



09/29/2004

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	U.S. ENVIRONMENTAL PROTECTION AGENCY Office of Pesticide Programs Registration Division (H7505C) 401 "M" St., S.W. Washington, D.C. 20460	EPA Reg. Number: 100-1170	Date of Issuance: SEP 29 2004
		Term of Issuance: Conditional	
		Name of Pesticide Product: Optigard ZT Insecticide	
NOTICE OF PESTICIDE: <u> x </u> Registration <u> </u> Reregistration (under FIFRA, as amended)			
Name and Address of Registrant (include ZIP Code): Mr. John L. Hott Syngenta Crop Protection, Inc. P.O. Box 18300 Greensboro, NC 27419			
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/reregistered 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 sec. 3(c)(7)(A). Once a pesticide is registered, however, it is not regarded as permanently acceptable. Registration does not eliminate the need for continual reassessment of pesticides. If the Agency determines that, at any time, additional data are required to maintain in effect an existing registration, the Agency will require submission of such data under FIFRA section (3)(c)(2)(B). 1. Revise the EPA Registration Number to read, "EPA Reg. No. 100-1170"			
Signature of Approving Official:  Dani Daniel Insecticide-Rodenticide Branch Registration Division (7505C)		Date: SEP 29 2004	

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100-1170

2. Submit two (2) copies of your final printed labeling before you release the product for shipment.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec. 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. If you have any questions regarding this notice, please contact me at (703) 305-5409.

Enclosure :

(Booklet)

Optigard™ ZT**Insecticide**

To be applied only by or under the supervision of commercial applicators responsible for pest control programs.

For Remedial Control of Localized Infestations of Drywood Termites
For Control of Certain Nuisance Pests in Void Areas of Structures.

Active Ingredient:

Thiamethoxam ¹ (CAS No. 153719-23-4).....	21.6%
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Other Ingredients:	78.4%
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Total:	100.0%
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¹ a thianicotinyl neonicotinoid insecticide

Optigard ZT is a suspension concentrate formulation that contains 2 lbs. thiamethoxam per gal. formulated product (244 grams thiamethoxam per liter formulated product).

KEEP OUT OF REACH OF CHILDREN.

CAUTION

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

See additional precautionary statements and directions for use in booklet.

EPA Reg. No. 100-XXX

EPA Est. XXX

Product of XXXXX

Formulated in the USA

SCP XXXX(DRAFT rev f)

Net Contents

**ACCEPTED
with COMMENTS
In EPA Letter Dated:**
SEP 29 2004
Under the Federal Insecticide,
Fungicide, and Rodenticide Act,
as amended, for the pesticide
registered under EPA Reg. No.
200-1170

FIRST AID	
If inhaled	<ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. • Call a poison control center or doctor for treatment advice.
If in eyes	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
If on skin or clothing	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
If swallowed	<ul style="list-style-type: none"> • 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 do so by a poison control center or doctor. • Do not give anything by mouth to an unconscious person.
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	
<p align="center">HOT LINE NUMBER For 24 Hour Medical Emergency Assistance (Human or Animal) or Chemical Emergency Assistance (Spill, Leak, Fire, or Accident), Call 1-800-888-8372</p>	

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

CAUTION

Harmful if inhaled or absorbed through skin. Do not breathe vapor or spray mist. Avoid contact with eyes, skin, or clothing. Wash thoroughly with soap and water after handling. Remove and wash contaminated clothing before reuse.

Personal Protection Equipment (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of any waterproof material - Category A (e.g., barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyethylene, polyvinyl chloride (PVC) or viton)
- Shoes plus socks

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions exist for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

User Safety Recommendations:

- Wash hands thoroughly before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

Environmental Hazards

This pesticide is toxic to wildlife and highly toxic to aquatic invertebrates. Do not apply directly to water, or to areas where surface water is present, or to inter-tidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash water.

Physical and Chemical Hazards

Do not use, pour, spill or store near heat or open flame.

CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

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

SYNGENTA warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, when used in accordance with directions under normal use conditions. This warranty does not extend to the use of the product contrary to label instructions, or under abnormal conditions or under conditions not reasonably foreseeable to or beyond the control of Seller or SYNGENTA, and Buyer and User assume the risk of any such use. SYNGENTA MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

In no event shall SYNGENTA or Seller be liable for any incidental, consequential or special damages resulting from the use or handling of this product. **THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF SYNGENTA AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF SYNGENTA OR SELLER, THE REPLACEMENT OF THE PRODUCT.**

SYNGENTA and Seller offer this product, and Buyer and User accept it, subject to the foregoing Conditions of Sale and Limitation of Warranty and Liability, which may not be modified except by written agreement signed by a duly authorized representative of SYNGENTA.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Read entire label before using this product.

GENERAL INFORMATION

Use Restrictions

DO NOT USE IN FOOD/FEED AREAS OF FOOD HANDLING ESTABLISHMENTS.

Use in all permitted sites, including food handling establishments, must be restricted to structural voids which eliminate exposure to food handling surfaces, living areas, or to any occupants.

Do not apply this product in a way that will contact any other person. Only protected applicators may be in the area during application. Keep people or pets away from treated area until dry.

Prior to treatment, the applicator must check the area to be treated and the areas immediately adjacent to the structure for visible and accessible cracks and holes to prevent any leaks or significant exposures to persons occupying the structure. If spillage or leakage occurs, people present or residing in the structure during application must be advised to remove their pets and themselves from the area. 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.

Locate heating/air conditioning ducts, air vents, plumbing pipes, drainage systems, sewer lines and electrical lines/conduits before proceeding with application. Caution must be taken to avoid puncturing and contaminating these elements.

Do not apply Optigard ZT on open or exposed surfaces accessible to people or pets.

Do not apply until location of heat pipes, ducts, water and sewer lines, and electrical conduits are known and identified. Caution must be taken to avoid puncturing and injection into these structural elements. Do not apply into electrical switches or receptacles or other wiring where electrical shock hazards exist.

Holes drilled in living areas must be sealed after treatment.

GENERAL APPLICATION INFORMATION

General Procedures

Optigard ZT must be applied as a diluted finished application using directions contained in the **Application Dilution Table**, and applied in a manner so that exposure to surfaces in living spaces (such as the living area sides of walls, floors, ceilings, countertops, or other surfaces) is eliminated. **Applications must be restricted to areas that are not accessible to occupants of the structure and are not open to living spaces.** Drill & treat techniques should be used to provide placement of the diluted product as near the infested areas as possible. Application to structural voids such as wall voids should be done by drilling a small hole into the void area and injecting product as liquid or foam so that wood surfaces inside the void area are treated. As described in the section on **Control of Occasional Invaders of Structural Voids**, closed, in-wall delivery systems may be used as described to apply product to the surfaces inside void areas.

Do not apply to the surface of walls, ceilings, decorative timbers, or floors accessible to occupants of the structure.

MIXING PROCEDURES

Dilution Rates

For drywood termite control, use a 0.1% dilution. For other pests on this label, 0.025-0.1% dilutions may be used, depending on pest pressure and desired service interval.

Mixing

Refer to **Application Dilution Table** for proper amount of Optigard ZT to be used. To prepare the application mixture, fill the application tank $\frac{1}{4}$ - $\frac{1}{3}$ of desired volume with water before adding Optigard ZT. Then slowly add the required amount of Optigard ZT. Add the remaining amount of water and agitate until product is thoroughly mixed.

Application Dilution Table

Gallons of Finished Solution Desired	Amount in fl. oz. (or mL.) of Optigard ZT Needed To Obtain the Following % Dilutions of Active Ingredient:		
	0.025%	0.05%	0.1%
1	0.14 fl. oz. (4 mL.)	0.28 fl. oz. (8 mL.)	0.56 fl. oz. (16 mL.)
3	0.42 fl. oz. (12 mL.)	0.84 fl. oz. (24 mL.)	1.7 fl. oz. (48 mL.)
5	0.7 fl. oz. (20 mL.)	1.4 fl. oz. (40 mL.)	2.8 fl. oz. (80 mL.)
10	1.4 fl. oz. (40 mL.)	2.8 fl. oz. (80 mL.)	5.6 fl. oz. (160 mL.)

DELIVERY OF OPTIGARD ZT WITH FOAM

The diluted finished product may be converted to foam and the foam used to control drywood termite infestations. Depending on the circumstances, foam applications may be used alone or in combination with liquid applications.

Foam Mixing Instructions and Application

Prepare the finished solution of Optigard ZT and mix it with the foaming manufacturer's recommended volume of foaming agent in approved foaming equipment. (The following table is for general foaming recommendations.)

Mixing Table for Optigard ZT Foam

Amount of Optigard ZT	Gal. of Water	Foam Expansion Ratio	Finished Foam (gallons)	Finished Dilution (% active ingredient)
0.65 fl. oz. (20 mL.)	1.0	5:1	5	0.025
1.30 fl. oz. (40 mL.)	1.0	10:1	10	
3.25 fl. oz. (100 mL.)	1.0	25:1	25	
1.30 fl. oz. (40 mL.)	1.0	5:1	5	0.05
2.60 fl. oz. (80 mL.)	1.0	10:1	10	
6.50 fl. oz. (200 mL.)	1.0	25:1	25	
2.60 fl. oz. (80 mL.)	1.0	5:1	5	0.1
5.60 fl. oz. (160 mL.)	1.0	10:1	10	
13.00 fl. oz. (400 mL.)	1.0	25:1	25	

DRYWOOD TERMITE CONTROL

When used as recommended in this label, Optigard ZT provides effective remedial control of localized infestations of drywood termites, including species of *Incisitermes*, *Cryptotermes* and *Marginitermes*. Knowledge of the biology and behavior of the drywood termite species involved, and the extent of the infestation will help to ensure successful control.

Treatment requirements for drywood termite control may vary due to state and local regulations. For advice concerning current drywood termite control regulations under local conditions, consult your State structural pest control regulatory agency.

Optigard ZT has not been approved for application to soil for control of subterranean termites.

DIRECTIONS FOR REMEDIAL CONTROL OF DRYWOOD TERMITES IN INFESTED WOOD

To control drywood termites in localized areas of infested wood in structures, apply 0.1% Optigard ZT as a liquid or foam to voids and galleries in damaged wood, in spaces between wooden structural members or between wood and foundations. Locate galleries by using visual signs (e.g. fresh fecal pellets, or blistered wood), the presence of live pests, mechanical sounding techniques (tapping on the wood surface and listening for changes in sound to indicate changes in wood density), listening devices, motion detection devices or other technology that helps pinpoint drywood termite activity.

Wood Injection Method

Drill small diameter holes of appropriate size for the injection tip to intersect termite galleries within infested wood. Drywood termite emergence or pellet kick-out holes connect directly to galleries and are indicators of potential sites to drill and inject Optigard ZT. Care should be taken to avoid electrical wiring, plumbing, etc., when drilling and injecting. Do not drill completely through wood. Spacing of the holes will depend on the distribution of insect activity and galleries. Injection holes may be clustered in areas with insect activity as indicated by damage, live insects, or other indicators previously described. Injection holes on opposite sides of large (4"x10" or larger) structural beams may be necessary to effectively penetrate galleries.

Apply up to 50 mL. (1.7 oz.) of finished Optigard ZT solution at each injection hole. It is not necessary to inject Optigard ZT until runoff is detected from other holes. Holes must be plugged after treatment. Use inert materials such as a wooden dowel or a touch up stick for wood surfaces to minimize the possible disturbance of termites from entry of fresh air into galleries.

Re-treatment guidelines: Reapply if insect activity within treated areas is detected 4 or more weeks following treatment. For best results in treating galleries, inject Optigard ZT into new injection holes drilled between previous injection sites.

CONTROL OF ARTHROPODS THAT ARE OCCASIONAL INVADERS IN STRUCTURAL VOIDS

Arthropod pests may occasionally invade structures through wall voids or other structural voids by entering cracks or other openings to the exterior. In conjunction with other appropriate methods such as exclusion or perimeter insecticide applications, Optigard ZT can control nuisance arthropods that move through or are harbored in wall void areas.

Method of Injection into Wall Voids

To control certain (listed) nuisance arthropod pests, apply Optigard ZT Insecticide at 0.025%-0.1% finished solution to surfaces inside structural voids. Application to structural voids such as wall voids should be done by drilling a small hole into the void area and injecting product as liquid or foam so that wood surfaces inside the void area are treated. Existing openings such as those around door or window frames may be used to inject product, provided these openings are sealed after treatment. Apply enough volume to lightly coat the target surface. Do not exceed liquid volume that would allow runoff (e.g. for wood, runoff is about 0.05-0.1 mL./sq. inch). For example, a 2x4 wall void with wood frame should be treated with 2-4 mL. finished solution per linear foot; other surfaces or wall void sizes may need more or less to achieve a light coating. For foam preparations, see instructions for use provided in the **MIXING PROCEDURES** section of this label. All injection points must be sealed with a suitable sealant material, such as caulking. Alternatively, closed, in-wall delivery systems may be used as described below to apply product to the surfaces inside void areas (see specific instructions below). Care should be taken to avoid application to any unenclosed areas.

Fixed In-Wall Delivery Systems

Closed, in-wall insecticidal delivery systems such as permanently installed piping or flexible tubing may also be used to deliver diluted product to inaccessible areas. Generally, about one ounce of finished product is needed per 35-40 ft. of tubing (based on 1/8"-diameter tubes). For these systems, use 0.025%-0.1% dilution rates as listed in the dilution table above. Prepare the finished product at the appropriate dilution, inject into system as recommended by delivery system manufacturer.

Recommendations for Applications to Structural Void

When applied as directed, the following pests will be controlled with Optigard ZT:

Pests	Dosage of Optigard ZT Insecticide	Remarks
Ants Beetles Boxelder Bugs Centipedes Crickets Earwigs Firebrats Millipedes Pillbugs Silverfish Sowbugs	0.025-0.1% (0.14 fl. oz. [4 mL.] - 0.56 fl. oz. [16 mL.] Optigard ZT /gal. water)	Use 0.05% - 0.1% rates for heavy pest infestations. Also, rate used may be based on the residual control or service period desired. (e.g. for quarterly service, use 0.025% dilution, 0.05% for 6 month service and 0.1% for single application or longer service periods.)

Need for re-treatment should be based upon results of monitoring for pest presence. Do not apply more than 4 times per year.

CONTROL OF CARPENTER ANTS

For control of carpenter ants in structures, apply a 0.05%-0.1% finished solution as a wall void application or to infested wood portions of structures. Void areas may also be treated using foam. Apply through small holes drilled into voids where these ants or their nests are present. Existing openings such as those around door or window frames may be used to inject product, provided these openings are sealed after treatment. Base need for re-treatment upon results of monitoring for pest presence.

STORAGE AND DISPOSAL

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

Storage

Store unused product in original container only, out of reach of children and animals and in a cool dry place.

For minor spills, leaks, etc., follow all precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during cleanup procedures and disposal of wastes. In the event of a major spill, fire, or other emergency call 1-800-888-8372, day or night.

Pesticide Disposal

Pesticide wastes may be toxic. Improper disposal of unused pesticide, application mixture, or rinse water is a violation of Federal law. If these wastes cannot be used according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance in proper disposal methods.

Container Disposal

Triple rinse (or equivalent), then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures allowed by state or local authorities.

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<p>For non-emergency (e.g., current product information), call Syngenta Crop Protection at 1-800-334-9481.</p>
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Syngenta Crop Protection, Inc.
Greensboro, North Carolina 27409
www.syngenta-us.com

SCP XXXX(DRAFT-rev f)

OPT ZT (DRAFT-rev f) - lg-9-24-04 000100-xxxxx.2021231f.optigard.pdf

(Non-detectable Container Label)

Optigard™ ZT

Insecticide

To be applied only by or under the supervision of commercial applicators responsible for pest control programs.

For Remedial Control of Localized Infestations of Drywood Termites
For Control of Certain Nuisance Pests in Void Areas of Structures.

Active Ingredient:	
Thiamethoxam ¹ (CAS No. 153719-23-4).....	21.6%
Other Ingredients:	78.4%
Total:	100.0%

¹ a thianicotinyl neonicotinoid insecticide

Optigard ZT is a suspension concentrate formulation that contains 2 lbs. thiamethoxam per gal. formulated product (244 grams thiamethoxam per liter formulated product).

KEEP OUT OF REACH OF CHILDREN.

CAUTION

See additional precautionary statements and directions for use in booklet.

EPA Reg. No. 100-XXX

EPA Est. XXX

SCP XXXX(DRAFT-rev f)

Net Contents

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

CAUTION

Harmful if inhaled or absorbed through skin. Do not breathe vapor or application mist. Avoid contact with eyes, skin, or clothing. Wash thoroughly with soap and water after handling. Remove and wash contaminated clothing before reuse.

Refer to FIRST AID, Environmental Hazards, Physical and Chemical Hazards, Storage and Disposal sections in booklet.

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Syngenta Crop Protection, Inc.
Greensboro, North Carolina 27409
www.syngenta-us.com

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