixed in water, the end use dilution after adding one 7.5-ounce bag of F4688 50 WSP Insecticide Termiticide to 25 gallons of water for termites is 0.11% active ingredient
Mixing Directions	Fill tank 1/4 to 1/3 full with water. Start pump to begin by-pass agitation and place end of treating tool in tank to allow circulation through hose. Add F4688 50 WSP bag(s). Add remaining amount of water. Let pump run and allow recirculation through the hose for 2 to 3 minutes. F4688 50 WSP Insecticide Termiticide may also be mixed into full tanks of water, but requires substantial agitation to insure uniformity of the dilution.
Application Volume	To provide maximum control and protection against termite infestation 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. Certain elements of a structure may not need to be treated, such as the drilling and treatment of basement slabs in northern states. 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. Where desirable for pre and post construction treatments, the volume of the F4688 50 WSP Insecticide Termiticide dilution may be reduced by 1/2 the labeled volume (and doubling the amount of F4688 50 WSP Insecticide Termiticide). 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.

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After Treatment	All holes in commonly occupied areas into which F4688 50 WSP Insecticide Termiticide has been applied must be plugged. Plugs must be of a non-cellulose material or covered by ap imparying por cellulose material.		Important	Do not apply dilution u pipes, water and sewer known and identified.
Pre-Constr	covered by an impervious, non-cellulose material. uction Subterranean Termite Control			puncturing and injection i For applications made a
Effective pre-con establishment of dilution of F4688 25 gallons water. <b>Do not apply at</b> <b>label for applicat</b> When treating for Insecticide Term construction cont foundation to a m	struction subterranean Termite control is achieved by the vertical and/or horizontal insecticidal barriers using a 0.11% 50 WSP Insecticide Termiticide or one (1) 7.5 ounce WSP per a lower dosage and/or concentration than specified on this clons prior to the installation of the finished grade.		Foundations	applicator must trench along the foundation w foundation elements at t top of the footing. When below grade, the applic trench or trench along prescribed to a minimum of treatment will vary compaction, and location the footing is exposed, adjacent to the footing to the footing. However, treated below the footing
walls and around from grade to a m the applicator mu	Create a horizontal barrier wherever treated soil will be covered by a slab, such as footing trenches, slab floors,			Vertical barriers may be within the structure and t or trenching outside at the linear feet per foot of de distribute the treatment barrier. Treatment should footing. Treat along the outside
).	carports, and the soil beneath stairs and crawl spaces. Apply 1 gallon of dilution per 10 square feet, to provide thorough and continuous coverage of the area being treated.			necessary beneath the walls. Treatment may a along both sides of inter
Horizontal Barriers	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.			of interior partitions an joints. Horizontal barr necessary by long-rod
	Applications should be made by 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.		Slabs	<ul> <li>vertically through the sla</li> <li>a. Drill holes in the sl</li> <li>application of a co</li> <li>b. For shallow found</li> <li>trench approximat</li> <li>of the foundation v</li> </ul>
	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.			the footing. The trench and soil at 4 per foot of depth a
	Apply 4 gallons of dilution per 10 linear feet per foot of depth from grade to top of footing to ensure complete coverage.	:		<ul> <li>c. For foundations d basement.</li> <li>d. Exposed soil and v</li> </ul>
Vertical	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			Where the footing is gre to the bottom of the found
Barriers	more than 12 inches apart. b. Care should be taken to avoid soil washout around the footing.			trenching and rodding in of 4 gallons of dilution When the footer is mo applicator may trench
)	c. Trenches need not be wider than 6 inches. The dilution should be mixed with the soil as it is being replaced in the trench.		Basements	along foundation walls a depth. Rod holes must insecticidal barrier, but
	<ul> <li>d. For a monolithic slab, an inside vertical barrier may not be required.</li> <li>Hollow block voids may be treated at a rate of 2 gallons of</li> </ul>			apart. The actual depth soil type, degree of co activity. However, in no
Prior to each a	dilution per 10 linear feet so that the dilution will reach the top of the footing. pplication, applicators must notify the general contractor.			below the footer. Sub-sla the inside of foundation walls, around pipes, con
construction sup termiticide applic responsible perso	erintendent, or similar responsible party, of the intended ation and intended sites of application and instruct the in to notify construction workers and other individuals to leave ated during application and until the termiticide is absorbed into			interior footing-supported Drill and treat voids in structure extending from create a continuous tre treated. Apply at the rate
Post-Cons Post-construction rodding into the	soil applications shall be made by injection, trenching and trench or trenching, or coarse fan spray with pressures not , at the nozzle. Care should be taken to avoid soil washout		Masonry Voids	feet of footing, using a n When using this treatm below the sill plate and a is practical. Treatment o walls must be closely e areas of possible runoff leakage in the treated treatable or may requ treatment.
				If treatment must be fieldstone or rubble walls around pipes and utility i

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Foundations	For applications made after the final grade is installed, the applicator must trench and rod into the trench or trench along the foundation walls and around pillars and other foundation elements at the rate prescribed from grade to the top of the footing. When the footing is more than four (4) feet below grade, the applicator must trench and rod into the trench or trench along the foundation walls at the rate prescribed to a minimum depth of four feet. The actual depth of treatment will vary depending on soil type, degree of compaction, and location of termite activity. When the top of the footing is exposed, the applicator must treat the soil adjacent to the footing to a depth not to exceed the bottom of the footing. However, in no case should a structure be treated below the footing.
	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 should not extend below the bottom of the footing. Treat along the outside of the foundation and where necessary beneath the slab on the inside of foundation walls. Treatment may also be required beneath the slab along both sides of interior footing-supported walls, one side of interior partitions and along all cracks and expansion
Slabs	<ul> <li>joints. Horizontal barriers may be established where necessary by long-rodding or by grid pattern injection vertically through the slab.</li> <li>a. Drill holes in the slab and/or foundation to allow for the application of a continuous insecticidal barrier.</li> <li>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.</li> <li>c. For foundations deeper than 1 foot follow rates for</li> </ul>
	basement. d. Exposed soil and wood in bath traps should be treated with the dilution. Where the footing is greater than 1 foot of depth from grade
Basements	where the tooting is greater than in toot depint must be made by 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. However, in no case should a structure 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.
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	<ul> <li>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:</li> <li>a. Trench and remove soil to be treated onto heavy plastic sheeting or similar material.</li> <li>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.</li> <li>c. After the treated soil has absorbed the liquid dilution, replace the soil in the trench.</li> </ul>

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.	Application Under Slabs or to Soil in Crawlspaces to Prevent or Control Termites	A Ti fe di
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.	The purpose of the	he
<ol> <li>Rod holes and trenches must not extend below the bottom of the footing.</li> </ol>	winged reproducti applications are in	ives iten
<ol> <li>Rod holes must be spaced so as to achieve a continuous termiticide barrier but in no case more than 12 inches apart.</li> </ol>	alteration, soil trea	Т
<ol> <li>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.</li> <li>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.</li> </ol>	Exposed Workers and Winged Reproductives	ir ir cid froir rub sv c
For inaccessible interior areas, such as areas where there is insufficient clearance between floor joists and ground		Р Т
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.	 Termite Carton Nests in Building Voids	d o p a s
<ol> <li>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 was a stranger and was a stranger.</li> </ol>	Termite Carton Nests In Trees	T O N Ir a

#### For inaccessible inter insufficient clearance surfaces to allow ope treat according to spaces. Otherwise, following two method

Accessible

Crawl Spaces

Inaccessible

- 1. To establish a hor 1 gallon of dilutio nozzle pressure application nozzle 7 or larger, or Sp comparable nozzle 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 **Crawl Spaces** 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.

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. Note: Crawl spaces are to be considered inside of the structure.

# **Foam Applications**

The F4688 50 WSP 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, termites, wasps or other anthropods 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.

Application may be made using F4688 50 WSP 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.

# **Termite Control**

applications described below is to kill termite workers or s that may be present at the time of treatment. These nded as supplements to, and not substitutes for, mechanical ent or foundation treatment.

Exposed Workers and Winged Reproductives	To control exposed workers and winged reproductive termites in localized areas, apply 0.11% dilution of F4688 50 WSP 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 should be securely plugged after treatment.
Termite Carton Nests in Building Volds	To control termite carton nests in building voids, apply 0.11% dilution of F4688 50 WSP 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.
Termite Carton Nests in Trees	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 reinfestation by termites in the soil. Apply liquid or foam to the volds in the tree to fill the voids.

# Sand Barrier Installation and Treatment

Termites can build mud tubes over treated surfaces as long as they have access to untreated soil and do not have to move F4688 50 WSP Insecticide Termiticide treated soil. Susceptable cracks and spaces can be filled with builder's or play box sand and the sand treated with F4688 50 WSP Insecticide Termiticide. The sand should be treated as soil following the termiticide rate listed on the F4688 50 WSP Insecticide Termiticide label.

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

Applicators must inspect all structures with nearby water sources such as wells, cisterns, surface ponds, streams, and other bodies of water and evaluate, at a minimum, the treatment recommendations listed below prior to making an application

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

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

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	Structures that contain wells or cisterns within the foundation of a structure can only be treated using the following techniques:
	<ol> <li>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:</li> </ol>
Structures with Wells/Cisterns Inside	a.∝Trench and remove soli to be treated onto heavy plastic sheeting or similar material or into a wheelbarrow.
Foundations	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.
	q. After the treated soil has absorbed the diluted dilution, replace the soil into the trench;
an a	<ol> <li>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.</li> </ol>

# Application in Conjunction with the Use of Termite Baits

As part of the integrated pest management (IPM) program for termite control, F4688 50 WSP 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.

#### Notes

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.

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.

Not for use in voids insulated with rigid foam insulation.

General Household Pest Control – Outdoor Pinstream, Spot, Crack and Crevice or Perimeter Treatment

	F4688 50 WSP Insecticide Termiticide		
		DRAFT March 5, 2008 v2	
	Ants (including Red	Midges	
	Imported Fire Ants	Millipedes	
	and Carpenter Ants)	Mosquitoes	
	Bees	Moths	
	Beetles	Pilibugs	
	Biting Flies	Scorpions	
	Boxelder Bugs	Silverfish	
	Centipedes	Sowbugs	
Controis	Chiggers	Spider Mites	
CONTROLS	Clover Mites	Spiders (including Black	
	Cockroaches	Widow)	
	Crickets	Springtails	
	Earwigs	Ticks (including American	
•	Elm Leaf Beetles	Dog Ticks and Deer Ticks)	
	Firebrats	Wasps	
	Fleas		
	Flies		
1	Gnats	and the first of a constant of the second	
	Apply as a pinstream s	pot, crack and crevice, or perimeter	
	soray on and around (	outside surfaces of residential and	
	non-residential building	and structures including, but not	
	limited to, exterior sidi	ng, foundations, porches, window	
Where to Apply	frames, eaves, patios,	garages, areas adjacent or around	
	private homes, duple	xes, townhouses, condominiums,	
-	house trailers, apartme	ent complexes, carports, garages,	
	storage sheds, and othe	er structures, and other areas where	
	pests congregate or have	e been seen.	
	As a perimeter treatment	t, apply as a continual band up to	
		structure and upwards along the	
1	foundation to a height of	up to 3 feet and around windows,	
Perimeter	doors, other penetration:	s and roof eves, soffets and	
Treatment	overhangs	•	
Application	A	anontration of active ineradiont in	
Rate	Apply 0.06% to 0.11% C	oncentration of active ingredient in er (see Dilution Chart) and apply	
, nate	sumpent amount of wate	00 square feet. Dilutions may be	
		low volumes. Do not apply more	
		tion per 1,000 square feet.	
<u>na ang satu na na na na</u>	Fill tank 1/4 to 1/3 full w		
	Start nump to begin h	y-pass agitation and place end of	
	treation tool in tank to al	low circulation through hose	
Mixing Directions	Add F4688 50 WSP bag	(5).	
		of water, Let pump run and allow	
		hose for 2 to 3 minutes.	
	F4688 50 WSP Insection	ide Termiticide may also be mixed	
	into full tanks of water.	but requires substantial agitation to	
	insure uniformity of the c	dilution.	
		· · · · · · · · · · · · · · · · · · ·	
Repeat	Retreatment may be ne	cessary to achieve and/or maintain	
Repeat Application	Retreatment may be ne control during periods	· · · · · · · · · · · · · · · · · · ·	

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# Outdoor Ant Control

 Apply F4688 50 WSP-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 General 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. Maximum control is generally achieved using the following procedure:

 Carpenter Ants
 1) Treat non-porous, surfaces with low volume applications using 0,06% to 0,11% dilution per 1,000 square feet.

 2) Treat porous surfaces and vegetation with high volume applications using 0,11% dilution per 1,000;

square feet.
Treat the trunks of trees that have carpenter ant trails or upon which carpenter ants are foraging using 0.06% to 0.11% dilution and applying this dilution to thoroughly wet the bark from the base of the tree to as high as possible on the trunk.

Nuisance Ants Outdoor (including fire ants)	For best results, locate and treat ant nests. Apply F4688 50 WSP 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 General 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. Maximum control is generally achieved using the following procedure:
	<ol> <li>Treat non-porous surfaces with low volume applications using 0.06% to 0.11% dilution per 1,000 square feet.</li> </ol>
	<ol> <li>Treat porous surfaces and vegetation with high volume applications using 0.11% dilution per 1,000 square feet.</li> </ol>

Specific Pest Control Applications				
Spec	and Pest Control Applications			
Ant and Fire Ant Mounds	Drench individual mounds with 1-2 gallons of F4688 50 WSP 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, but not in the heat of the day.			
Carpenter ants in trees, utility poles, fencing, deck materials and similar structural members	Drill to locate the interior infested cavity and inject or foam 0.11% dilution (see Dilution Chart) into the cavity using a sufficient volume and an appropriate treatment tool with a splash-back guard.			
Wood piles and stored lumber	To protect firewood or lumber from carpenter ants (and termites), make up a 0.11% dilution (see Dilution Chart) of F4688 50 WSP 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. Wood can be burned as firewood or used as lumber one month after treatment.			
	Underground Services such as: wires, cables, utility lines, pipes, conduits, etc. Services may be within structures or located outside of structures. Soil treatment may be made using F4688 50 WSP Insecticide Termiticide dilution to prevent attack by Termites and Ants.			
Underground Services	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.			
	Where soil will not accept the above-labeled volume, 1 gallon of 0.11% dilution of F4688 50 WSP 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. 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.			
Posts, Poles, and Other Constructions	Create an insecticidal barrier in the soil around wooden constructions such as signs, fences and landscape ornamentation by applying a dilution. 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.			

Pests Under Slabs	Infestations of Arthropods, such as Ants, Cockroaches and Scorpions inhabiting 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.
Pest Control in Crawlspaces and Voids	Apply F4688 50 WSP 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.

#### RESTRICTIONS

Do not apply in a perimeter treatment to areas beyond 10 feet from the foundation of the structure. Do not use as a space spray.

Do not use in and around barns, stables, paddocks, grazing areas, feed lots or other similar areas used for housing, boarding, and/or rearing animals.

Do not apply by air.

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

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

Let surfaces dry before allowing people and pets to contact surfaces.

F4688 50 WSP Insecticide Termiticide will not stain or damage any surface that water alone will not stain or damage.

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 F4688 50 WSP 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.

# 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 containers only. Store in a cool, dry place and avoid excess heat. Do not store at temperatures below  $32^{\circ}$ F (0°C). Rough handling may cause breakage, especially at low temperatures. Allow warming above  $50^{\circ}$ F (10°C) before use. Do not allow inner bags to become wet during storage. Do not handle inner bag with wet bare hands or wet gloves. 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:** If liquid, dike surrounding area or absorb with sand, cat litter or commercial clay. If dry material, cover to prevent dispersal. Place damaged package in a holding container. Identify contents.

Pesticide Disposal: Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. 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. 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 consequences may result because of such factors as manner of use or application, weather or crop conditions beyond the control or 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. 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 foresee-able to (or beyond the control of) seller or Nippon Soda >o,, Ltd., and buyer assumes the risk of any such use.

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

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