

U.S. ENVIRONMENTAL PROTECTION AGENCY

Office of Pesticide Programs Registration Division (7505P) 1200 Pennsylvania Ave., N.W. Washington, D.C. 20460

432-1600

EPA Reg. Number:

Date of Issuance:

2/22/18

NOTICE OF PESTICIDE:

X Registration
Reregistration
(under FIFRA, as amended)

Term of Issuance: Conditional

Name of Pesticide Product:

Premise Dual Insecticide

Name and Address of Registrant (include ZIP Code):

Jan Brill
Manager Registrations
Bayer CropScience
2 T.W. Alexander Dr.
Research Triangle Park, NC 27709

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is conditionally registered in accordance with FIFRA section 3(c)(7)(A). You must comply with the following conditions:

1. Submit and/or cite all data required for registration/registration/registration review of your product under FIFRA when the Agency requires all registrants of similar products to submit such data.

 ${\bf Signature\ of\ Approving\ Official:}$

Date:

2/22/18

Venus Eagle, Product Manager 01

Invertebrate and Vertebrate Branch 3, Registration Division (7505P)

- 2. You are required to comply with the data requirements described in the DCI identified below:
 - a. Imidacloprid GDCI-129099

You must comply with all of the data requirements within the established deadlines. If you have questions about the Generic DCI listed above, you may contact the Chemical Review Manager in the Pesticide Reevaluation Division: http://iaspub.epa.gov/apex/pesticides/f?p=chemicalsearch:1

- 3. Make the following label changes before you release the product for shipment:
 - Revise the EPA Registration Number to read, "EPA Reg. No. 432-1600."
- 4. Submit one copy of the final printed label for the record before you release the product for shipment.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

If you fail to satisfy these data requirements, EPA will consider appropriate regulatory action including, among other things, cancellation under FIFRA section 6(e). Your release for shipment of the product constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records. Please also note that the record for this product currently contains the following CSFs:

- Basic CSF dated 10/4/17
- Alternate CSF 1 dated 10/4/17
- Alternate CSF 2 dated 10/4/17
- Alternate CSF 3 dated 10/9/17

If you have any questions, please contact Marianne Lewis by phone at (703) 308-8043 or via email at lewis.marianne@epa.gov.

Enclosure

ACCEPTED

02/22/2018

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 4000 IMIDACLOPRID GROUP 4A INSECTICIDE

Premise

ACTIVE INGREDIENT:

Dual Insecticide

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

For prevention or control of subterranean termites, drywood termites, dampwood termites, carpenter ants, and other wood-infesting insects.

For Foliar and Systemic insect control on turfgrass, landscape ornamentals, fruit and nut trees, and interior plantscapes.

Imidacloprid,1-[(6-Chloro-3-pyridinyl)methyl]-N-nitro-2-imidazolidinimine 21.4% OTHER INGREDIENTS: 78.6% TOTAL: 100.0% Contains 2 pounds of imidacloprid per gallon. Shake well before using.

EPA Reg. No. 432-XXX EPA Est. No.

STOP - READ THE LABEL BEFORE USE. KEEP OUT OF REACH OF CHILDREN

CAUTION

PRECAUCION AL USUARIO: Si usted no puede leer o entender inglés, no use este producto hasta que la etiqueta le haya sido explicada ampliamente.

(TO THE USER: If you cannot read or understand English, do not use this product until the label has been fully explained to you.)

See [Back] [Side] Panel for First Aid Instructions and [Leaflet] [Booklet] for Complete Precautionary Statements and Directions for Use. (Note to reviewer: Location of additional precautionary statements, directions for use will vary between those listed, depending on container type/size.)

For <u>MEDICAL</u> and <u>TRANSPORTATION</u> Emergencies <u>ONLY</u> Call 24 Hours A Day 1-800-334-7577 For PRODUCT USE Information Call 1-800-331-2867

FIRST AID						
If swallowed:	Call a 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 by a poison control center or doctor. 						
	Do not give anything by mouth to an unconscious person.					
If on skin or clothing:	Take off contaminated clothing					
	Rinse skin immediately with water for 15 to 20 minutes.					
	Call a poison control center or doctor for treatment advice.					
If in eyes:	 Hold eyelids open and rinse slowly and gently with water for 15 to 20 minutes. 					
	 Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. 					
	Call a poison control center or doctor for treatment advice.					
	HOT LINE NUMBER					

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-334-7577 for emergency medical treatment.

NOTE TO PHYSICIAN: No specific antidote is available. Treat patient symptomatically.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Harmful if swallowed. Harmful if absorbed through skin. Harmful if inhaled. Causes moderate eye irritation. Avoid contact with skin, eyes, or clothing.

Personal Protective Equipment (PPE)

All pesticide handlers (mixers, loaders, and applicators) must wear long-sleeved shirt and long pants, socks, shoes, and chemical-resistant gloves made out of: barrier laminate, butyl rubber ≥14 mils, nitrile rubber ≥14 mils, neoprene rubber ≥14 mils, polyethylene, polyvinyl chloride ≥14 mils, or viton ≥14 mils. All pesticide handlers must wear protective eyewear when working in a non-ventilated space or when applying termiticide by rodding or sub slab injection. After the product is diluted in accordance with label directions for use, shirt, pants, socks, shoes must be worn.

Wash after handling before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove contaminated clothing and wash before reuse.

ENVIRONMENTAL HAZARDS

This product is highly toxic to 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. Do not contaminate water when disposing of equipment washwaters. Apply this product only as specified on this label. Extreme care must be taken to avoid runoff. Apply only to soil or other fill substrate that will accept the solution at the specified rate. Do not treat soil that is water-saturated or frozen or in any conditions where run-off or movement from the treatment area (site) is likely to occur. Apply this product only as specified on this label. Extreme care must be taken to avoid runoff. Apply only to soil or other fill substrate that will accept the solution at the specified rate. Do not treat soil that is water-saturated or frozen or in any conditions where run-off or movement from the treatment area (site) is likely to occur. This product is highly toxic to bees exposed to direct treatment or residues on blooming crops/plants or weeds. Do not apply this product or allow it to drift to blooming crops/plants or weeds if bees are foraging the treatment area.

This chemical demonstrates the properties and characteristics associated with chemicals detected in groundwater. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

PROTECTION OF POLLINATORS

APPLICATION RESTRICTIONS EXIST FOR THIS PRODUCT

BECAUSE OF RISK TO BEES AND OTHER INSECT POLLINATORS. FOLLOW APPLICATION RESTRICTIONS FOUND IN THE DIRECTIONS FOR USE TO PROTECT POLLINATORS.

Look for the bee hazard icon in the Directions for Use for each application site for specific use restrictions and instructions to protect bees and other insect pollinators.

This product can kill bees and other insect pollinators.

Bees and other insect pollinators will forage on plants when they flower, shed pollen, or produce nectar. Bees and other insect pollinators can be exposed to this pesticide from:

- o Direct contact during foliar applications, or contact with residues on plant surfaces after foliar applications
- Ingestion of residues in nectar and pollen when the pesticide is applied as a seed treatment, soil, tree injection, as well as foliar applications.

When Using This Product Take Steps To:

- Minimize exposure of this product to bees and other insect pollinators when they are foraging on pollinator attractive plants around the application site.
- Minimize drift of this product on to beehives or to off-site pollinator attractive habitat. Drift of this product onto beehives or off-site to pollinator attractive habitat can result in bee kills.

Information on protecting bees and other insect pollinators may be found at the Pesticide Environmental Stewardship website at: http://pesticidestewardship.org/PollinatorProtection/Pages/default.aspx.

Pesticide incidents (for example, bee kills) should immediately be reported to the state/tribal lead agency. For contact information for your state, go to: www.aapco.org/officials.html. Pesticide incidents should also be reported to the National Pesticide Information Center at: www.npic.orst.edu or directly to EPA at: beekill@epa.gov

DIRECTIONS FOR USE

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

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticides regulation.

See individual sites for specific pollinator protection application restrictions. If none exist under the specific use site, for outdoor foliar applications, follow these application directions.



Do not apply Premise Dual Insecticide while bees are foraging in the treatment area. Do not apply Premise Dual Insecticide to plants that are flowering. Only apply after all flower petals have fallen off.

Do not use this product on plants being grown for sale or other commercial use or for commercial seed production or for research purposes.

Do not formulate this product into other end-use products.

APPLICATION AS A TERMITICIDE

For prevention or control of subterranean termites, drywood termites, dampwood termites, carpenter ants, and other listed wood-infesting insects.

Structures that contain wells or cisterns within the foundation of the structure can only be treated using the treated backfill method described in the treatment around wells and cisterns section of this label. Consult state and local specifications for recommended distances of wells from treated area, or if such regulations do not exist, refer to Federal Housing Administration Specifications (H.U.D.) for guidance.

Restrictions for termiticide and ant/wood boring applications:

- Do not apply when bees are foraging in the treatment area. Do not apply to plants that are flowering. Only apply after all flower petals have fallen off.
- Do not allow this product to contact blooming plants when making perimeter treatments if bees are foraging the treatment



area.

- Do not apply this product, by any application method, to linden, basswood, or other Tilia species.
- Do not use this product on plants being grown for sale or other commercial seed production or for research purposes.
- Do not let children and pets enter the treated area until dry.
- After treatment, plug and fill all holes drilled in concrete slab areas of the building with a suitable sealant.
- Do not apply solution until location of heat pipes, ducts, water and sewer lines and electrical conduits are known and identified. Caution must be taken to avoid puncturing and injection into these structural elements.
- Do not treat within a distance of one foot out from the drip line of edible plants.
- Do not contaminate public and private water supplies.
- Use anti-backflow equipment or an air gap on filing hoses.
- Consult State, Federal, or local authorities for information regarding the approved treatment practices for areas in close proximity to potable water supplies.
- Do not apply to firewood.

MIXING: Refer to Mixing Table for proper amount of Premise Dual Insecticide to be used.

Mix the termiticide use dilution in the following manner. Fill tank 1/4 to 1/3 full. If using large sprayer, start pump to begin bypass agitation and place end of treating tool in tank to allow circulation through hose. Add specified amount of Premise Dual Insecticide. Add remaining amount of water. Let pump run and allow recirculation through the hose for 2 to 3 minutes.

MIXING TABLE FOR Premise Dual Insecticide					
GALLONS WATER		0.05%	0.1%		
10		80 mL	160 mL		
5	PLUS	40 mL	80 mL		
2		16 mL	32 mL		
1		8 mL	16 mL		

MI	MIXING TABLE FOR Premise Dual Insecticide					
GALLONS WATER		0.05%	0.1%			
100		27.5 fl oz	55.0 fl oz			
50	PLUS	13.8 fl oz	27.5 fl oz			
25		6.9 fl oz	13.8 fl oz			
1		0.3 fl oz	0.6 fl oz			

[FOR 240 mL SIZE ONLY]*

[FOR 55 FL OZ SIZE ONLY]*

^{*}Contingent on container size, only one or the other of the tables will be used.

PROPORTIONAL INJECTOR MIXING TABLE FOR Premise Dual Insecticide				
INJECTOR VOLUME (fl oz/gal) CONCENTRATION (%)				
0.3	0.05			
0.6	0.10			

IN-LINE-INJECTION: For the desired application rate, use the proportional injector mixing table to determine the amount of Premise Dual Insecticide for a given injection volume of finished emulsion.

CONVERSION KEY: 128 fl oz = 1 gal, 16 fl oz = 1 pint, 8 pints = 1 gal, 1 fl oz = 29.5 mL

APPLICATION VOLUME

The application volumes described in the Premise Dual Insecticide "DIRECTIONS FOR USE" must be used whenever possible. However, where soil conditions will not accept application of 4 gallons of Premise Dual Insecticide per 10 linear feet, twice the Premise Dual Insecticide concentration may be applied in 2 gallons of solution per 10 linear feet. For example, if 0.05% is the correct use rate to be applied in 4 gallons of water, then 2 gallons of 0.1% dilution may be used per 10 linear feet to deliver an equivalent amount of Premise Dual Insecticide per unit of soil.

CONTROL - GENERAL

Treatment standards for subterranean termite control may vary due to regulations, treatment procedures, soil types, construction practices, and other factors. The purpose of chemical soil treatment for termite control is to establish a continuous chemical treated zone (horizontal and/or vertical as needed) between the wood and other cellulose material in the structure and the termite colonies in the soil. Follow all federal, state, and local regulations and treatment standards for protection of a structure from termites. In some instances where an aerial or above ground colony is established, supplemental treatments to control the termites, landscape modifications, and/or structural repairs may be needed to deprive termites of a moisture source. Use a 0.05 to 0.1% dilution based on local recommendations. Generally a 0.05% dilution is used for typical control situations. Where severe or persistent infestations occur, a 0.1% dilution may be used.

PRE-CONSTRUCTION TREATMENT

Do not apply at a lower dosage and/or concentration than specified on this label for application prior to installation of the finished grade.

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.

CONCRETE SLAB-ON-GROUND OR BASEMENTS: Apply an overall treatment to the entire surface of soil or other substrate to be covered by the slab including areas to be under carports, porches, basement floor and entrance platforms. Apply at the rate of 1 gallon of solution to accurately and uniformly cover 10 square feet. If fill under slab is gravel or other coarse aggregate, apply at the rate of 1.5 gallons or sufficient volume of solution, to accurately and uniformly cover 10 square feet. In addition, apply 4 gallons of solution (see APPLICATION VOLUME) per 10 linear feet to provide a uniform treated zone in soil at critical areas such as along the inside of foundation walls, and around plumbing, bath traps, utility services, and other features that will penetrate the slab.

After completion of grading, make an application by trenching or trenching and rodding around the slab or foundation perimeter. Rodding may be done from the bottom of a shallow trench. When rodding, rod holes must be spaced in a manner that will allow for a continuous chemical treated zone, not to exceed 12 inches, to be deposited along the treated area. Rod holes must not extend below the footing. Apply 4 gallons of solution (see APPLICATION VOLUME) per 10 linear feet, per foot of depth to provide a uniform treated zone. When trenching, the trench along the outside foundation should be about 6 inches in width and 6 inches in depth. Use a low pressure spray (not to exceed 25 psi at the treatment tool when the valve is open) to treat soil which will be placed in the trench after rodding. Mix the spray solution with soil as it is being placed in the trench. When treating voids in hollow masonry units, use 2 gallons of solution per 10 linear feet of wall. Apply solution so it will reach the footing by injecting into the lower areas of the wall, just above the floor or footing.

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

Rodding in trench followed by flooding of trench and treatment of backfill may provide a better opportunity to achieve a continuous chemical treated zone than using soil rodding alone to establish a vertical termiticide treated zone.

CRAWL SPACES: Application must be made by trenching or trenching and rodding downward along the inside and outside of foundation walls, around piers, interior supports in contact with the soil, plumbing, and utility services. Apply 4 gallons of solution (see APPLICATION VOLUME) per 10 linear feet, per foot of depth to provide a uniform treated zone. Rodding may be done from the bottom of a shallow trench to top of the footing or a minimum of 4 feet. When rodding, rod holes must be spaced in a manner that will allow for a continuous chemical treated zone to be deposited along the treated area. Rod holes must not extend below the footing. When trenching, the trench should be about 6 inches wide and 6 inches deep. Use a low pressure spray to treat soil which will be placed in the trench, mixing the spray solution with soil as it is being placed in the trench.

HOLLOW BLOCK FOUNDATIONS OR VOIDS: Hollow block foundations or voids in masonry resting on the footing may be treated to provide a continuous chemical treated zone in the voids at the footing. Apply 2 gallons of solution per 10 linear feet to the lower part of the void so that it reaches the top of the footing or soil.

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

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

POST-CONSTRUCTION TREATMENT

CONCRETE SLAB-ON-GROUND: To apply a treatment under the slab, including attached porches, carports, entrance platforms, garages and similar slab structures, it may be necessary to drill through the slab or exterior foundation. Drill holes must be spaced in a manner that will allow for application of a continuous chemical treated zone. Treat all existing cracks and cold, construction or expansion joints. Also, treat around bath traps, plumbing and utility services which penetrate the slab. Apply 4 gallons of solution (see APPLICATION VOLUME) per 10 linear feet per foot of depth to provide a uniform treated zone. DO NOT MAKE TREATMENT UNTIL LOCATION OF HEAT OR AIR CONDITIONING DUCTS AND VENTS ARE KNOWN AND IDENTIFIED. USE EXTREME CAUTION TO AVOID CONTAMINATION OF DUCTS AND VENTS. Plug and fill all drilled holes in commonly occupied areas with a suitable sealant. Plugs must be of non-cellulose material or covered by an impervious, non-cellulose material.

An application must be made by trenching or trenching and rodding around the outside of the foundation wall. Apply 4 gallons of solution (see APPLICATION VOLUME) per 10 linear feet per foot of depth to provide a uniform treated zone. When trenching, the trench along the outside foundation should be about 6 inches wide and 6 inches deep. Use a low pressure spray to treat soil as it is being placed in the trench.

Rodding can be done from the bottom of a shallow trench. When rodding, rod holes must be spaced in a manner that will allow for a continuous chemical treated zone, not to exceed 12 inches, to be deposited along the treated area. Do not extend rod hole depth below the footing.

BATH TRAPS: Treat exposed soil or soil covered with tar or a similar type sealant beneath and around plumbing and/or drain pipe entry areas with 3 gallons of solution per square foot. Cut and install an access door or inspection vent if not already present. After inspection and removal of any wood or cellulose debris, the soil can be treated by rodding or drenching the soil.

CRAWL SPACES: When there is insufficient clearance between floor joists and ground surfaces to allow applicator access, excavate, if possible, and treat according to crawl spaces (refer to Pre-Construction Treatment). If unable to excavate, crawl space soil and wood treatment may be used to prevent surface access by termites. Apply 1 gallon of solution (see APPLICATION VOLUME) per 10 square feet to provide a uniform chemical treated zone. Use a very coarse spray at a pressure not exceeding 25 psi at the treatment tool when the valve is open.

Where a crawl space cannot be reached with the application wand, use extension wands or other suitable equipment to apply a coarse spray on the soil, wood and structural members contacting the soil at the above rates. Do not apply to inaccessible crawl space areas using pressures greater than 25 psi at the treatment tool when the valve is open.

Treatment may also be made by drilling through the foundation wall or through the floor above and treating the soil perimeter at a rate of 1 gallon of solution per 10 square feet. Drill spacing must be at intervals not to exceed 16 inches. Many states have smaller intervals so check state regulations which may apply.

To prevent subterranean termites from constructing mudtubes between soil and crawl space wood members above, an overall soil treatment of this product may be applied. Remove all cellulose debris before application. Apply 1 gallon of solution (see APPLICATION VOLUME) per 10 square feet to provide a uniform chemical treated zone.

OUTER FOUNDATION WALLS: Application must be made by trenching, or where appropriate (see below) by trenching, or trenching and rodding from the bottom of the trench, around the outside of the foundation walls. When trenching, excavate a trench along the outside foundation that is about 6 inches wide and 6 inches deep. Apply 4 gallons of solution (see APPLICATION VOLUME) per 10 linear feet, per foot of depth to provide a uniform vertical treated zone.

- For shallow foundations, one foot or less of depth, dig a narrow trench that does not exceed 6 inches wide and 6 inches deep along the outside (and inside) of the foundation walls, being careful not to dig below the bottom of the footings. For foundations with exposed footings, dig a trench alongside the footing taking care not to undermine the footing.
- For basements and other foundations deeper than one foot, the application must be made by trenching and rodding from the bottom of a shallow trench. When rodding, rod holes must be spaced in a manner that will allow for a continuous treated zone, not to exceed 12 inches, to be deposited along the treated area. Rod holes must not extend below the footing. Rodding depth should be to the top of the footer, or to a maximum depth of 4 feet, or according to state or local regulations.

For all applications, apply the solution into the trench and mix with the excavated soil as it is replaced into the trench. Use a low-pressure spray to treat soil that will be replaced into the trench after rodding. Mix spray solution with the soil as it is being replaced in the trench.

Note: Where direct access to soil on the outer foundation wall is impossible due to attached porches, entrance platforms, garages and similar slab structures, consult the CONCRETE SLAB-ON-GROUND section of this label for directions on treatment of soil beneath these structures. However, where obstructions (e.g., concrete walkways) adjacent but not attached to foundation, or where soil type and/or conditions prevent trenching the exterior perimeter treatment may be performed at the obstructed location by rodding alone. When rodding, rod holes must be spaced in a manner that will allow for a continuous treated zone, not exceed 12 inches, to be deposited along the treated area.

BASEMENTS - INSIDE PERIMETER: If necessary, treat by drilling along the perimeter of the interior walls. Applications also may be necessary around sewer pipes, floor drains, conduits, expansion joints or any cracks or holes in the basement floor. Apply 4 gallons of solution (see APPLICATION VOLUME) per 10 linear feet to provide a uniform treated zone.

Space drill holes in a manner that will allow for application of a continuous chemical treated zone. Plug and fill all drill holes in commonly occupied areas of the building with a suitable sealant. Plugs must be of non-cellulose material or covered by an impervious, non-cellulose material.

HOLLOW BLOCK FOUNDATION OR VOIDS: Hollow block foundations or voids in masonry resting on the footing may be treated to provide a continuous chemical treated zone in the voids at the footing. Apply 2 gallons of solution per 10 linear feet to the lower part of the void so that it reaches the top of the footing or soil. Drill spacing must be at intervals not to exceed 16 inches. Many states have smaller intervals so check state regulations which may apply.

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

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

PLENUMS: For plenum-type structures which use a sealed underfloor space to circulate heated and/or cooled air throughout the structure, apply the dilution at the rate of 4 gallons of solution (see APPLICATION VOLUME) per 10 linear feet, per foot of depth of soil to provide a uniform treated zone adjacent to both sides of foundation walls, supporting piers, plumbing and conduits. The soil must be treated by trenching to a depth of 6 inches or trenching and rodding (where conditions permit) or to the top of the footing. When conditions will not permit trenching or rodding, a surface application adjacent to interior foundation walls may be made, but the treated strip shall not exceed a width of 18 inches, horizontally, from the foundation walls, piers or pipes. The surface application will be made at a rate of 1.5 gallons of solution per 10 square feet as a very coarse spray under low pressure (not to exceed 25 psi when measured at the treating tool when valve is on).

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

TREATMENT AROUND WELLS OR CISTERNS: Do not contaminate wells or cisterns.

Structures With Wells/Cisterns Inside Foundations: Structures that contain wells or cisterns within the foundation of a structure can only be treated using the following techniques:

- 1. Do not apply within 5 feet of any well or cistern by rodding and/or trenching or by the backfill method. Treat soil between 5 and 10 feet from the well or cistern by the backfill method only. Treatment of soil adjacent to water pipes within 3 feet of grade should only be done by the backfill method.
 - 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 solution 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 solution, 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 Pests" section of this label.

Structures With Adjacent Wells/Cisterns and/or Other Water Bodies: Applicators must inspect all structures with nearby water sources such as wells, cisterns, surface ponds, streams, and other bodies of water and evaluate, at a minimum, the treatment specifications listed below prior to making an application.

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

Exterior Perimeter/Interior Spot Treatment

USE INFORMATION

Exterior Perimeter/Interior Spot Treatment is an optional method of termite treatment only for use in post-construction applications, after the final grade is established. Structural protection when using the Exterior Perimeter/Interior Spot Treatment is accomplished by: 1) establishing a continuous treated zone around the entire exterior foundation wall of the building; and 2) spot-treating infested areas on the building interior. Soil adjacent to the exterior foundation wall must be treated in the same manner as conventional (full) application. It is required that a complete and continuous treated zone be achieved around the entire exterior perimeter, including under any attached slabs such as garages, porches, patios, driveways and pavement adjoining the foundation. Interior spot treatments must then be made to any indoor areas where termite activity is present. Optional interior spot treatments may also be made to high risk areas including, but not limited to, plumbing and utility penetrations (including bath traps), along settlement cracks and expansion joints, and dirt-filled porches.

Exterior Perimeter/Interior Spot Treatment can be used either as a preventative treatment (before structural infestation occurs) or as a curative treatment (after structural infestation occurs) in existing structures. Preventative treatment does not include pre-construction applications made to protect new construction. It is required that a thorough structural inspection be completed, before treatment, to locate all areas of active infestation. Spot treatment of all known sites of termite activity is required with this optional labeling. If no termite activity is observed inside the structure, interior spot treatments are not required. Do not apply at a lower dosage and/or concentration than specified on this label.

EXTERIOR PERIMETER TREATMENT

It is required that all structures, regardless of the type of construction, be protected by establishing a vertical treated zone along the outer perimeter of the foundation wall. Consult the OUTER FOUNDATION WALLS section of this label (see below) for detailed directions on this treatment procedure.

- 1. OUTER FOUNDATION WALLS: Application must be made by trenching, or where appropriate (see below) by trenching, or trenching and rodding from the bottom of the trench, around the outside of the foundation walls. When trenching, excavate a trench along the outside foundation that is about 6 inches wide and 6 inches deep. Apply 4 gallons of solution (see APPLICATION VOLUME) per 10 linear feet, per foot of depth to provide a uniform vertical treated zone.
 - For shallow foundations, one foot or less of depth, dig a narrow trench that does not exceed 6 inches wide and 6 inches deep along the outside of the foundation walls, being careful not to dig below the bottom of the footings. For foundations with exposed footings, dig a trench alongside the footing taking care not to undermine the footing.
 - For basements and other foundations deeper than one foot, the application must be made by trenching and rodding from the bottom of a shallow trench. When rodding, rod holes must be spaced in a manner that will allow for a continuous treated zone, not to exceed 12 inches, to be deposited along the treated area. Rod holes must not extend below the footing. Rodding depth should be to the top of the footer, or to a maximum depth of 4 feet, or according to state or local regulations.

For all applications, apply the solution into the trench and mix with the excavated soil as it is replaced into the trench. Use a low-pressure spray to treat soil that will be replaced into the trench after rodding. Mix spray solution with the soil as it is being replaced in the trench.

Note: Where direct access to soil on the outer foundation wall is impossible due to attached porches, entrance platforms, garages and similar slab structures, consult the CONCRETE SLAB-ON-GROUND section of this label for directions on treatment of soil beneath these structures. However, where obstructions (e.g., concrete walkways) adjacent but not attached to foundation, or where soil type and/or conditions prevent trenching the exterior perimeter treatment may be performed at the obstructed location by rodding alone. When rodding, rod holes must be spaced in a manner that will allow for a continuous treated zone, not exceed 12 inches, to be deposited along the treated area.

2. CONCRETE SLAB-ON-GROUND: To treat soil beneath a slab, including attached porches, carports, entrance platforms, garages and similar slab structures abutting the foundation wall, it is necessary to drill through the slab. If an infestation is associated with an expansion joint, crack, utility penetration, or similar access point in the slab, treat by drilling and injecting through the slab. Drill holes must be spaced in a manner that will allow for application of a continuous chemical treated zone, but must extend a minimum of 3 feet on both sides of the infested site. Apply 4 gallons of solution (see APPLICATION VOLUME) per 10 linear feet.

DO NOT MAKE TREATMENT UNTIL LOCATION OF HEAT OR AIR CONDITIONING DUCTS AND VENTS ARE KNOWN AND IDENTIFIED. USE EXTREME CAUTION TO AVOID CONTAMINATION OF DUCTS AND VENTS. Plug and fill all drilled holes in commonly occupied areas with suitable sealant. Plugs must be of non-cellulose material or covered by an impervious, non-cellulose material.

3. INACCESSIBLE CRAWL SPACES: If termite activity is found along the perimeter wall or on a pier within an inaccessible crawl space, areas with termite activity must be treated. Apply 4 gallons of solution (see APPLICATION VOLUME) per 10 linear feet to create a vertical treated zone, which must extend a minimum of 3 feet on both sides of the infested site.

Optional directions for horizontal rodding: Treatment may also be made by drilling through the foundation wall (or through the floor above) to treat the soil along the perimeter wall at a rate of 4 gallons of solution (see APPLICATION VOLUME) per 10 linear feet. Drill spacing must be at intervals not to exceed 16 inches. Many states have shorter intervals so check state regulations which may apply.

If termite activity is neither along the perimeter wall nor on a pier within the inaccessible crawl space, to prevent subterranean termites from constructing mud tubes between soil in the crawl space and wooden elements in the structure, an overall soil treatment of this product may be applied. Remove all cellulose debris before application. Apply 1 gallon of solution (see APPLICATION VOLUME) per 10 square feet to provide a uniform chemical treated zone.

4. ACCESSIBLE CRAWL SPACES: If termite activity is found within an accessible crawl space, the area(s) where termite activity exist must be treated by trenching, or trenching and rodding from the bottom of the trench, along the interior foundation walls, around piers, interior supports in contact with the soil, plumbing, or utility services. Apply 4 gallons of solution (see APPLICATION VOLUME) per 10 linear feet, per foot of depth, to create a vertical treated zone, which must extend a minimum of 3 feet on both sides of the infested site. Rodding may be done from the bottom of a shallow trench to the top of the footing or to a minimum of depth of 4 feet. When rodding, rod holes must be spaced in a manner that will allow for a continuous treated zone, not to exceed 12 inches, to be deposited along the treated area. Rod holes must not extend below the footing. When trenching, dig a narrow trench about 6 inches wide and 6 inches deep. Use a low-pressure spray to treat soil which will be placed in the trench, mixing the spray solution with soil as it is being placed in the trench.

INTERIOR SPOT TREATMENT

Targeted applications must be made to all known infested sites inside the structure. One or more of the following application methods must be used to make interior spot treatments:

- Sub-slab injections made through the slab at or near areas where termites are known to be penetrating the slab to reach wood in the structure and/or at or near sites of active infestations. Apply 4 gallons per 10 linear feet per foot of depth. Sub-slab injections must extend to a minimum of 3 feet on either side of every known infested site at expansion joints or cracks in slabs.
- Void treatments using injection of sprays, mists, or foams into above ground structural voids, termite carton nests, and other infested locations.
- Wood treatments using injection techniques and/or surface applications, to treat active infestations in structural timbers.

To maximize dispersion of treatment solution in soil and in above ground locations, the use of foam and directional dispersion tips is encouraged for all interior spot treatments. Consult section(s) of this label appropriate to the element of construction, FOAM APPLICATIONS or CONTROL OF WOOD INFESTING PESTS for detailed directions on any of these treatment procedures.

1. INTERIOR SLABS: When termite activity is located within an interior wall or structural member, the soil beneath the slab and the wall void at this site of activity must be treated. The source of infestation at an expansion joint, crack, through a utility penetration, or similar access point in the slab, must be treated by drilling and injecting through the slab. Drill holes in the slab must be spaced in a manner that will allow for application of a continuous chemical treated zone, which must extend a minimum of 3 feet on either side of the infested site. Apply 4 gallons of solution (see APPLICATION VOLUME) per 10 linear feet. To maximize dispersion of treatment solution in soil, the use of foam and directional dispersion tips is encouraged. To treat the wall void, consult section(s) of this label appropriate to the element of construction, FOAM APPLICATIONS or CONTROL OF WOOD INFESTING PESTS for detailed directions on any of these treatment procedures.

DO NOT MAKE TREATMENT UNTIL LOCATION OF HEAT OR AIR CONDITIONING DUCTS AND VENTS ARE KNOWN AND IDENTIFIED. USE EXTREME CAUTION TO AVOID CONTAMINATION OF DUCTS AND VENTS. Plug and fill all drilled holes in commonly occupied areas with suitable sealant. Plugs must be of non-cellulose material or covered by an impervious, non-cellulose material.

2. HOLLOW BLOCK FOUNDATION OR MASONRY VOIDS: Termite activity located within hollow-block foundations or masonry voids must be treated. Spot treatment at the site(s) of termite activity must extend a minimum of 3 feet on both sides. Treat masonry voids by applying 2 gallons of solution per 10 linear feet to the lower part of the void so that it reaches the top of the footing or soil. Drill spacing in masonry voids must be at intervals not to exceed 16 inches; states may have shorter intervals so check state regulations which may apply. To maximize dispersion of treatment solution in voids, the use of foam and directional dispersion tips is encouraged. To treat structural voids above sites of termite activity in masonry, consult section(s) of this label appropriate to the element of construction, FOAM APPLICATIONS or CONTROL OF WOOD INFESTING PESTS for detailed directions on any of these treatment procedures.

Treatment of voids in block or rubble foundation walls must be closely examined. Applicators must inspect areas of possible runoff as a precaution against application leakage in the treated areas. Some areas may not be treatable or may require mechanical alteration prior to treatment. All leaks resulting in the deposition of termiticide in locations other than those prescribed on this label must be cleaned up prior to leaving the application site (refer to Precautionary Statements). Do not allow people or pets to contact or to reoccupy the contaminated areas of the structure until the clean up is completed.

- 3. BATH TRAPS: If termite activity is observed within 2 feet of the bath trap, then exposed soil or soil covered with tar or a similar type of sealant around plumbing and/or drain pipe entry areas must be treated. Tar or sealant may have to be removed to allow for adequate soil treatment. An access door or inspection portal should be installed if one is not present. After inspection and removal of any wood or cellulose debris, the soil can be treated by rodding or drenching the soil at a volume of no less than 3 gallons of solution per square foot.
- **4. SHOWER OR FLOOR DRAINS:** If termite activity is observed within 2 feet of a shower or floor drain in the slab, then soil beneath the drain must be treated. Drill through the slab adjacent to the drain and use sub-slab injection to apply solution to the soil. Multiple access points may be drilled adjacent to the drain. Treat soil at a volume of 1 gallon of solution per square foot.

FOAM APPLICATIONS

Construction practices, soil subsidence, and other factors may create situations in which a continuous chemical treated zone cannot be achieved using conventional treatment alone. In situations where necessary, conventional application methods can be supplemented through use of foam generating equipment, or similar devices, to provide a continuous treated zone.

*Contingent on container size, only one or the other of the other of the tables will be used.

Foam application may be made alone or in combination with conventional application methods, provided that the labeled amount of active ingredient per unit area is used.

Foam Application Use Directions: Mix appropriate concentration of Premise Dual Insecticide in water and add the manufacturer's specified quantity of foam agent to the Premise Dual Insecticide solution (see table for foaming specifications.) Apply a sufficient volume of Premise Dual Insecticide foam alone or in combination with liquid solution to provide a continuous treated zone at the required rate for specific application sites.

[FOR 240 ML SIZE ONLY]*

Premise Dual Insecticide* (mL)	GALLONS OF WATER	FOAM EXPANSION RATIO	FINISHED FOAM	
			(gallons)	(ai%)
160	1	20:1	20	0.05
80	1	10:1	10	
40	1	5:1	5	

[FOR 55 FL OZ SIZE ONLY]*

Premise Dual	GALLONS OF WATER	FOAM EXPANSION	FINISHE	D FOAM	
nsecticide* (fl oz)	GALLONS OF WATER	RATIO	(gallons)	(ai%)	
6.9	1	25:1	25	0.05	
	2.5	10:1			
	5	5:1			
13.8	1	50:1			
	2.5	20:1	50		
	5	10:1			

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

Foam and liquid applications must be consistent with volume and active ingredient instructions in order to ensure proper application has been made. The volume and amount of active ingredient are essential to an effective treatment. At least 75% of the gallons of Premise Dual Insecticide must be applied as a typical liquid treatment. The remaining 25% or less gallons is delivered to appropriate locations using a foam application.

NOTE: When foam is used solely to kill subterranean termites in above ground locations (such as feeding galleries in wooden framing, or in voids with framed walls), and whenever the target pest is other than subterranean termites (drywood termites, beetles, ants, etc.), dilute solutions of Premise Dual Insecticide may be expanded by foaming without concentrating the Premise Dual Insecticide solution as previously described for soil applications. Add the manufacturers' specified volume of foaming agent to produce foam of the desired expansion ratio. Use application tips and methods suitable to the site and pest.

CONTROL OF WOOD INFESTING PESTS

For control of **above ground termites and carpenter ants** in localized areas, apply a 0.05 to 0.1% solution or sufficient volume of Premise Dual Insecticide foam to voids and galleries in damaged wood, and in spaces between wooden structural members and between the sill plate and foundation where wood is vulnerable. Applications may be made to inaccessible areas by drilling, and then injecting the suspension or foam with a suitable directional injector into the damaged wood or wall voids. Termite carton nests in building voids may be injected with a 0.05 to 0.1% suspension or foam. Multiple injection points to varying depths may be necessary. It is desirable to physically remove carton nest material from building voids when such nests are found. Application to attics, crawl spaces, unfinished basements, or man-made voids may be made with a coarse fan spray of 0.05 to 0.1% solution or foam to control exposed worker and winged reproductive forms of termites or carpenter ants. This type of application is intended to be a supplemental treatment for control of above ground subterranean termites and carpenter ants.

It is recommended to remove or prune away any shrubbery, bushes, and tree branches touching the structure. Vegetation touching the structure may offer a route of entry for ants into the structure. This may allow ants to inhabit the structure without coming in contact with the treatment. If nests are found, direct treatment of Premise Dual Insecticide can be made to these nests.

Use a 0.05 to 0.1% solution to control existing infestations of or to prevent infestation by termites or carpenter ants in adjacent trees, utility poles, fencing and decking materials, landscape timbers and similar non-structural wood-to-soil contacts. If possible, locate the interior infested cavity and inject a 0.05 to 0.1% solution or sufficient volume of Premise Dual Insecticide foam using an appropriate treatment tool with a splashback guard. These non-structural wood-to-soil contacts may also be treated by applying a solution to the soil as a spot application or continuous treated zone applied as a drench or by rodding around the base of the point(s) of soil contact(s). Place rod holes approximately 3 inches away from the soil contact point(s) and spaced no more than 12 inches along the perimeter of

the soil contact(s). For small poles or posts (< 6 inches in diameter), apply 1 gallon per foot of depth. For larger constructions, apply 4 gallons per 10 linear feet per foot of depth. Retreat as needed to maintain protection.

Termite carton nests in trees adjacent to structure may be injected with a 0.05 to 0.1% solution or sufficient volume of foam using a pointed injection tool. Multiple injection points to varying depths may be necessary. Removal of carton material from trees is desirable but may not be necessary when foam application is used. In some instances, a perimeter application of a 0.05 to 0.1% solution applied to soil around the root flare of the tree may be necessary to prevent reinfestation by termites in the soil. For small trees (< 6 inches in diameter), apply 1 gallon of solution. For larger trees, apply 4 gallons per 10 linear feet (measured as the circumference at the root flare).

Drywood termites and wood-infesting beetles or borers (such as, but not limited to, powder post beetles, anobiid or deathwatch beetles, false powder post beetles, old house borers, wharf borers, or ambrosia or bark beetles). Galleries and structure voids can be treated with sprays, mists, or foams of a 0.05 to 0.1% Premise Dual Insecticide solution. Locate galleries by using visual signs (frass or pellets, blistered wood, emergence or clean out holes), the presence of live insects, mechanical sounding techniques, or listening devices (e.g., stethoscopes, acoustic emission detectors). Penetrate the gallery system by drilling holes to receive the injector tip or treatment tool. Distribute drill holes to adequately cover the gallery system. [NOTE: Do not drill where electrical wiring, plumbing lines, etc. are located.] Apply Premise Dual Insecticide solutions as a low pressure (about 20 psi) spray or by misting or, where appropriate, by foaming. It is not necessary to treat to the point where runoff is detected from adjacent holes. Do not apply where electrical shock hazards exist. Drill holes should be sealed after treatment. Also, wood surfaces can be sprayed or misted with a 0.05 to 0.1% solution or, where appropriate, use a sufficient volume of foam. For inaccessible surfaces, drill and treat the interior of structural voids. Surfaces treated may include exposed wooden surfaces in crawlspaces, basements, or attics, wooden exterior surfaces such as decks, fencing, or siding, structural voids, channels in damaged wood, in spaces between wooden members of a structure, and junctions between wood and foundations. Apply by brushing or as a coarse, low pressure (about 20 psi) spray to the wood surface; apply sufficient volume to cover the surface to the point of wetness, but do not apply to the point of runoff. When spraying overhead in living areas, cover surfaces below the treated area with plastic sheeting or similar material. Do not contact treated surfaces until spray deposits have dried. Retreat as needed to maintain protection.

Localized treatment for carpenter bees: Apply a 0.05 to 0.1% solution as a spray or mist, or sufficient volume of foam, directly into gallery entrance holes. Following treatment, entrance holes may be plugged with small pieces of steel wool or similar material.

RETREATMENT

Retreatment for subterranean termites can only be performed if there is clear evidence of reinfestation or disruption of the treated zone due to construction, excavation, or landscaping and/or evidence of the breakdown of the termiticide treated zone in the soil. These vulnerable or reinfested areas may be retreated in accordance with application techniques described in this product's labeling. The timing and type of these retreatments will vary, depending on factors such as termite pressure, soil types, soil conditions and other factors which may reduce the effectiveness of the treated zone. Retreatment may be made as either a spot or complete treatment.

When a structure is not known to be reinfested and the treated zone is not disturbed, but where the structure was last treated five or more years ago, retreatment may be performed if, in the judgement of the applicator, it is necessary to ensure adequate protection of the structure. In determining the timing of any retreatment, the applicator should consider efficacy and/or degradation data and/or site-specific conditions and previous experience that indicate a vulnerability of the structure to termite attack.

Annual retreatment of the structure is prohibited unless there is clear evidence that reinfestation or treated zone disruption has occurred.

When another registered termite control product/system is used as the primary treatment for prevention or control of subterranean termites and is applied to all label-specified areas, Premise Dual Insecticide may be applied as a spot application in a secondary treatment to critical areas of the structure including plumbing and utility entry sites, bath traps, expansion joints, foundation cracks, the outside foundation wall, and areas of known or suspected activity at either a pre-construction or post-construction timing. These secondary treatments must be applied in amounts and concentration in accordance with label directions relevant to the treatment area(s) to receive the secondary treatment.

PERIMETER PEST CONTROL FOR ANTS

For control of ants in houses and other structures, apply a 0.05 to 0.1% solution as a general surface, spot, crack and crevice or wall void application. Apply to surfaces on buildings, porches, patios and other structures, around doors and windows, eaves and attic vents, utility entry points, soffit areas and other exterior openings (including foundation cracks or drilled holes) where these pests enter the structure or where they crawl or hide. Spray into cracks and crevices. Spray, mist, or foam into voids where these ants or their nests are present. Apply the volume of spray mist or foam sufficient to cover the area, but do not allow excessive dripping or run-off to occur from vertical or overhead surfaces.

Treat soil, turf, or non-flowering ground cover adjacent to the structure where ants are trailing or may find food or harborage. To control ants tunneling in soil apply a 0.05 to 0.1% solution as a drench or soil injection at intervals to establish a continuous treated zone. Treat along the edge of walls, driveways or other hard surfaces where ants are tunneling beneath the surface.

Aerial Nests: If ant nests are located in tree hollows adjacent to the structure or non-structural wooden construction (e.g.; posts, fences, decks) treat the interior cavity and/or the nest site by injecting a 0.05 to 0.1% solution as a spray mist, or sufficient volume of foam.

Apply in sufficient water to cover the foliage and soil area being treated. Maximum application is once per month to maintain control.

Do not allow residents or pets into the immediate area during the application or contact with treated areas until spray has dried. Interior applications for ant control are limited to spot, crack and crevice, or wall void applications only.

Do not use this product against native or imported fire ants, pharaoh, or harvester ants.

NOTE: Where severe pest pressures may exist and when rapid knockdown or exclusion at pest entry points is desired, supplemental treatments using Premise Dual Insecticide with targeted applications of a pyrethroid such as TEMPO® SC ULTRA or SUSPEND® SC or similar to doors and windows, utility entry points, and other places where these pests enter the structure. Read and follow all label directions for use of this companion product.

APPLICATION TO TURFGRASS

Use Premise Dual Insecticide as directed on turfgrass, on the following sites: residential home lawns, business and office complexes, shopping complexes, multi-family residential complexes, golf courses, airports, cemeteries, parks, playgrounds, and athletic fields.

Use Premise Dual Insecticide to control the following soil inhabiting pests of turfgrass: Northern & Southern masked chafers, *Cyclocephala borealis, C. immaculata*, and/or *C. lurida*; Asiatic garden beetle, *Maladera castanea*; European chafer, *Rhizotroqus majalis;* Green June beetle, *Cotinis nitida*; May or June beetle, *Phyllophaga* spp.; Japanese beetle, *Popillia japonica*; Oriental beetle, *Anomala orientalis;* Billbugs, *Spherophorus* spp.; Annual bluegrass weevil, *Hyperodes* spp.; Black turfgrass ataenius, *Ataenius spretulus* and *Aphodius* spp. European Crane Fly *Tipula paludosa*, and mole crickets,. scapteriscus spp. Premise Dual Insecticide can also be used for suppression of cutworms and chinch bugs.

The active ingredient in Premise Dual Insecticide has sufficient residual activity so that applications can be made preceding the egg laying activity of the target pests. High levels of control can be achieved when applications are made preceding or during the egg laying period. The need for an application can be based on historical monitoring of the site, previous records or experiences, current season adult trapping or other methods. Optimum control will be achieved when applications are made prior to egg hatch of the target pests, followed by sufficient irrigation or rainfall to move the active ingredient through the thatch.

Do not apply when turfgrass areas are waterlogged or the soil is saturated with water. Adequate distribution of the active ingredient cannot be achieved when these conditions exist. The treated turf area must be in such a condition that the rainfall or irrigation will penetrate vertically in the soil profile. If rainfall does not occur within 24 hours after application, irrigate to move the active ingredient through the thatch.

Do not tank mix.

APPLICATION EQUIPMENT INSTRUCTIONS

Apply this product in sufficient water to provide adequate distribution in the treated area. Use accurately calibrated equipment normally used for soil application of insecticides. Use equipment which will produce a uniform, coarse droplet spray, using a low pressure spray (not to exceed 25 psi when measured at the treating tool when the valve is open) setting to eliminate off-target drift. Check calibration periodically to ensure that equipment is working properly.

RESISTANCE:

For resistance management, Premise Dual Insecticide contains a Group 4A insecticide. Any insect population may contain individuals naturally resistant to Premise Dual Insecticide and other Group 4A insecticides. The resistant individuals may dominate the insect population if this group of insecticides are used repeatedly in the same fields. Appropriate resistance-management strategies should be followed.

DIRECTIONS FOR USE ON TURFGRASSES IN RESIDENTIAL, COMMERCIAL, AND INDUSTRIAL AREAS					
SITE	PEST		DOSAGE Premise Dual Insecticide		
TURFGRASSES	LARVAE OF:	European Crane Fly	1 .25 to 1.6 pt/A		
(Residential	Annual bluegrass weevil	Green June beetle	or		
home lawns,	Asiatic garden beetle	Japanese beetle	0.46 to 0.6 fl oz		
business and office complexes,	Billbug	Northern masked chafer	(14 to 17 mL)		
shopping	Black turfgrass ataenius	Oriental beetle	per 1,000 sq ft		
complexes, multi-	Cutworms (suppression)	Phyllophaga spp.			
family residential complexes, golf	European chafer	Southern masked chafer			
courses, airports, cemeteries,	For optimum control of grubs, billbugs, annual bluegrass weevil, and European Crane Fly make application prior to egg hatch of the target pest.				
parks,	Chinch bugs (suppression)	Mole crickets	1.6 pt /A		
playgrounds, athletic fields)			or		
			0.6 fl oz (17 mL) per 1,000 sq ft		
	For suppression of chinch bugs, make application prior to the hatching of the first instar nymphs.				
0 11 1 11	For control of mole crickets make application prior to or during the peak egg hatch period. If application is not made prior to egg hatch or when adults or large nymphs are present and actively tunneling, apply Premise Du Insecticide in combination with a remedial insecticide to minimize damage to turf.				

Consult your local turf, state Agricultural Experiment Station, or State Extension Service Specialists for more specific information regarding timing of application.

RESTRICTIONS:

- Do not apply more than 1.6 pints (0.4 lbs of active ingredient) per acre per year
- Do not let children and pets enter the treated area until dry
- Do not apply when bees are foraging. Do not apply to plants that are flowering. Only apply after all flower petals have fallen



off.

- Do not use on sod farms
- Do not mow turf or lawn area until after sufficient irrigation or rainfall has occurred so that uniformity of application will not be affected.
- Do not graze treated areas or use clippings from treated areas for feed or forage.
- Do not allow runoff or puddling of irrigation water following application
- Do not apply Premise Dual Insecticide to areas which are water logged or saturated, which will not allow penetration into the root zone.
- Do not use in commercial greenhouses, nurseries, or on grasses grown for seed, or on commercial fruit and nut trees.

If rainfall does not occur within 24 hours after application, irrigate to move the active ingredient through the thatch.

APPLICATION TO OUTDOOR ORNAMENTALS AND GROUND COVERS

Premise Dual Insecticide can be used by soil or foliar application as directed on trees, shrubs, and groundcovers around the perimeter of industrial and commercial buildings and residential landscape areas. Premise Dual Insecticide is a systemic product and will be translocated upward into the plant system from root uptake. To assure optimum effectiveness, the product must be placed where the growing portion of the target plant can absorb the active ingredient. The addition of a nitrogen containing fertilizer, where applicable, into the solution may enhance the uptake of the active ingredient. Application can be made by foliar application or soil applications; including soil injection, drenches, and broadcast sprays. Foliar applications offer locally systemic activity against insect pests.

When making soil applications to plants with woody stems, systemic activity will be delayed until the active ingredient is translocated throughout the plant. In some cases, this translocation delay could take 60 days or longer. For this reason, make application prior to anticipated pest infestation to achieve optimum levels of control.

ANT MANAGEMENT PROGRAMS

Use Premise Dual Insecticide to control aphids, scale insects, mealybugs and other sucking pests on ornamentals to limit the honeydew available as a food source for ant populations. Premise Dual Insecticide applications can then be supplemented with residual sprays, bait placements or other ant control tactics to further reduce the pest population.

APPLICATION EQUIPMENT FOR FOLIAR APPLICATIONS

Premise Dual Insecticide mixes readily with water and may be used in many types of application equipment. Mix product with the required amount of water and apply as specified dependent upon the selected use pattern.

When making foliar applications on hard to wet foliage such as holly, pine, or ivy, the addition of a spreader/ sticker is recommended. If concentrate or mist type spray equipment is used, apply an equivalent amount on the area sprayed, as would be used in a dilute application.

DIRECTIONS FOR APPLICATION TO OUTDOOR ORNAMENTALS IN RESIDENTIAL, COMMERCIAL, AND **INDUSTRIAL LANDSCAPE AREAS DOSAGE PREMISE DUAL** SITE **PEST** INSECTICIDE Trees Adelgids (including hemlock Mealybugs 1.5 fl oz (45 mL) woolly adelgid) Shrubs **Psyllids** per 100 gal of water **Aphids** Sawfly larvae Evergreens Leaf-feeding beetles (Japanese Foliage plants Thrips (foliage only) beetle, emerald ash borer and vine weevil adults) Whiteflies Groundcovers Leaf-feeding bugs (including lace bugs, leaf bugs, and plant bugs) Leafhoppers, planthoppers, sharpshooters (including glassywinged sharpshooter) and spittle bugs Foliar Applications: Start treatments prior to establishment of high pest populations. Reapply on an as needed basis but do not exceed maximum application rates per year. White grub larvae 0.46 to 0.6 fl oz (such as Japanese beetle (14 to 17 mL) larvae. Chafers. Phyllophaga per 1,000 sq ft spp. Asiatic garden beetle, Oriental beetle) Broadcast Applications: Mix required amount of product in sufficient water to uniformly and accurately cover the area being treated. Do not use less than 2 gallons of water per 1,000 sq ft. Irrigate thoroughly to incorporate Premise Dual Insecticide into the upper soil profile.

RESTRICTIONS:

- Do not apply more than 1.6 pints (0.4 lbs of active ingredient) per acre per year.
- Do not let children and pets enter the treated area until dry.
- Do not apply when bees are foraging. Do not apply to plants that are flowering. Only apply after all flower petals have fallen



- off.
- Do not apply this product, by any application method, to linden, basswood, or other Tilia species.
- Do not apply through any irrigation system.

DIRECTIONS FOR APPLICATION TO PLANTS GROWN INDOORS IN RESIDENTIAL AND COMMERCIAL BUILDINGS

SITE	PE	ST	DOSAGE PREMISE DUAL INSECTICIDE		
Interior	Adelgids (including hemlock woolly	Mealybugs	1.5 fl oz (45 mL)		
plantscapes	adelgid)	Psyllids	per 100 gal of water		
	Aphids	Sawfly larvae			
	Leaf-feeding beetles (Japanese beetle, emerald ash borer and vine	Thrips (foliage only)			
	weevil adults)	Whiteflies			
	Leaf-feeding bugs (including lace bugs, leaf bugs, and plant bugs)				
	Leafhoppers, planthoppers, sharpshooters (including glassy- winged sharpshooter) and spittle bugs				
	Foliar Applications: Start treatments prior to establishment of high pest populations. Reapply on an as needed basis but do not exceed maximum application rates.				
	White grub larvae		0.46 to 0.6 fl oz		
	(such as Japanese beetle larvae, Chafers, <i>Phyllophaga</i> spp. Asiatic garden beetle, Oriental beetle)		(14 to 17 mL)		
			per 1,000 sq ft		
		ed amount of product in sufficient water an 2 gallons of water per 1,000 sq ft. Irr er soil profile.			

RESTRICTIONS:

- Not for use in commercial greenhouses.
- Do not apply more than 1.6 pints (0.4 lbs of active ingredient).
- Do not let children and pets enter the treated area until dry.

DIRECTIONS FOR APPLICATION TO TREES AND SHRUBS BY SOIL DRENCH AND SOIL INJECTION					
For use in and around the perimeter of industrial and commercial buildings, in residential and recreational areas, municipal and city landscape areas.					
Trees and Shrubs	0.1 to 0.2 fl oz (3 to 6 mL) per inch of trunk diameter (D.B.H.)				
		or per foot of shrub heig	ıht		
Adelgids (including hemlock	Leaf-feeding bugs (including	Leafminers	Sawfly larvae		
woolly adelgid)	lace bugs, leaf bugs, and	Mealybugs	Soft scales		
Aphids	plant bugs)	Pine tip moth larvae	Whiteflies		
Leaf-feeding beetles (including	Leafhoppers, planthoppers, sharpshooters (including	Psyllids			
Japanese beetle and vine weevil adults)	glassy-winged sharpshooter)	Royal palm bug			
weevii addita)	and spittle bugs				
Trees and Shrubs	0.2 fl oz (6 m	L) per inch of trunk diameter	(D.B.H.)		
	C	r per foot of shrub height			
Armored scales (including but not limited to: camellia, false	Roundheaded borers (including Asian longhorned beetle)				
oleander, Florida red,	Thrips (foliage only)				
oystershell, tea, and white peach scales)	White grub, billbug, and root weevil larvae				
Flatheaded borers (including emerald ash borer)	Woovii idi vao				
Trees with a 15 inch of trunk diameter at breast height (D.B.H.) or greater			ast height (DBH) 0.1 to 0.4 fl oz (3 to 12 gher rate (0.3 -0.4 fl oz) to control the		
	DBH	= is measured at 4.5 feet from	m the ground		
Emerald Ash Borer, Bronze birch borer, Asian Longhorned Beetle, Eucalyptus Longhorned Borer, Alder Borer					

Soil Injection: GRID SYSTEM: Space holes on 2.5 foot centers, in a grid pattern, extending to the drip line of the tree. CIRCLE SYSTEM: Apply in holes evenly spaced in circles, (use more than one circle dependent upon the size of the tree) beneath the drip line of the tree extending in from that line. BASAL SYSTEM: Space injection holes evenly around the base of the tree trunk no more than 6 to 12 inches out from the base.

Mix required dosage in sufficient water to inject an equal amount of solution in each hole. Maintain a low pressure and use sufficient solution for distribution of the liquid into the treatment zone. For optimum control, keep the treated area moist for 7 to 10 days. Do not use less than 4 holes per tree or shrub.

Soil Drench: Uniformly apply the dosage in no less than 10 gallons of water per 1,000 square feet as a drench around the base of the tree, directed to the root zone. Remove plastic or any other barrier that will stop solution from reaching the root zone.

For Control of Specified Borers: Application to trees already heavily infested may not prevent the eventual loss of the trees due to existing pest damage and tree stress.

Ground Treatment pre-planting

0.46 to 0.6 fl oz (14 to 17 mL) per 1,000 sq ft

Apply as a broadcast treatment and incorporate into the soil before planting.

RESTRICTIONS:

- Do not apply more than 1.6 pints (0.4 lbs of active ingredient) per acre per year.
- Do not let children and pets enter the treated area until dry.
- Do not apply this product, by any application method, to linden, basswood, or other Tilia species.
- Do not apply Premise Dual Insecticide to areas which are water logged or saturated, which will not allow penetration into the root zone.
- No soil injection applications allowed in Nassau or Suffolk Counties of New York.

DIRECTIONS FOR FOLIAR APPLICATION TO POME FRUITS, PECANS, AND GRAPES GROWN IN RESIDENTIAL **AREAS**

SITE	PEST		RATE PER AF	PPLICATION
Pome Fruits Apple Crabapple Loquat Mayhaw Pear Pear (oriental) Quince	Aphids (except Wooly apple aphid) Leafhoppers (including glassy-winged sharpshooter)	Leafminer Mealybugs* San Jose scale*	1.5 fl oz (45 mL) per 100 gal	6.0 fl oz/A ¹

Apply specified dosage as foliar spray as needed after petal-fall is complete.

For control of rosy apple aphid, apply prior to leafrolling caused by the pest.

For first generation leafminer control, make first application as soon as petal-fall is complete. Greatest leafminer control will result from the earliest possible application. For second and succeeding generations of leafminer, optimal control is obtained from applications made early in the adult flight against egg and early instar larvae. A second application may be required 10 days later if severe pressure continues or if generations are overlapping. A single application may result in suppression only. Premise Dual Insecticide will not control late stage larvae.

For San Jose Scale, time applications to the crawler stage. Treat each generation.

For late season (preharvest) control of leafhopper species, apply Premise Dual Insecticide while most leafhoppers are in the nymphal stage.

For optimal control of mealybug, insure good spray coverage of the trunk and scaffolding limbs or other resting sites of the mealybug.

RESTRICTIONS:

- Do not apply more than 1.6 pints (0.4 lbs of active ingredient) per acre per year.
- Do not let children and pets enter the treated area until dry.
- Do not apply when bees are foraging. Do not apply to plants that are flowering. Only apply after all flower petals have fallen



- Do not graze treated areas or use clippings from treated areas for feed or forage.
- Do not allow runoff or puddling of irrigation water following application.
- Do not apply Premise Dual Insecticide to areas which are water logged or saturated, which will not allow penetration into the root zone.
- Do not use in commercial greenhouses, nurseries, or on grasses grown for seed, or on commercial fruit and nut trees.
- Do not apply more than 6.0 fl oz per acre in a single application.
- Do not make more than 4 applications per year.
- Allow 10 or more days between applications.
- Allow at least 7 days between last application and harvest.
- Do not use on pears in California.

SITE	PEST		RATE PER A	PPLICATION
Pecans*	Yellow pecan aphid Black margined aphid Pecan leaf phylloxera	Pecan spittlebug Pecan stem phylloxera	1.5 fl oz (45 mL) per 100 gal	6.0 fl oz/A ¹

Make foliar applications as pests begin to build before populations become extreme. Two applications at a 10 to 14 day interval may be required to achieve control. Scout and retreat if needed.

Thorough uniform coverage of foliage is necessary for optimal control. Addition of an organosilicone-based spray adjuvant at a rate not to exceed the adjuvant manufacturer's recommended use rate may improve coverage.

RESTRICTIONS:

- Do not apply more than 18 fl oz of (0.3 lbs of active ingredient) per acre per year.
- Do not let children and pets enter the treated area until dry.
- Do not apply when bees are foraging. Do not apply to plants that are flowering. Only apply after all flower petals have fallen



- Do not graze treated areas or use clippings from treated areas for feed or forage.
- Do not allow runoff or puddling of irrigation water following application.
- Do not apply Premise Dual Insecticide to areas which are water logged or saturated, which will not allow penetration into the root zone.
- Do not use in commercial greenhouses, nurseries, or on grasses grown for seed, or on commercial fruit and nut trees.
- Do not make more than 3 applications.
- Allow 10 or more days between applications.
- Allow at least 7 days between last application and harvest.
- Do not use on pecans in California.

* Use on pecans not permitted in California unless directed by specific supplemental labeling.

SITE	PEST		RATE PER A	PPLICATION
Grapes	Leafhoppers (including glassy-winged sharpshooter)	Mealybugs	1.5 fl oz (45 mL) per 100 gal	3.0 fl oz/A (90 mL/A)

Apply specified dosage as a foliar spray using 200 gallons of water per acre.

RESTRICTIONS:

- Do not apply more than 6 fl oz of (0.1 lbs of active ingredient) per acre per year.
- Do not let children and pets enter the treated area until dry.
- Do not apply when bees are foraging. Do not apply to plants that are flowering. Only apply after all flower petals have fallen



off.

- Do not graze treated areas or use clippings from treated areas for feed or forage.
- Do not allow runoff or puddling of irrigation water following application.
- Do not apply Premise Dual Insecticide to areas which are water logged or saturated, which will not allow penetration into the root zone.
- Do not use in commercial greenhouses, nurseries, or on grasses grown for seed, or on commercial fruit and nut trees.
- · Allow 14 or more days between applications.

The amount of Premise Dual Insecticide required per acre will depend on tree size and volume of foliage present. The rate per acre is based on a standard of 400 gallons of dilute spray solution per acre for large trees.

STORAGE AND DISPOSAL

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

Pesticide Storage: Store in original container in a secured dry storage area. Avoid extremes in temperatures. Prevent cross-contamination with other pesticides and fertilizers. If the container is leaking and/or material is spilled on floor or paved surfaces, absorb on sawdust or other commercially available absorbing material, sweep up and remove to chemical waste area for your disposal. Concentrate is stable at normal storage temperatures.

Pesticide Disposal: Wastes resulting from the use of this product may be disposed of on site (in the treatment area) or at an approved waste disposal facility.

Container Handling:

[Less than One gal size]

Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank 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. Securely wrap container in several layers of newspaper and discard in trash or offer for recycling if available. If partly filled: Call your local solid waste agency for disposal instructions. Never place unused product down any indoor or outdoor drain.

[One to 5 gal size]

Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank 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 or reconditioning, or puncture and dispose of in a sanitary landfill. If partly filled: Call your local solid waste agency for disposal instructions. Never place unused product down any indoor or outdoor drain.

[Rigid Non-refillable containers that are too large to shake (i.e., with capacities greater than 5 gals or 50 lbs)]

Non-refillable container. Do not reuse or refill this container. Triple rinse or pressure rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip. Then offer for recycling or reconditioning or puncture and dispose of in a sanitary landfill.

IMPORTANT: READ BEFORE USE

Read the entire Directions for Use, Conditions, Disclaimer of Warranties and Limitations of Liability before using this product.

If terms are not acceptable, return the unopened product container at once. By using this product, user or buyer accepts the following Conditions, Disclaimer of Warranties and Limitations of Liability.

CONDITIONS: The directions for use of this product are believed to be adequate and must be followed carefully. However, because of manner of use and other factors beyond Bayer CropScience LP's control it is impossible for Bayer CropScience LP to eliminate all risks associated with the use of this product. As a result, crop injury or ineffectiveness is always possible. All such risks shall be assumed by the user or buyer.

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Total Net Contents:

Batch code is applied by inkjet during production to container.

Produced for



A Division of Bayer CropScience LP PO Box 12014, 2 T.W. Alexander Drive Research Triangle Park, NC 27709

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