

432-1514

04-19-2011

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	<p align="center">U.S. ENVIRONMENTAL PROTECTION AGENCY Office of Pesticide Programs Registration Division (7504P) 1200 Pennsylvania Ave., N.W. Washington, D.C. 20460</p>	EPA Registration No. <p align="center">432-1514</p>	Date of Issuance: <p align="center">APR 19 2011</p>
<p align="center">NOTICE OF PESTICIDE:</p> <p align="center"> <input checked="" type="checkbox"/> Registration <input type="checkbox"/> Reregistration </p> <p align="center">(under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended)</p>	Term of Issuance: <p align="center">Conditional Registration</p>		Name of Pesticide Product: <p align="center">Deltamethrin 543</p>
	Name and Address of Registrant (include ZIP Code): <p>Bayer Environmental Science c/o Mr. Jan Brill P.O. Box 12014 Research Triangle Park, NC 27709</p>		
<p>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.</p>			
<p>On the basis of information furnished by the registrant, the above named pesticide is hereby registered under the Federal Insecticide, Fungicide and Rodenticide Act.</p> <p>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.</p> <p>This product is conditionally registered in accordance with FIFRA §3(c)(7)(a) provided that:</p> <ol style="list-style-type: none"> As a condition of registration for this product, within one year from the date of this registration, you must submit the results of Storage Stability and Corrosion Characteristics studies, corresponding to OCSPP Guidelines 830.6317 and 830.6320, respectively, including interim reports made at 0, 3, 6, 9, and 12 month intervals. Per the acute toxicity review, revise the first aid statements on page 1 as follows: <p>“FIRST AID</p> <p>If in eyes:</p> <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. - Call a poison control center or doctor for treatment advice. <p>If on skin:</p> 			

- 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.

Have the product container..."

3. Per the acute toxicity review, revise the Hazards to Humans and Domestic Animals statement on page 1 to read as follows, deleting the struck-out text:

~~"Harmful if inhaled. Avoid breathing vapor or spray mist.~~ Causes moderate eye irritation. Avoid contact with skin or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Contact with product may result in transient tingling..."

4. On page 1, the measure of contents must be included on the front panel to read as "Net Contents: _____ [ounces] [gallons]."
5. On page 2 under Product Facts, revise by adding underlined text, deleting the stuck-out text or the statement in its entirety, because these claims are unsubstantiated based on the data and information submitted:

- "Residual Control that lasts for up to 90-days or longer"
- Longer residual means fewer applications required, reducing the ~~pesticide load in the environment as well as the number of applications required to maintain control.~~
- Compared to SC formulations, this product improves rain fastness and ~~reduces the amount of pyrethroid entering urban water sheds.~~
- ~~Reduces environmental impacts by minimizing wash off of residue from treated surfaces.~~

6. On page 4 under Application for Indoor Pests, delete "General Pest Control" because each target pest must be specified.
7. Include the specific pests identified on pages 4 and 5 listed in the rows under the header Application for Indoor Pests as part of the complete list of Indoor Pests on page 3.
8. On page 7, delete "or as necessary to maintain adequate control" from the When to Apply row, because retreatment intervals must be specified.
9. On page 7 under Application for Outdoor/Perimeter Pests, revise the following header to add the underlined text:

"Ants, roaches, and other listed crawling pests"
10. On page 7, delete the row for "Occasional invaders" because this is not clear description of the target pests. The specific pests must be listed for each application site.
11. On page 7, delete "Lyme Disease" from the Fleas and Ticks header because there were no data submitted to support this claim.
12. On page 8, delete "etc." from the header Centipedes, millipedes, pill bugs, sow bugs, springtails, because the target pests must be specified on the label.

13. On pages 8 and 9, you must include the following text on the same panel in the same size font for all claims and references to Wood-infesting Pests:

“Wood-infesting Pests*

*Application of this product will not provide structural protection nor substitute for mechanical alteration, soil or foundation treatment with termiticide. This product is not to be used as sole protection against termites, as it is not intended for use for elimination of termite infestations nor for protection against future infestations. ~~A professional inspection is recommended.~~”

14. On page 9 in the remark section for Drywood Termites & Wood-infesting Beetles, revise the following statement by deleting struck-out text and adding underlined text:

“~~It is not necessary to~~ Do not treat to the point where runoff is detected from adjacent holes.”

15. On page 10, delete the reference of “[>5 gallon size]” from the Container Disposal statement, to be consistent with the proposed retail container sizes as indicated on the application (EPA Form 8570-1), which states “8 ounces to 5 gallons.”

16. On page 13 for Residual Claims, revise the following claims by adding underlined text, deleting the stuck-out text or the statement in its entirety, because these claims are unsubstantiated based on the data and information submitted:

- “Residual Control that lasts for up to 90-days ~~or longer~~”
- Longer residual means fewer applications required, reducing the ~~pesticide load in the environment as well as~~ the number of applications required to maintain control.”

Delete the following claims in their entirety because they are not supported by the submitted data, or comparative or misleading claims are not permitted:

- “Outdoor residual control that lasts longer than microencapsulated pyrethroids”
- “Improved rain fastness”
- “Resists run off”
- “Compared to SC formulations, reduces deltamethrin residues in wash off water by 65% to 70% after 1 inch of rainfall”
- “Compared to SC formulations, reduces the amount of active ingredient in run off water”
- “Reduces the amount of pyrethroid entering urban water sheds”
- “A more environmentally sensitive formulation for pyrethroid insecticides”
- “Reduces environmental impacts by minimizing wash off of residues from treated surfaces”
- “The AI stays where you apply it, so it breaks down on treated surfaces and not in the backyard, in a storm drain or in a stream”
- “Protects AI from aggressive substrates, like high pH concrete or cement
- “Protects AI from sorptive substrates, like wood or greasy surfaces”
- “Improved efficacy on difficult surfaces, like concrete, wood or greasy surfaces”
- Exclusive [MykroFilm] [Microfilm] technology creates a monomolecular layer of protection from the environment”
- “Exclusive [MykroFilm] [Microfilm] technology creates an artificial barrier between AI and aggressive or alkaline surfaces, protecting AI from degradation or sorption”
- Exclusive [MykroFilm] [Microfilm] technology creates a microscopic polymer film that protects AI from the treated substrate”

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17. Revise the EPA Registration Number to read: "EPA Registration No. 432-1514."

Two copies of the finished labeling must be submitted prior to releasing 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 copy of your label stamped "Accepted with Comments" is enclosed for your records. Please contact Rosanna Louie-Juzwiak at (703) 308-0037 with any questions.

Enclosure: Deltamethrin 543 Label, Stamped *Accepted with Comments*

Signature of Approving Official:



Mark Suarez, Product Manager (13)
Registration Division, Insecticide Branch

Date:

APR 19 2011

ACCEPTED
with COMMENTS
In EPA Letter Dated:

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APR 19 2011

Under the Federal Insecticide,
Fungicide, and Rodenticide Act,
as amended, for the pesticide
registered under EPA Reg. No.

432-1514

Deltamethrin 543

ACTIVE INGREDIENT:

* Deltamethrin 4.75%

OTHER INGREDIENTS: 95.25%

*Contains 0.42 lb deltamethrin per gallon 100.0%

EPA Reg. No. 432-XXXX

EPA Est. No.

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

CAUTION

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

FIRST AID

If Inhaled

- Move person to fresh air.
- If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.
- Call a poison control center or doctor for further treatment advice.

Have the product container or label with you when calling a poison control center or doctor or going for treatment. In case of emergency call toll free the Bayer Environmental Science Emergency Response Telephone No. 1-800-334-7577.

Note To Physician: No specific antidote is available. Treat the patient symptomatically.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

Harmful if inhaled. Avoid breathing vapor or spray mist. Contact with product may result in transient tingling and reddening of the skin. Remove contaminated clothing and wash before reuse.

ENVIRONMENTAL HAZARDS

This product is extremely toxic to fresh water and estuarine fish and invertebrates. Use with care when applying in areas adjacent to any body of water. To protect the environment, do not allow pesticide to enter or run off into storm drains, drainage ditches, gutters or surface waters. Applying this product in calm weather when rain is not predicted for the next 24 hours will help to ensure that wind or rain does not blow or wash pesticide off the treatment area. Rinsing application equipment over the treated area will help avoid run off to water bodies or drainage systems.

This pesticide is highly toxic to bees exposed to direct treatment. Do not apply or allow it to drift to crops or weeds on which bees are actively foraging.

PHYSICAL & CHEMICAL HAZARDS

Do not use water-based sprays of Deltamethrin 543 in conduits, motor housings, junction boxes, switch boxes, or other electrical equipment because of possible shock hazard.

Product Facts: <ul style="list-style-type: none">• Residual Control that lasts for 90-days or longer.• Longer residual means fewer applications required, reducing the pesticide load in the environment as well as the number of applications required to maintain control.• Compared to SC formulations, this product improves rain fastness and reduces the amount of pyrethroid entering urban water sheds.	
<ul style="list-style-type: none">• Reduces environmental impacts by minimizing wash off of residues from treated surfaces.• Exclusive formulation technology creates a microscopic polymer film that protects AI from weather, precipitation, irrigation and mechanical abrasion.	
Deltamethrin 543	This product is a suspension concentrate formulation containing 0.42 lb of deltamethrin per gallon. This product is designed for use both indoors and outdoors and will provide effective knockdown and long residual control of the pests listed on this label. For residential, industrial and institutional control of major nuisance and public health pests listed on the label. Will not damage paints, plastics, fabrics or other surfaces where water alone causes no damage.
Controls	<ul style="list-style-type: none">• Indoor, General Household Pests• Outdoor/ Perimeter Pests• Wood-Infesting Pests <i>For list of specific insects, see inside</i>
Where to Apply	<ul style="list-style-type: none">• Apply where pests have been seen or found, or can find shelter.• In and around buildings and structures• On established landscape ornamentals around residential and commercial properties
Dilution Rates	<ol style="list-style-type: none">1. When 1.5 fluid ounces (45.4 milliliter) is diluted in one gallon of water, the active ingredient concentration is equivalent to 0.06% deltamethrin. Use of the 1.5 fluid ounce (0.06%) rate is recommended for severe pest infestations or when longer residual control is desired.2. When 0.75 fluid ounce (22.7 milliliter) is diluted in one gallon of water, the active ingredient concentration is equivalent to 0.03% deltamethrin. Use of the 0.75 fluid ounce (0.03%) rate is recommended for initial service or clean out treatments.3. When 0.25 fluid ounce (7.5 milliliter) is diluted in one gallon of water, the active ingredient concentration is equivalent to 0.01% deltamethrin. Use of the 0.25 fluid ounce (0.01%) rate is recommended for maintenance treatments.
Mixing Information	This product is intended to be mixed with water and applied with hand pressurized or power operated sprayers. Shake this product well before measuring concentrate for dilution in water. Mix the appropriate amount of this product with water. Thoroughly shake, agitate or invert sprayer to insure proper suspension. If spraying is interrupted when using a back-pack or hand-held sprayer, invert sprayer to re-suspend the dilution before starting to make applications. Diluted spray mixture can be stored overnight, but agitate well before using. If spray screens are used, they should be 50 mesh or larger.
Tank mixing	This product may be tank-mixed with other registered pesticides unless expressly prohibited by the product label. A small volume mixing test with other products is recommended to ensure compatibility. Observe all restrictions and precautions which appear on the labels of these products.
How to Apply	General surface applications, spot treatments, crack & crevice sprays, or void injections by sprays, mists or foams. Foliar application to established landscape ornamentals.

Re-Apply	Treatments may be applied at 21-day intervals, or as necessary to maintain adequate control.
Re-Entry	Avoid contact with treated surfaces until dry. People and pets may re-enter after the treated area is dry.
Questions	For questions or comments, call toll free 1 800 331-2867

DIRECTIONS FOR USE

**It is a violation of Federal law to use this product in a manner inconsistent with its labeling.
Do not formulate this product into other end-use products.**

INDOOR PESTS				
Indoor applications to residential buildings and structures may only be made as a spot treatment, crack and crevice applications or void (spray, mist, foam) injections. This includes schools, factories, stores, warehouses, hospitals, food processing facilities (non food/feed areas), and modes of transportation. For a list of common facilities where this product may be used, see Appendix.				
Ants	Cluster flies	Flesh flies	Midges	Pill bugs
Bed bugs	Cockroaches	Flies	Millipedes	Sciarid flies (fungus gnats)
Blue/green bottle flies	Crickets	Fruit flies	Moths	Silverfish
Boxelder bugs	Darkling beetles	Gnats	Multi-colored Asian lady beetles	Sow bugs
Carpet beetles	Dermestids	Hide beetles	Pantry pests, beetles & moths	Spiders
Centipedes	Earwigs	Hornets	Phorid flies	Wasps
Clothes moths	Elm leaf beetles	House flies		Yellowjackets
Clover mites	Firebrats	Leather beetles		
Where to Apply	<p>Treat where pests have been seen or found, or can find shelter. Treat areas where pests normally feed or hide, such as baseboards, corners, around water pipes, behind and under refrigerators, cabinets, sinks and stoves. This product can be applied to walls, floors, ceilings, in and around cabinets, between, behind and beneath equipment and appliances, around floor drains, window and door frames and around plumbing, sinks and other possible pest harborage sites. Treat entry points around water pipes, utility penetrations, windows, doors, vents and eaves. Void applications can be made behind veneers, piers, and chimney bases, into rubble foundations, into block voids and structural voids, wall voids, under slabs, stoops, porches or to the soil in crawlspaces, and other similar voids. Spot treat floors, floor coverings, carpets or rugs for flea and tick control; DO NOT treat entire floor area.</p>			
Use Rate	<p>0.01% -- 0.25 fluid ounce (7.5 milliliter) per gallon 0.03% -- 0.75 fluid ounce (22.7 milliliter) per gallon 0.06% -- 1.50 fluid ounce (45.4 milliliter) per gallon</p>			

<p>How to Apply (see Application for Indoor Pests)</p>	<p><u>Spot Applications</u></p> <ul style="list-style-type: none"> • Use a low pressure system (do not exceed 50 psi at nozzle tip) with a fan-type nozzle to uniformly apply spot treatments in and around cupboards, and beneath, between and behind equipment or appliances. • In the home, all food processing surfaces and utensils should be covered before treatment or thoroughly washed following treatment. Cover exposed food or remove from area being treated.
	<p><u>Spray, Mist or Foam Crack and Crevice or Void Applications</u></p> <ul style="list-style-type: none"> • Spray, mist or foam directly into cracks and crevice or voids where pests or their nests are present. Apply the volume of spray, mist or foam sufficient to cover the area. • <u>Spray</u>: Use a low pressure system (do not exceed 50 psi at nozzle tip) with a pin-point or variable pattern nozzle to apply the spray mixture to areas such as floors, cracks and crevices in and around baseboards, walls, expansion joints, areas around water and sewer pipes or utility penetrations, and voids created by equipment and appliances. • <u>Mist</u>: Use appropriate mist generating equipment. Do not allow mist to drift out of void spaces into commonly occupied areas of structure. • <u>Foam</u>: Use foam to treat structural voids and control pests in walls, under slabs or other void areas. Using appropriate foam generating equipment, mix dilution with manufacturers specified volume of foaming agent and apply sufficient volume of foam.
<p>When to Apply</p>	<p>When pests are seen or found. Treatments may be applied at 21-day intervals, or as necessary to maintain adequate control.</p>
<p>Restrictions</p>	<p>Do not apply in food/feed areas of food and feed handling establishments. Do not apply broadcast treatments to floors or floor coverings. Do not apply as a space spray. Remove or tightly cover fish tanks and disconnect aerators during application. Keep people and pets away from sites of application until treated are has dried. When treating overhead areas, wear safety glasses, goggles or face shield and a dust/mist respirators.</p>
<p>APPLICATION FOR INDOOR PESTS</p>	
<p>General Pest Control Cockroaches, Ants, Crickets, Silverfish, Firebrats, Centipedes, Millipedes, Clothes Moths, Earwigs, Pillbugs, Sowbugs, Scorpions and Spiders</p>	<p>Apply as a coarse, low pressure (do not exceed 50 psi at nozzle tip) spot or crack and crevice spray to areas that these pests normally inhabit. Pay particular attention to dark corners of rooms and closets; floor drains; cracks and crevices in walls; along and behind baseboards; beneath and behind sinks, stoves, refrigerators, and cabinets; around plumbing and other utility installations; doors, windows and in attics and crawl spaces. Spot applications may be made to floor surfaces along baseboards and around air ducts. Let surfaces dry before allowing children or pets to contact surfaces.</p>
<p>Pantry Pest Control</p>	<p>To kill adult and accessible immature stages of insects such as lesser grain borers, grain weevils, flour beetles, saw-toothed grain beetles, cigarette beetles, merchant grain beetles, Angoumois grain moths, Mediterranean flour moths, Indian meal moths, grain mites and spider mites: Make applications to cupboards, shelving and storage areas. Remove all foodstuffs, all utensils, shelf paper and other objects before spraying. Allow all treated surfaces to dry before replacing foodstuffs, utensils or other items. Any foodstuff accidentally contaminated with any spray solution must be discarded.</p>
<p>Crawling and Flying Insect Pests Flies, Gnats, Midges, Mosquitoes, Cockroaches, Ants and Silverfish</p>	<p>Apply directly to walls, ceilings, window screens and other resting areas as a residual surface treatment. May be used inside residential buildings, as well as in and around carports, garages, storage sheds, unoccupied barns, stables or pet kennels.</p>

<p>Ants Including Pharaoh's ant</p>	<p>Apply to trails, around doors and windows and other areas where ants inhabit or enter premises.</p>
<p>Bed Bugs</p>	<p>Spray bed bugs and eggs directly wherever possible following site directions below. For infested mattresses, remove linens and wash before reuse. Apply to mattresses, especially tufts, folds, and edges until moist. Allow to dry before remaking bed.</p>
	<p>Apply to <u>bedsprings, box springs, and the interior of bed frames or headboards</u>, including all cracks and crevices. When bed bugs are found in upholstered furniture, apply only to the infested tufts, seams, folds and edges, but do not make broadcast applications to flat surfaces where prolonged human contact will occur. If bugs heavily infest furniture (inside cushions and/or batting) apply a labeled insecticide dust or consider fumigation. Apply as a crack and crevice treatment to all baseboards, moldings, beneath floor coverings and carpets, closets, shelves, curtains, furniture and picture frames that may provide harborage to bed bugs.</p>
<p>Carpet Beetles, Fleas and Ticks</p>	<p>A total integrated pest management program is recommended. It is suggested that infested areas be thoroughly vacuumed prior to treatment. These areas include all carpet, upholstered furniture, baseboards and other indoor areas frequented by pets. The vacuum cleaner bag should be discarded in an outdoor trash container upon completion. Pet bedding should be cleaned or replaced. Apply this product as a uniform, coarse low-pressure (do not exceed 50 psi at nozzle tip) spot or crack and crevice treatment to areas where these pests normally inhabit. Care should be taken to limit spot treatments to pet bedding and its surrounding area, infested floor coverings and pest habitats. DO NOT treat entire area of floor, carpet or floor coverings. When these pests are found in upholstered furniture, apply only to the infested tufts, seams, folds and edges, but do not make broadcast applications to flat surfaces where prolonged human contact will occur. This product can also be applied out-of-doors for flea and tick control (see directions in Outdoor/Perimeter Pests).</p>
<p>Pet Kennels</p>	<p>For residual control of crawling and flying insects in and around these structures, apply as a general surface and/or crack and crevice spray. Optimal control results if facilities to be treated are clean and if the exterior perimeter is concurrently treated with this product. Apply only to areas of facility where animals are not present. Allow spray to dry before allowing re-entry of animals into treated areas. Do not apply to animal feed or watering equipment. Do NOT treat pets with this product.</p>
<p>Non-Food/Non-Feed Areas of Food/Feed Handling Establishments</p>	<p>Examples of non-food/non-feed areas include garbage rooms, lavatories, floor drains (to sewers), entries and vestibules, offices, locker rooms, machine rooms, boiler rooms, mop closets and storage (after packaging, canning or bottling). In such non-food/non-feed areas, this product may only be applied as spot treatments, crack & crevice sprays, or void injections (sprays, mists or foams) where labeled insects inhabit or may enter the facility.</p>

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OUTDOOR/PERIMETER PESTS				
Use this product to control outdoor pests by application as a perimeter treatment, residual spray or broadcast application to exterior surfaces of buildings, lawns, grounds and ornamental plantings.				
Ants Blue or green bottle flies	Crickets Earwigs Elm leaf beetles	Gnats Ground beetles Hornets	Mosquitoes Moths Multi-colored	Sow bugs Spiders Springtails
Boxelder bugs Carpenter ants Centipedes Cockroaches Cluster flies Clover mites	Fire ants Firebrats Fleas Flesh flies Flies	House flies Midges Millipedes	Asian lady beetle Pill bugs Scorpions Silverfish	Stable flies Ticks Wasps Yellow jackets
Where to Apply	<p>This product may be applied as a residual spray or as a perimeter treatment around residential and non-residential settings.</p> <p><u>Residual Spray:</u> Apply to surfaces on building exteriors, porches, patios and other structures, around door and windows, eaves and attic vents, utility entry points, soffit areas and other exterior openings (including foundation cracks or drilled holes) where pests enter the structure or where they have been seen or found, or can find shelter.</p> <p><u>Perimeter Treatments:</u> Treat the outside of the structure, including walls (to a height of 2 to 3 feet), around door and window frames, and soffits where pests are active or may enter or hide. Treat the soil, turf, or other ground covering adjacent to the structure (in a band up to 10 feet wide) where pests are seen, have been found, or can find shelter.</p> <p>In ant management programs, apply to flower, shrub or ornamental plant beds where ants may be nesting, find food or forage.</p>			
Application Restrictions	<p>Do not water the treated area to the point of run-off</p> <p>Do not make applications during rain.</p> <p>All outdoor applications must be limited to spot or crack-and-crevice treatments only, <u>except</u> for the following permitted uses:</p> <p>(1) Treatment to soil or vegetation around structures;</p> <p>(2) Applications to lawns, turf, and other vegetation;</p> <p>(3) Applications to building foundations, up to a maximum height of 3 feet.</p> <p>Other than applications to building foundations, all outdoor applications to impervious surfaces such as sidewalks, driveways, patios, porches and structural surfaces (such as windows, doors, and eaves) are limited to spot and crack-and-crevice applications, only.</p> <p>Application is prohibited directly into sewers or drains, or to any area like a gutter where drainage to sewers, storm drains, water bodies, Or aquatic habitat can occur. Do not allow the product to enter any drain during or after application.</p>			
Use Rate	<p>0.25 fluid ounce (7.5 milliliter) per 1,000 square feet of surface</p> <p>0.75 fluid ounce (22.7 milliliter) per 1,000 square feet of surface</p> <p>1.50 fluid ounce (45.4 milliliter) per 1,000 square feet of surface</p>			
How to Apply (see Application for Outdoor/ Perimeter Pests)	<p>Apply as a coarse low-pressure (do not exceed 50 psi at nozzle tip) spray at the rate of 0.25 to 1.5 fluid ounces of this product per 1,000 square feet of surfaces. Apply in a sufficient volume of water to provide adequate coverage but do not allow run-off to occur.</p> <p><u>High volume applications using power sprayers:</u> You must adjust the rate of product dilution to ensure the correct amount of the product (see Use Rate section above) is applied per 1,000 square feet of treated surface. For example, mixing 12.5 fluid ounces of this product in a 50 gallon tank, while using an application volume of 3.0 gallons per 1,000 square feet, will apply 0.75 fluid ounces of this product per 1,000 square feet. The table below gives examples of end use dilutions for typical power spraying application volumes.</p>			

DILUTION RATE CHART	
<u>Amount of Product fluid ounces (milliliter)</u>	<u>Application Volume gallons water</u> <u>Concentration (% AI) in spray solution</u>
0.25 (7.5)	1 0.01%
	2 0.005%
	3 0.0033%
	4 0.0025%
	5 0.002%
0.75 (22.7)	1 0.03%
	2 0.015%
	3 0.01%
	4 0.0075%
	5 0.006%
1.5 (45.4)	1 0.06%
	2 0.03%
	3 0.02%
	4 0.015%
	5 0.012%
When to Apply	Begin applications when pests are noticed. Treatments may be applied at 21-day intervals, or as necessary to maintain adequate control.

APPLICATION FOR OUTDOOR/PERIMETER PESTS

Ants, roaches and other crawling pests	Apply as a residual spray and/or perimeter treatment around the infested structure as described above. Locate and treat ant nests if possible. Follow trails of foraging worker ants and inspect for likely nest sites. If ants are nesting in soil, drench or inject the nest and surrounding soil. Foliar applications to landscape ornamentals will control aphids, scale insects, and other plant-sucking insects and limit the production of honeydew (and important food source for ant populations). Apply a light mist of the dilute spray, and do not allow excess run-off. Treat thoroughly for good coverage, including the underside of leaves. It is recommended to remove or prune away any shrubbery, bushes or tree branches touching the structure. Vegetation touching the structure may offer a route of entry for ants into the structure, allowing ants to avoid contact with the treatment.
Occasional invaders	Apply directly to insects that have congregated around doors, windows and similar areas where they may enter the structure. Apply a perimeter treatment as described above. For best results, treat trees and shrubs infested with boxelder bugs, elm leaf beetles and other occasional invading species early in the season. [Tree spraying may require ornamental license - check with your local regulator.]
Fleas and Ticks (including ticks that may transmit Lyme Disease and Rocky Mountain Spotted Fever)	Apply as a coarse wet spray to areas where fleas and ticks are most likely to be found, such as dog houses, kennels, runways, along paths or trails, under plants, shrubs, bushes, trees, or other shaded, moist areas where pests may be found. Treat the entire area where these pests could be present. Fleas and ticks may be re-introduced from surrounding areas by host animals.
Mosquitoes	Treat with spray or mist around landscape plants, turf and ground cover, under decks, around building foundations and other places where mosquitoes may rest.
Fire Ants	Apply as a mound drench. Dilute 1.5 oz per one gallon of water. Gently sprinkle 1 to 2 gallons of the diluted insecticide over the surface of each

	<p>mound and surrounding area to a 2-foot diameter. For best results, apply in cool weather, 65 to 80°F or in early morning or late evening hours. Treat new mounds as they appear.</p>
Scorpions	<p>Treat around piles of firewood and other areas where scorpions hide. When possible, remove piles of materials that can harbor the pests. Apply as a residual spray and/or perimeter treatment. Do not treat firewood with this product.</p>
Hornets, wasps, and yellow jackets	<p>Make a pin stream application directly to hornet or yellow jacket nests. To reduce sting threat, make applications in the evening when the insects are inside the nest. For paper wasps, use a pin stream or fan spray and apply over surface of exposed nest. Remove and destroy treated nests to prevent emergence of newly emerged insects. If removal is not possible, retreat nests as needed.</p>
Centipedes, millipedes, pill bugs, sow bugs, springtails, etc.	<p>Apply perimeter treatment to reduce the number of insects entering the structure. Thoroughly treat mulched areas. Correcting moisture problems around the structure will reduce pest pressure.</p>
House flies and Cluster flies	<p>Apply low pressure (do not exceed 50 psi at nozzle tip) mist or spray to outside of surfaces of buildings, porches, patios, garages, fences, and other areas where house flies rest. Cluster flies: Treat in late summer or fall, just before cluster flies begin looking for winter shelter. Spray siding, eaves, around windows and doors, and window screens. To help reduce infestations, treat cracks and crevices, attics and other indoor winter hiding places.</p>

WOOD-INFESTING PESTS			
Drywood termites Beetles - Lyctid or powder post - Anobiid or deathwatch	Beetles (con't) - False powderpost - old house borers - wharf borers	Beetles (con't) - Ambrosia beetles - bark beetles	Carpenter ants Carpenter bees
Where to Apply	For treatment of wood infested with, or subject to infestation by, wood-infesting pests. Apply where pests have been seen or found, or can find shelter.		
Use Rate	0.06% - - 1.50 fluid ounce (45.4 milliliter) per gallon		
How to Apply	Apply spray, mist or foam as described below in the application section. Treatment dilutions may also be applied to wood surfaces by paint brush or roller. Do not contact treated surfaces until dry.		
When to Apply	When pests are seen or found. Treatments may be applied at 21-day intervals, or as necessary to maintain adequate control.		
Foam Applications	This product can be converted to foam and used to treat structural voids to control wood-infesting pests in walls, under slabs, within masonry voids, or in other void areas. Mix end-use dilution with manufacturer's specified volume of foaming agent.		

APPLICATION FOR WOOD-INFESTING PESTS

<p>Drywood termites & wood-infesting beetles</p>	<p><u>Galleries and structural voids:</u> Treat by applying sprays, mists, or foams. 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. Apply as low pressure (do not exceed 50 psi at nozzle tip) 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.</p> <ul style="list-style-type: none"> • Avoid drilling where electrical wiring, plumbing lines, etc. are located. • Do not apply where electrical shock hazards exist. • Drill holes in commonly occupied areas must be sealed after treatment. <p><u>Wood surfaces:</u> Treat by spray or mist or, where appropriate, foam applications. 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 (do not exceed 50 psi at nozzle tip) spray to the wood surface; apply sufficient volume to cover the surface to the point of wetness, but avoid applying to the point of runoff.</p> <p>When spraying wood surfaces 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.</p>
<p>Carpenter ants</p>	<p><u>Homes and other structures:</u> Apply around doors and windows and other places where carpenter ants may enter. Spray or foam into cracks & crevices, or spray, mist or foam through small drilled holes into voids where ants or their nests are present. Use enough spray or foam to cover the area, but do not exceed 1 gallon of dilute suspension per 1,000 square feet of treated surface.</p> <p>It is recommended to remove or prune away any shrubbery, bushes or tree branches touching the structure. Vegetation touching the structure may offer a route of entry for ants into the structure, allowing ants to avoid contact with the treatment.</p> <p><u>Exterior ant nests:</u> Inside trees, utility poles, fencing and decking materials and similar structural members, drill to find the interior infested cavity and inject spray, mist or foam using a treatment tool with a backsplash guard.</p> <p><u>Tunneling in soil:</u> Apply as a soil drench or inject the dilution or foam in the soil at intervals of 8 to 12 inches. Use 1 gallon of dilution per 8 square feet. Treat along the edges of walls, driveways or other hard surfaces where ants are tunneling beneath the surface.</p> <p><u>Protecting firewood from carpenter ants:</u> Treat soil beneath firewood before stacking at 1 gallon of dilution per 8 square feet. Do not treat firewood with this product.</p>
<p>Carpenter bees</p>	<p>Apply as a spray or mist, or sufficient volume of foam, directly into gallery entrance holes. Leave entrance open to be sure that returning adult bees are killed. When there is no longer any insect activity, the entrance hole may be sealed with a suitable sealant.</p> <p>Exterior wood surfaces may be treated by general surface application to prevent nest cavity excavation by adult carpenter bees.</p>

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STORAGE AND DISPOSAL	
Do not contaminate water, food or feed by storage or disposal.	
STORAGE	Mix as needed. Store in original container in a secured dry storage area. Avoid extremes in temperatures. Prevent crosscontamination 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 or at an approved waste disposal facility.
CONTAINER DISPOSAL	<p>[less than one gallon] Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. 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 or 1-800-CLEANUP for disposal instructions. Never place unused product down any indoor or outdoor drain.</p> <p>[One to 5 gallon size] Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. 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, or by incineration, or if allowed by State and local authorities, by burning. If burned, stay out of smoke. If partly filled: Call your local solid waste agency or 1-800-CLEANUP for disposal instructions. Never place unused product down any indoor or outdoor drain.</p> <p>[> 5 gallon size] Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available. Offer for reconditioning, if appropriate. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 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. Offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by incineration, or if allowed by State and local authorities, by burning. If burned, stay out of smoke. If partly filled: Call your local solid waste agency or 1-800-CLEANUP for disposal Instructions. Never place unused product down any indoor or outdoor drain.</p>

APPENDIX

Use this product as a general surface (outdoors only), spot, mist, or crack and crevice treatment. Permitted areas of use include the following buildings, structures, and modes of transport:

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| • Aircraft* (cargo holds only) | • frozen food plants * | • meat and produce canneries* |
| • apartment buildings | • grain mills* | • mobile & motor homes |
| • bakeries* | • granaries* | • nursing homes* |
| • bottling facilities* | • greenhouses (structures only) | • offices |
| • breweries* | • hospitals* | • pickle factories* |
| • buses | • hotels | • poultry houses |
| • cafeterias* | • houses | • processing and packing plants* |
| • candy plants* | • industrial buildings | • restaurants* |
| • cereal processing and manufacturing plants* | • kitchens* | • schools* |
| • correctional facilities | • laboratories | • spice plants* |
| • dairies and dairy product processing plants* | • livestock housing | • stores |
| • food manufacturing plants* | • pet kennels | • warehouses |
| • food processing plants* | • manufacturing establishments | • wineries and similar structures* |
| • food service establishments* | • mausoleums | • transportation vessels such as buses, trucks, trailers, rail cars, and marine vessels |
| | • Meat, poultry & egg processing & packaging plants* | |

For indoor applications at these sites (*), observe the following restrictions:

- Do not apply in food/feed areas of food and feed handling establishments.
- Do not allow people or pets to contact treated areas until spray has dried.
- Do not apply in hospital and/or nursing home rooms while they are occupied.
- Do not apply in classrooms while they are occupied.
- Do not apply in aircraft cabins.
- Do not apply to furniture or upholstery where prolonged contact with humans will occur.
- Do not apply as a space spray.
- Do not allow excessive dripping or run-off to occur when treating vertical or overhead surfaces.
- Do not apply in conduits, motor housings, junction boxes, switch boxes, or other electrical equipment because of possible shock hazard.

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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.

DISCLAIMER OF WARRANTIES: TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER CROPSCIENCE LP MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE, THAT EXTEND BEYOND THE STATEMENTS MADE ON THIS LABEL. No agent of Bayer CropScience is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER CROPSCIENCE LP DISCLAIMS ANY liability whatsoever for special, incidental or consequential damages, resulting from the use or handling of this product.

LIMITATIONS OF LIABILITY: TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER FOR ANY AND ALL LOSSES, INJURIES OR DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, WHETHER IN CONTRACT, WARRANTY, TORT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE, SHALL NOT EXCEED THE PURCHASE PRICE PAID, OR AT BAYER CROPSCIENCE LP'S ELECTION, THE REPLACEMENT OF PRODUCT.

Deltagard is a registered trademark of Bayer.

PRODUCED FOR



Bayer Environmental Science

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

Deltamethrin 543 (PENDING) 09/24/10, Resubmitted 11/17/10

Marketing Claims

- Residual control that lasts for 90 days or longer
- Outdoor residual control that lasts longer than microencapsulated pyrethroids
- Longer residual means fewer applications required, reducing the pesticide load in the environment
- Maintain control with fewer applications
- Reduces the number of applications necessary to maintain control
- Improved rain fastness
- Resists run off
- Compared to SC formulations, reduces deltamethrin residues in wash off water by 65% to 70% after 1 inch of rainfall
- Compared to SC formulations, reduces the amount of active ingredient in run off water
- Reduces the amount of pyrethroid entering urban water sheds
- A more environmentally sensitive formulation for pyrethroid insecticides
- Reduces environmental impacts by minimizing wash off of residues from treated surfaces
- The AI stays where you apply it, so it breaks down on treated surfaces and not in the backyard, in a storm drain or in a stream
- Protects AI from aggressive substrates, like high pH concrete or cement
- Protects AI from sorptive substrates, like wood or greasy surfaces
- Improved efficacy on difficult surfaces, like concrete, wood or greasy surfaces
- Better, more uniform distribution of AI particles than possible with conventional SC formulations
- [MykroFilm™] [Microfilm] is an exclusive polymer technology that ensures the active ingredient stays where it's applied after drying
- Exclusive [MykroFilm™] [Microfilm] technology binds (fixes) the AI to the treated surface
- Exclusive [MykroFilm™] [Microfilm] technology creates a microscopic polymer film that protects AI from weather, precipitation, irrigation and mechanical abrasion
- Exclusive [MykroFilm™] [Microfilm] technology creates a monomolecular layer of protection from the environment
- Exclusive [MykroFilm™] [Microfilm] technology binds AI to surface, and slowly releases over time to achieve extended control
- Deltamethrin crystals remain available to kill insects, while being protected in the [MykroFilm™] [Microfilm]
- Exclusive [MykroFilm™] [Microfilm] technology creates an artificial barrier between AI and aggressive or alkaline surfaces, protecting AI from degradation or sorption
- Exclusive [MykroFilm™] [Microfilm] technology creates a microscopic polymer film that protects AI from the treated substrate

[] Brackets denote optional text