

70506-120

09-08-2009

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

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

SEP 8 2009

Mr. Timothy M. Formella
Senior Registration Manager
United Phosphorus, Inc.
630 Freedom Business Center, Suite 402
King of Prussia, PA 19406

Subject: Label Notifications for Pesticide Registration Notices 2007-4, 2005-1 (Adding IRAC code) and 98-10 (Replacing Primary Product Names)

Dear Mr. Formella,

The Agency is in receipt of your Applications for Pesticide Notification under Pesticide Registration Notices (PRN) 98-10, 2005-1, and 2007-4 dated April 3, 2009 and resubmitted August 19, 2009 for the following products:

Lambda-Cy EC Insecticide-MUP
Lambda-Cy EC Insecticide

EPA Registration Number 70506-119
EPA Registration Number 70506-120

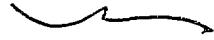
The Registration Division (RD) has conducted its review of these requests for their applicability under PRNs 98-10, 2005-1, and 2007-4 and finds that the label changes requested fall within the scope of PRNs 98-10, 2005-1, and 2007-4. The labels submitted with the applications have been stamped "Notification" and will be placed in our records.

Please be reminded that 40 CFR Part 156.140(a)(4) requires that a batch code, lot number, or other code identifying the batch of the pesticide distributed and sold be placed on nonrefillable containers. The code may appear either on the label (and can be added by non-notification/PR Notice 98-10) or durably marked on the container itself.

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If you have any questions, please call me directly at 703-305-6249 or Steve Schaible of my staff at 703-308-9362.

Sincerely,




Linda Arrington
Notifications & Minor Formulations Team Leader
Registration Division (7505P)
Office of Pesticide Programs

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Please read instructions on reverse before completing form.

Form Approved, OMB No. 2070-0060, Approval expires 05-31-98

 EPA United States Environmental Protection Agency Washington, DC 20460	<input type="checkbox"/> Registration <input type="checkbox"/> Amendment <input checked="" type="checkbox"/> Other:	OPP Identifier Number
	Application for Pesticide - Section I	

1. Company/Product Number 70506-120	2. EPA Product Manager Kimberly Nescki	3. Proposed Classification <input checked="" type="checkbox"/> None <input type="checkbox"/> Restricted
4. Company/Product (Name) Lambda-Cy EC Insecticide	PM# 13	
5. Name and Address of Applicant (Include ZIP Code) United Phosphorus, Inc. 630 Freedom Business Center, Suite 402 King of Prussia, PA 19406 <input type="checkbox"/> Check if this is a new address	6. Expedited Review. In accordance with FIFRA Section 3(c)(3)(b)(I), my product is similar or identical in composition and labeling to: EPA Reg. No. _____ Product Name _____	

Section - II

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

NOTIFICATION
SEP - 8 2009

Explanation: Use additional page(s) if necessary. (For Section I and Section II.)
 Notification of label change per PR Notices 2007-4, 2001-5, and 98-10. This notification is consistent with the guidance in PR Notices 2007-4, 2001-5, and 98-10 and the requirements of EPA's regulations at 40 CFR §§ 152.46, 156.10, 156.140, 156.144, 156.146, and 156.156. No other changes have been made to the labeling or the Confidential Statement of Formula for this product. I understand that it is a violation of 18 U.S.C. Sec. 1001 to willfully make any false statement to EPA. I further understand that if the amended label is not consistent with the requirements of 40 CFR §§ 152.46, 156.10, 156.140, 156.144, 156.146, and 156.156, this product may be in violation of FIFRA and I may be subject to enforcement action and penalties under sections 12 and 14 of FIFRA.

Section - III

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

Section - IV

1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application)

Name Timothy M. Formella	Title Senior Registration Manager	Telephone No. (Include Area Code) 610-491-2813
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Certification

I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.

2. Signature 	3. Title Senior Registration Manager
4. Typed Name Timothy M. Formella	5. Date August 21, 2009

6. Date Application Received (Stamped)

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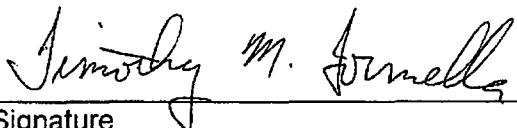
Certification with Respect to Label Integrity

version: 9/11/02

I certify that the information (including, but not limited to, text, tables, and graphics) contained in the electronic file identified below by file name and submitted with this certification is the same information as that on the paper copies of these documents included with this submission.

PROPOSED LABEL		
EPA Registration #	Date Submitted to EPA	Electronic file name
70506-120	8/21/2009	070506-00120.20090821.pdf

I certify that the statements that I have made on this form are true, accurate, and complete. I acknowledge that any knowingly false or misleading statements may be punishable by fine or imprisonment or both under applicable law.


Signature

08/21/2009
Date

Timothy M. Formella
Name (typed)

Senior Registration Manager
Title

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GROUP 3 INSECTICIDE

LAMBDA-CY™ EC INSECTICIDE

For use in, on and around buildings and structures for the control of listed pests, including on lawns, ornamental trees and shrubs around residential, institutional, public, commercial, agricultural and industrial buildings; and parks, recreational areas and athletic fields.

NOTIFICATION

ACTIVE INGREDIENT

Lambda-cyhalothrin
 [1α(S*),3α(Z)]-(±)-cyano-(3-phenoxyphenyl)methyl-3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2-dimethylcyclopropanecarboxylate.....11.4%

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INERT INGREDIENTS.....88.6%
 100.0%

Contains 1.0 lb. of active ingredient per gallon.
 Contains petroleum distillates.

**KEEP OUT OF REACH OF CHILDREN
 WARNING/AVISO**

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.)

FIRST AID	
IF SWALLOWED	<ul style="list-style-type: none"> • Call a poison control center or doctor immediately for treatment advice. • Do not give any liquid to the person. • Do not induce vomiting unless told to do so by a poison control center or a doctor. • Do not give anything by mouth to an unconscious person.
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 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 INHALED	<ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, give artificial respiration immediately, preferably by mouth-to-mouth. • Call a poison control center or doctor for treatment advice.
Note to Physician: Contains petroleum distillates. Vomiting may cause aspiration pneumonia.	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. Contact the Rocky Mountain Poison Center at 1-866-673-6671 for emergency medical treatment information.	

FOR CHEMICAL EMERGENCY: Spill, leak, fire, exposure, or accident, call CHEMTREC 1-800-424-9300.

United Phosphorus, Inc.
 630 Freedom Business Center, Suite 402
 King of Prussia, PA 19406
 1-800-438-6071 • www.upi-usa.com

Net Contents:
 EPA Reg. No. 70506-120
 EPA Est. No.
 Batch/Lot # _____

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

WARNING

May be fatal if swallowed. Harmful if inhaled or absorbed through skin. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Avoid breathing spray mist. Wash hands thoroughly with soap and water after handling and before eating, drinking, or using tobacco. Remove contaminated clothing and wash before reuse.

Personal Protective Equipment (PPE)

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category G on an EPA chemical resistance category selection chart.

Applicators and Other Handlers Must Wear:

- Long-sleeved shirt and long pants
- Chemical resistant gloves made of any waterproof material such as Barrier Laminate, or Viton ≥14 mils
- Shoes plus socks
- Protective eyewear

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

ENVIRONMENTAL HAZARDS

This product is extremely toxic to fish. Do not contaminate water when cleaning equipment or disposing of equipment washwater. Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Apply this product only as specified on this label. When making applications, care should be used to avoid household pets, particularly fish and reptile pets.

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

PHYSICAL AND CHEMICAL HAZARDS

Combustible. Do not use or store near heat or open flame. Do not use this product in or on electrical equipment due to the possibility of shock hazard.

DIRECTIONS FOR USE

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

LAMBDA-CY EC INSECTICIDE may be used for applications to maintain indoor or outdoor areas where turf and ornamentals are grown such as residential landscaped areas and non-residential landscapes around institutional, public, commercial and industrial buildings, parks, recreational areas and athletic fields.

It may also be used for Structural and Perimeter Pest Control; use as a general surface, crack and crevice, or spot treatment in, on, and around buildings and structures and their immediate surroundings, and on modes of transport. Permitted areas of use include, but are not limited to THE FOLLOWING:

aircraft (cargo and other non-cabin areas only)	greenhouses (non-commercial)	pet kennels
apartment buildings	hospitals	porches
boiler rooms	hotels and motels	railcars

buses	houses	restaurants
closets	industrial buildings	storage rooms
correctional facilities	laboratories	schools
decks	livestock/poultry housing	sewers (dry)
entries	landscape vegetation	stores
factories	locker rooms	trailers
floor drains (that lead to sewers)	machine rooms	trees
food granaries	mausoleums	trucks
food grain mills	mobile homes	utility passages
food manufacturing	mop closets	vessels
processing and serving establishments	mulch	vestibules
furniture	nursing homes	warehouses
garages	offices	wineries
garbage rooms	patios	yards

USE DIRECTIONS - LAWNS/TURFGRASS AND ORNAMENTALS

LAMBDA-CY EC INSECTICIDE may be used for applications to maintain indoor or outdoor areas where turf and ornamentals are grown such as residential landscaped areas and non-residential landscapes around institutional, public, commercial and industrial buildings, parks, recreational areas and athletic fields. Application rates for turf and ornamental applications for LAMBDA-CY EC INSECTICIDE are lower than structural pest control rates, reflecting that treatment intervals are generally more frequent.

Applicators must ensure that they are certified in the necessary pesticide certification categories to allow application of LAMBDA-CY EC INSECTICIDE away from structures, such as to turf and ornamental plantings. Structural pest control certification categories may limit the distance away from structures for pesticide application. Consult your state extension office or pesticide regulatory officials for further information.

Not for use on plants being grown for sale or other commercial use, or for commercial seed production, or for research purposes. For use on plants intended for aesthetic purposes or climatic modification and being grown in interior or exterior plantscapes, ornamental gardens or parks, or on lawns or grounds.

IMPORTANT: Time application of flowering plants during periods when pollinating insects are not present, such as early morning or late evening.

- Do not apply this product through any type of irrigation system.
- Do not apply this product to edible crops.
- Do not apply this product by aerial application.
- Allow treated surfaces to dry before allowing children and pets to contact them.

Use of this pesticide adjacent to water may affect aquatic organisms. To protect these organisms, do not apply this pesticide within 25 ft. of lakes, reservoirs, rivers, permanent streams, marshes or natural ponds, estuaries, and commercial fish farm ponds.

Do not make outdoor broadcast applications to turf and ornamentals when wind speed is 15 mph or greater.

In the state of New York, do not apply within 100 feet of coastal marshes or streams that drain into coastal marshes.

MIXING INSTRUCTIONS (Turf and Ornamental Dilutions): LAMBDA-CY EC INSECTICIDE is to be diluted with water for spray application and may be used in all types of application equipment. First fill application tank with ½ - ¾ volume of water. It is suggested that the pH of the water be between 5 and 7;

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use a buffering agent if necessary to adjust the pH. Next slowly add LAMBDA-CY EC INSECTICIDE to the applicator tank water with maximum agitation. Finally, fill tank to desired volume and continue to agitate while making applications. If application is interrupted, agitate or re-suspend spray solution before resuming sprays. Do not make up more mixture than needed at one time.

Mixing Chart for Ornamentals: Amount of LAMBDA-CY EC INSECTICIDE to add per spray tank

Spray Tank Volume	Rate of LAMBDA-CY EC INSECTICIDE		
	1.3 oz/100 gal. ¹	2.6 oz/100 gal. ²	4.4 oz/100 gal. ³
25 gals	0.33 oz	0.65 oz	1.1 oz
50 gals	0.65 oz	1.3 oz	2.2 oz
100 gals	1.3 oz	2.6 oz	4.4 oz
200 gals	2.6 oz	5.2 oz	8.9 oz
300 gals	4.0 oz	7.9 oz	13.3 oz

¹Equivalent to 3 mL/1000 sq ft (or 4.5 oz/A) when applied at 8 gal/1000 sq ft

²Equivalent to 6 mL/1000 sq ft (or 9 oz/A) when applied at 8 gal/1000 sq ft

³Equivalent to 10 mL/1000 sq ft (or 15 oz/A) when applied at 8 gal/1000 sq ft

Mixing Chart for Turfgrass Applications: Amount Lambda-Cy EC Insecticide to be added to 100 gal spray tank

Amount of Spray Solution Applied per 1,000 Sq. Ft. of Turf	Rate of LAMBDA-CY EC INSECTICIDE		
	4.4 fl. oz./A	8.8 fl. oz./A	17.6 fl. oz./A
2 gals.	5.0 oz	10.0 oz	20.0 oz
4 gals.	2.5 oz	5.0 oz	10.0 oz
6 gals.	1.7 oz	3.3 oz	6.7 oz
8 gals.	1.2 oz	2.5 oz	5.0 oz
10 gals.	1.0 oz	2.0 oz	4.0 oz

Conversion Rate: 1 Fluid ounce (fl. oz.) equals 29 milliliters (mL).

TANK MIXING (Turf and Ornamental Dilutions): LAMBDA-CY EC INSECTICIDE may be tank mixed with other currently registered pesticides unless expressly prohibited by the product label. Adjuvants such as spreader stickers, wetting agents, and penetrants may also be added. Use a small volume mixing test with the other products to confirm compatibility. If other chemicals are added to the applicator tank, LAMBDA-CY EC INSECTICIDE should be added last. Fill tank to desired volume and continue to agitate while making applications. If mixed with EC formulations, use within 24 hours.

Observe all restrictions and precautions found on labels of products in the tank mix.

COMPATIBILITY

LAMBDA-CY EC INSECTICIDE has been found to be compatible with commonly used fungicides, miticides, liquid fertilizers, and other insecticides. Check physical compatibility using the correct proportion of products in a small jar, if local experience is unavailable.

Note: Although phytotoxicity testing has been conducted on a wide range of ornamental plants under various environmental conditions, and no phytotoxicity has been observed, it is possible that certain cultivars could be sensitive to the final spray solution. UPI recommends that a selection of ornamental plants be sprayed and observed for 7-10 days prior to treating large areas if local use experience is unavailable.

USE DIRECTIONS – ORNAMENTALS (Including Trees, Shrubs, Flowers, Evergreens, Foliage Plants and Groundcovers) In Residential Landscaped Areas and Landscaped Areas Around Institutional, public, Commercial and Industrial Buildings, Parks, Recreational Areas, and Athletic Fields

Pest	Rate of LAMBDA-CY EC INSECTICIDE per 100 gallons	Instructions
Ants (Including Imported fire ants) Armyworms Azalea caterpillars Aphids Bagworms ¹ Black vine weevils (adult) Boxelder bugs Budworms California Oakworms Cankerworms Cockroaches Crickets Cutworms Eastern tent caterpillars Elm leaf beetles European sawflies Fall webworms Flea beetles Forest tent caterpillars Gypsy moth larvae Japanese beetles (adult) June beetles (adult) Lace bugs Leaf-feeding caterpillars Leafhopper Leafminers, (adult) Leaf rollers Leaf skeletonizers Midges Mosquitoes Oleander moth larvae Pillbugs Pine sawflies Pine shoot beetles Pinetip moths Plant bugs Root weevils Sawflies Scale insects (crawlers) ² Spiders Spittlebugs Striped beetles Striped oakworms Thrips Tip moths Tussock moth larvae Wasps	1.3-4.4 fl. oz. (38-128 mL)	<p>Begin application to ornamentals before high insect pest populations become established. Reapply as necessary to keep pest populations under control. Use higher rates as pest pressure increases.</p> <p>Begin application to ornamentals before high insect pest populations become established. Reapply as needed for pest control, using higher rates as pest pressure increases.</p> <p>For the best control, good spray coverage is essential. For ornamentals with waxy, hard-to-wet foliage, add a spreader-sticker at recommended rates to enhance the control of insects.</p> <p>Apply at 7- day intervals if more than one treatment is required. If more frequent treatment is needed, it should be limited to spot treatments. Note that as plants grow, new foliage will be unprotected until it is treated. When making spot treatments, use 0.44 fl. oz. LAMBDA-CY EC INSECTICIDE per 1-2.5 gallons of water.</p> <p>Do not apply more than 0.36 lb. of the active ingredient (46 fl. oz. of concentrate) per acre per year.</p> <p>Consult your state university or local Cooperative Extension Service office for specific pest control application timing in your area.</p> <p>¹ Bagworm: Make application when bagworm larvae begin to hatch, spraying directly on the larvae. Best results will when the larvae are young.</p> <p>² Scale: Cover the plant thoroughly with LAMBDA-CY EC INSECTICIDE spray. Including trunks, stems, twigs, and foliage for control of the crawler stage.</p>

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Pest	Rate of LAMBDA-CY EC INSECTICIDE per 100 gallons	Instructions
Broadmites Brown softscales California redscales (crawler) Clover mites Mealybugs Pine needlescales (crawler) Spider mites Whiteflies	2.6-4.4 fl. oz. (75-128 mL)	

Sample calculation: To prepare a mid-rate solution of LAMBDA-CY EC INSECTICIDE, mix 2.6 oz. (75 mL) of concentrate in 100 gallons.

TABLE 1
USE DIRECTIONS – TURFGRASS – For Lawns Around Residential, Institutional, Public,
Commercial and Industrial Buildings, Parks, Recreational Areas and Athletic Fields

Pest	Amount of LAMBDA-CY EC INSECTICIDE	Instructions
Ants (Including Imported fire ants) Armyworms Centipedes Crickets Cutworms Earwigs Fleas (adult) Grasshoppers Japanese beetles (adult) Millipedes Mites Mosquitoes (Adult) Pillbugs Sod webworms Sow bugs Ticks (including species which transmit Lyme disease)	2.9-6 mL/1,000 sq. ft. (4.4-8.8 fl. oz./A)	Begin application to turf before the establishment of high insect pest populations and before significant turf damage has occurred. Reapply as necessary to keep pest populations under control. Use higher rates as pest pressure increases. Apply at 7- day intervals if more than one treatment is required. If more frequent treatment is needed, it should be limited to spot treatments. For spot treatments, use 0.44 fl. oz. of LAMBDA-CY EC INSECTICIDE per 1-2.5 gals. of water. Do not apply more than 0.36 lb. of active ingredient (46 fl. oz. of concentrate) per acre per year. Do not apply when turfgrass is waterlogged or when soils are saturated with water
Bluegrass billbugs (adult) Black turfgrass ataeinus (adult) Chiggers Fleas (adult) Grub (suppression) Hyperodes weevils (adult) Mole crickets (nymphs and young adults)	6 mL/1,000 sq. ft. (8.8 fl. oz./A)	Keep children and pets off treated areas until spray has dried following the application.
Chinch bugs Mole crickets (mature adults) (Not for use on mature adult mole crickets and chinch bugs in New York State)	12 mL/1,000 sq. ft. (17.6 fl. oz./A)	

Sample calculation: To treat the listed turf pests at the mid-rate for LAMBDA-CY EC INSECTICIDE of 6 mL/1000 sq ft, determine gal. dilution/1000 sq. ft. needed to cover turf. For example, at 5 gal./1,000 sq. ft., use 6 mL divided by 5 or 1.2 mL per gallon. If using a 50 gallon tank, this would be equivalent to 60 mL or 2 oz (in 50 gal. water).

Follow rates for insects as shown in Table 1, above

Insect/Insect Category	Specific Instructions
Armyworms, Cutworms, Fleas, and other Surface Insects	For best results, LAMBDA-CY EC INSECTICIDE at labeled rates in 2-5 gals. of water per 1,000 sq. ft. If significant precipitation is expected, use a spreader-sticker. Under normal conditions the addition of adjuvants is not necessary. Watering and mowing should be postponed for 12-24 hours for best control of surface-feeding insect pests.
Chinch Bugs, Billbugs, and other Thatch Inhabiting Insects	Apply LAMBDA-CY EC INSECTICIDE at recommended rates in 2-10 gals. of water per 1,000 sq. ft. A nonionic wetting agent, penetrant or similar adjuvant is recommended at label rates. Irrigate lightly after application with up to ½ inch of water to move LAMBDA-CY EC INSECTICIDE into the thatch layer. If irrigation is not possible, use high water application rates for optimum result
Mole Crickets, Grubs, and other Subsurface Insects	Apply LAMBDA-CY EC INSECTICIDE at labeled rates in 4-10 gals. of water per 1,000 sq. ft. A nonionic wetting agent, penetrant or similar adjuvant is strongly recommended following label rates. Use the greatest water application rates possible with your sprayer. Apply LAMBDA-CY EC INSECTICIDE to turf which is wet with dew, rain or irrigation. For best results, water-in immediately after application with ¼ - ½ inch of.
Fire Ants	Use a watering can to treat individual mounds with a drench. Mix 0.44 fl. oz. of LAMBDA-CY EC INSECTICIDE per 2.5 gals. of water. Soak each mound thoroughly, and also apply in a 3 ft. diameter circle around each mound. Apply mixture in a gentle fashion, to avoid disturbing the mound; disturbing the mound may cause the ants to migrate and reduce the effectiveness of the treatment. Best results will occur if application is made in early morning or late evening hours. Apply on a monthly schedule to maintain protection.
Mosquitoes	Apply as a general spray around landscape plantings, turf and building foundations. Create a mosquito barrier in yards or other areas enclosed by landscaping by treating perimeter vegetation. For best results, apply LAMBDA-CY EC INSECTICIDE at recommended rates in 2-5 gals. of water per 1,000 sq. ft. Higher volumes applied result in better coverage and, will generally improve control.

USE DIRECTIONS - STRUCTURAL AND PERIMETER PEST CONTROL

For use as a general surface, crack and crevice, or spot treatment in, on and around buildings and structures and their immediate surroundings, and on modes of transport. Permitted areas of use include, but are not limited to the following:

aircraft (cargo and other non-cabin areas only)	greenhouses (non-commercial)	pet kennels
apartment buildings	hospitals	porches
boiler rooms	hotels and motels	railcars
buses	houses	restaurants
closets	industrial buildings	storage rooms
correctional facilities	laboratories	schools
decks	livestock/poultry housing	sewers (dry)
entries	landscape vegetation	stores
factories	locker rooms	trailers
floor drains (that lead to sewers)	machine rooms	trees
food granaries	mausoleums	trucks
food grain mills	mobile homes	utility passages
food manufacturing	mop closets	vessels
processing and serving establishments	mulch	vestibules
furniture	nursing homes	warehouses
garages	offices	wineries
garbage rooms	patios	yards

When making applications indoors, retreat at 21 day intervals or as necessary to maintain control.

MIXING INSTRUCTIONS: LAMBDA-CY EC INSECTICIDE is to be diluted with water for application using hand-held or power-operated application equipment. Apply as a coarse spray for crack and crevice or spot and general surface treatments. Low volume application equipment, such as the Micro-Injector® or Actisol® applicator, may also be used to make crack and crevice or spot and general surface treatments. To mix, first fill the applicator tank with the desired volume of water then add LAMBDA-CY EC INSECTICIDE. Before using, close the tank and shake it to ensure proper mixing. If the application is interrupted, always shake and re-agitate applicator tank before use is resumed. Do not mix more than can be used at one time. A paintbrush or applicator attached to a handle can be used when making a general surface treatment.

Structural Perimeter Barrier Applications Rate Table

	Rate of LAMBDA-CY EC INSECTICIDE		
	0.18 fl. oz. (5 mL)	0.35 fl. oz. (10 mL)	0.7 fl. oz. (20 mL)
Amount of Water, Gallons	1-5	1-5	1-5
Area Covered, Sq. Ft.	800-1,600	800-1,600	800-1,600

TANK MIXING: Unless specifically prohibited by the product label, LAMBDA-CY EC INSECTICIDE may be tank mixed with other currently registered pesticides. Ensure compatibility by conducting a small volume mixing test with the other products. If mixed with sanitizers, LAMBDA-CY EC INSECTICIDE should be added to the tank first. If other chemicals are added to the applicator tank, LAMBDA-CY EC INSECTICIDE should be added last. If mixed with EC formulations, use within 24 hrs. Maintain continuous agitation when making applications.

LAMBDA-CY EC INSECTICIDE may be tank mixed with an Insect Growth Regulator (IGR) such as Archer Insect Growth Regulator.

When tank mixing, always observe all restrictions and precautions which appear on the labels of products used.

FOAM APPLICATIONS: When treating structural LAMBDA-CY EC INSECTICIDE to treat structural voids to control or prevent pests including ant, bees, termites (above ground only), wasps, or other arthropods harboring in walls, under slabs, or in other void areas, LAMBDA-CY EC INSECTICIDE can be converted to a foam.

RESTRICTIONS

- Allow treated surfaces to dry before allowing humans and pets to contact them.
- Do not use this product with oil.
- Do not apply this product in any room being used as living, eating, sleeping, or recovery area by patients, the elderly, or infirm when they are in the room.
- Do not apply to classrooms when in use.
- Do not apply to institutions (including libraries, sports facilities, etc.,) in the immediate area when occupants are present.
- Do not apply this product to edible growing crops or stored raw agricultural commodities used for food or feed.
- Do not allow applications to contact water inhabited by fish, such as in aquariums and ornamental fish ponds that are located in/around structures being treated.

NOTE: Do not use water base sprays of LAMBDA-CY EC INSECTICIDE in conduits, motor housings, junction boxes, switch boxes, or other electrical equipment because of possible shock hazard. For best results, thoroughly wash out sprayer and screen with water and detergent before using LAMBDA-CY EC INSECTICIDE. LAMBDA-CY EC INSECTICIDE has not stained or caused damage to painted or varnished surfaces, plastics, fabrics, or other surfaces where water applied alone causes no damage. However, treat a small area and allow to dry to determine whether staining will occur.

TABLE 2
USE DIRECTIONS - STRUCTURAL PESTS (HAND APPLICATION EQUIPMENT)
(See specific directions below table, for further instructions on certain pests)

Insects	Concentration of active ingredient	Rate of Dilution
Ants	0.013-0.026 %	0.18 fl. oz.(5 mL)/gal. of water (0.013%)
Bedbugs (adult)		
Bees	0.35 fl. oz. (10 mL)/gal. of water (0.026%)	
Beetles		
Boxelder Bugs		
Carpenter Bees		
Carpet Beetles		
Centipedes		
Cigarette Beetles		
Clover Mites		
Cockroaches ¹		
Confused Flour Beetles		
Crickets		
Earwigs		
Firebrats		
Fleas ²		
Flies		
Lesser Grain Borers		

Insects	Concentration of active ingredient	Rate of Dilution
Millipedes Mosquitoes Red Flour Beetles Rice Weevils Saw-toothed Grain Beetles Silverfish Sowbugs Spiders Termites (above ground only) Ticks Wasps		
Cockroaches ¹ Crickets ⁶ Flies* ⁵ Litter Beetles ³ (such as Darkling, Hide, and Carrion) Mosquitoes ⁴ Pillbugs Scorpions Spiders ⁶ Spider Mites (Two-spotted, Spruce) Ticks ⁶	0.053%	0.7 fl. oz. (20 mL)/gal. of water
<p>*Not approved for use in California at the high rate.</p> <p>¹ For cockroaches, the recommended rate for maintenance treatments is 0.013% and for clean-out treatments is 0.026%. For control of SEVERE infestations, use 0.053% rate.</p> <p>² For outdoor use only and use 0.026% rate.</p> <p>³ For control of LIGHT beetle infestations, use 0.026% rate.</p> <p>⁴ For residual control, use 0.053% rate.</p> <p>⁵ Rates for flies may be increased to 0.053% when environmental conditions are severe and/or populations are high.</p> <p>⁶ For clean-out/severe infestations, use 0.053% rate.</p>		

Follow rates for insects as shown in Table 2, above

Insects	Specific Instructions
Ants	Apply to any trails around doors and windows and other places where ant may be found, and for best results, locate and treat nests. In cases where ants are making trails indoors, apply as a residual surface treatment to areas such as baseboards, corners, around pipes, in and behind cabinets, behind and under refrigerators, sinks, furnaces and stoves, cracks and crevices. When both baits and residual surface insecticides will be used, apply the surface insecticides in cracks and crevices, along baseboards, and infested surfaces and outside barrier treatments. To eliminate honeydew-producing insects which provide an ant food source, treat perimeter landscaping. In areas not being treated by residual insecticides, use baits; also see Outdoor Surfaces Use .
Cockroaches, Crickets, Earwigs, Firebrats, Silverfish, and Spiders	Apply to areas where these pests hide as a coarse, low pressure spray. Pay special attention to baseboards, corners, storage areas, closets, around water pipes, doors and windows, attics and eaves, cabinets, behind and under refrigerators, furniture, sinks, furnaces and stoves, the underside of shelves, drawers and similar areas. Also pay particular attention to cracks and crevices. See Outdoor Surfaces Use .
Bedbugs	Floors and surfaces should be cleaned by vacuuming, then apply as a coarse, low-pressure spray to harborage areas including crevices, baseboards, loose plaster, behind bed frames and headboards, beneath beds and furniture, and to bedsprings and bed frames. Do not apply to furniture surfaces or mattresses where people will be lying or

Insects	Specific Instructions
	sitting. Do not treat infested bedding, but remove, place in sealed plastic bags, and take for laundering and drying at high temperatures.
Bees Flies Mosquitoes Wasps	<p>Make application 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, and storage sheds; also see Outdoor Surface Use.</p> <p>Use caution when treating nests of stinging insects because LAMBDA-CY EC INSECTICIDE does not provide instant knockdown; protective equipment for the applicator may be necessary. For most effective control, treat bee, wasp and hornet nests late in the day when most insects will be in the nest. Observe nest for 2-3 days for colony to die, and retreat if necessary.</p> <p>To control mosquitoes, make a general structural perimeter spray to landscape plantings, turf, and building foundations. Create a mosquito barrier by treating perimeter vegetation in areas such as yards or other areas which are enclosed by landscaping. For best results, apply LAMBDA-CY EC INSECTICIDE at recommended rates in 2-5 gal. of water per 1,000 sq. ft. In general, higher volumes will result in better coverage and better control. Note that application to vegetation away from structures may require additional certification, e.g. in turf ornamental categories and consult your state regulatory agency for requirements.</p>
Carpenter Bees	<p>Make application as a coarse spray in order to thoroughly wet wood surfaces where bees have been previously active or to provide protection against further damage. Apply early in the spring to keep bees from invading the wood. When bees have already infested wood, make a surface application to help control embedded larvae and bees that emerge from the wood. As a maintenance treatment, apply monthly.</p>
Pantry Pests (i.e., Carpet beetle, Cigarette beetle, Confused flour beetle, Lesser grain borer, Red flour beetle, Rice weevil, and Saw- toothed grain beetle)	<p>Remove all utensils, uncovered foodstuffs (or any having original package opened), and shelf paper, then make application to cupboards, shelving, and storage areas. Before replacing any items, allow treated surfaces to dry and cover shelves with clean paper.. Any foodstuff which becomes contaminated with treatment solution should be destroyed.</p>
Boxelder Bugs Centipedes Millipedes Pillbugs Sowbugs	<p>Make application around doors and windows and other places where these pests may be found or where they may enter. Treat locations such as baseboards and storage areas. Use barrier treatments to prevent infestation as described below; and also see Outdoor Surface Use.</p>
Fleas and Ticks	<p>For control of fleas and ticks (e.g. dog ticks) apply to kennels, yards, runs, and other areas where pets may spend time. For best control of ticks, apply using a coarse fan spray to vegetation brush, branches, walls, and other areas near dwellings which ticks may frequent. Make treatment of entire area rather than making spot treatments. Retreat as needed to maintain control. Do not apply to pasture or cropland, and do not allow animals and people access to treated areas until the spray has dried. Monthly applications may be made, and should start in the spring to continue until frost for control of both larvae and adult ticks. In addition, treat pets with a product registered for flea and tick control. See Outdoor Surface Use.</p>
Cluster Flies	<p>Make application in late summer or early fall before flies are seen alighting on surfaces. Pay special attention to south-facing surfaces and apply thoroughly on siding, under eaves, and around windows and doors. Do not apply to runoff, but use just enough dilution to adequately cover the. Vary the volume depending on the type of surface being treated. If heavy rain occurs before the autumn frost, it may be necessary to retreat to maintain protection. When flies emerge and become active in</p>

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Insects	Specific Instructions
	winter and spring, make interior crack and crevice and void treatments. These can help reduce infestation, especially when used with ULV or general surface application in infested attics or unoccupied lofts.
Litter Beetles (Darkling, Hide, and Carrion Beetles) and Flies In Animal Housing (Such As Poultry Houses)	To control adult litter beetles, make application LAMBDA-CY EC INSECTICIDE to walls and floors at cleanout. Apply before reintroduction of animals to suppress beetles that may have escaped earlier treatment and to help delay future infestation. In particular, treat areas where beetles frequently occur, such as walls, supports, cages, stalls, and around feeders. For flies, make a directed application to horizontal surfaces and overhead areas. Allow to dry before animals are reintroduced; also see Livestock/Poultry Housing Structures and Pet Kennels.

Follow rates for insects as shown in Table 2, above

Other Areas of Application	Specific Instructions
Within Food Handling Establishments (places other than private residences in which exposed food is held, processed, prepared, or served) including, but not limited to, areas for receiving, storage, packing (canning, bottling, wrapping, boxing), preparing foods, edible waste storage and enclosed processing systems (mills, dairies, edible oils, syrups), and serving areas.	<p>Make crack and crevice or spot treatments in and around both food and nonfood areas. Using small amounts, apply directly into cracks and crevices. Use equipment which can deliver a pin stream of insecticide, in points between different elements of construction, between equipment and floor, openings leading to voids and hollow spaces in walls, equipment and bases. Clean all food contact surfaces and equipment with an effective cleaning compound, and rinse them with potable water before using.</p> <p>Spot treatments should not cover more than 20% of the treated surface. Any individual spot treatments should not be larger than 2sq. ft. Do not introduce this product into the air. Avoid contamination of food and food processing surfaces.</p>
Within Food Serving Areas (facilities where food is served, such as dining rooms)	<p>Make crack and crevice or spot treatment to surfaces such as baseboards, under elements of construction, and into cracks and crevices. Do not treat surfaces which are likely to be contacted by food, and do not apply when facility is in operation or when foods are exposed. All food must be covered, or removed from the area being treated. Do not apply directly to food or allow applications to contaminate food.</p> <p>Application to this product in the Food Areas and/or Food Serving Areas of Food Handling Establishments other than as a spot and /or crack and crevice treatment is not permitted. Limit the use of application equipment such as the Micro-Injector or Actisol applicator in food areas to crack and crevice treatment only.</p>
Livestock/Poultry Housing Structures and Pet Kennels	<p>Apply as a general surface spray (including directed sprays) and /or as a crack and crevice treatment. Control is improved when interior and exterior perimeter applications are made in and around the livestock, poultry, and pet housing structures. Follow all normal cleaning practices of the structure along with applications of LAMBDA-CY EC INSECTICIDE in order to effectively control the crawling and flying insect pests listed on this label.</p> <p>In unoccupied areas of livestock barns or housing structures, make application to floors as well as vertical, and overhead surfaces where crawling or flying insect pests are or may be found. Cover all feeders, waterers, and feed prior to application to keep them from being contaminated. Application to milk rooms or feed rooms is prohibited. Pay attention in animal areas to stanchions, pipes, windows and doors, and areas where insect pests hide or congregate. Apply to south facing</p>

	<p>walls, foundation perimeters to help prevent interior infestations of flying and crawling insects.</p> <p>In poultry houses, apply to floor area for birds grown on litter or to walls, posts, and cage framing for birds grown in cages. Also apply into cracks and crevices found around insulation. Make another application after each grow out or sanitization procedure. Improve indoor control by making perimeter treatments around the outside of building foundations for the prevention of immigrating adult beetles. Make a uniform band application 1-3 ft. up and 2-6 ft. out from foundation. Prevent the development of background populations by instituting a year-round treatment program</p> <p>Do not make interior applications of LAMBDA-CY EC INSECTICIDE in areas of facility where animals other than cattle or calves are present. Allow treated surfaces to completely dry before restocking the facility.</p> <p>DO NOT make applications to any animal feedstuffs, water, or watering equipment.</p> <p>DO NOT contaminate any animal food, feed, or water in and around livestock, poultry, or pet housing when making applications.</p>
Outdoor Surfaces Use	<p>For control of ants, bees, centipedes, cockroaches, crickets, fleas, flies, millipedes, mosquitoes, scorpions, sowbugs, pillbugs, spiders, termites (above ground only), ticks, wasps, and other similar perimeter arthropod pests. Apply with either hand or power application equipment as a residual treatment to ornamental plants next to foundations of buildings and to surfaces of buildings, porches, screens, window frames, eaves, patios, garages, refuse dumps, and other similar areas where these insect pests are active. For termites, this type of application is not intended as a substitute for soil treatment labeled termiticides or mechanical alternation to control subterranean termites, or fumigation for extensive infestation of drywood termites or other wood-infesting insects. The purpose of such applications of LAMBDA-CY EC INSECTICIDE for termites is to kill workers or winged reproductive forms which may be present in treated channels at the time of treatment. Such applications are not a substitute for mechanical alteration, soil treatment of foundation treatment, but are merely a supplement. This product is not recommended as a sole protection against termites. For active termite infestations, get a professional inspection.</p>
Structural Perimeter Barrier Treatments	<p>Applying a continual band of insecticide around a building foundation and around windows, doors, service line entrance, eaves, vents, and other areas can greatly reduce the potential for entry by crawling pests. To facilitate application, remove debris and leaf litter from next to the foundation, cut back vegetation and branches that touch the foundation, and move or rake back rocks, deep mulch, or other potential pest harborage next to the foundation. Apply the band up to 10 ft. wide around the structure (or according to state regulations governing commercial pest control) and upwards along the foundation to 3 ft. and around windows, doors, and rood overhangs. Apply as a coarse spray to thoroughly and uniformly wet the foundation and/or band area so that the insecticide will reach the soil or thatch level where pests may be active.</p>

	Amount of concentrate is dependent upon pest species (see pest Table 2 and comments), infestation levels, and service interval desired. If required due to heavy vegetation or landscaping materials, use more than 5 gallons water per 800-1600 square feet.
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Some Typical Dilutions For Structural Perimeter Barrier Applications

Application Volume – Gal. of Solution per 1,000 sq. ft.	Application Rate fl. oz. (mL) of LAMBDA-CY EC INSECTICIDE per 1,000 sq. ft.	fl. oz. (mL) of LAMBDA-CY EC INSECTICIDE to Dilute in Water According to Spray Tank Volume		
		5 gal.	10 gal.	50 gal.
1 gal.	0.18 fl. oz. (5 mL)	0.88 fl. oz. (26 mL)	1.8 fl. oz. (51 mL)	8.8 fl. oz. (255 mL)
	0.35 fl. oz. (10 mL)	1.8 fl. oz. (51 mL)	3.5 fl. oz. (102 mL)	17.6 fl. oz. (510 mL)
	0.7 fl. oz. (20 mL)	3.5 fl. oz. (102 mL)	7 fl. oz. (204 mL)	35 fl. oz. (1020 mL)
2 gal.	0.18 fl. oz. (5 mL)	0.44 fl. oz. (13 mL)	0.88 fl. oz. (26 mL)	4.4 fl. oz. (128 mL)
	0.35 fl. oz. (10 mL)	0.88 fl. oz. (26 mL)	1.8 fl. oz. (51 mL)	8.8 fl. oz. (255 mL)
	0.7 fl. oz. (20 mL)	1.8 fl. oz. (51 mL)	3.5 fl. oz. (102 mL)	17.6 fl. oz. (510 mL)
5 gal.	0.18 fl. oz. (5 mL)	0.18 fl. oz. (5 mL)	0.4 fl. oz. (12 mL)	1.8 fl. oz. (51 mL)
	0.35 fl. oz. (10 mL)	0.35 fl. oz. (10 mL)	0.8 fl. oz. (24 mL)	3.5 fl. oz. (102 mL)
	0.7 fl. oz. (20 mL)	0.7 fl. oz. (20 mL)	1.6 fl. oz. (42 mL)	7 fl. oz. (204 mL)

Sample calculation to prepare the mid-rate of LAMBDA-CY EC INSECTICIDE at a volume of 5 gal./1000 sq. ft.: Mix 3.5 oz. of concentrate in 50 gallons of water.

The percent active ingredient in the finished LAMBDA-CY EC INSECTICIDE dilution can be calculated as follows:

Take the mL needed to be added times 11.4% (the % active ingredient in the concentrate), divided by the gal. finished dilution, times 3,785 mL/gal. to yield the % active in dilution. (Sample calculation: For 3.5 oz. in 50 gal. of water, use the chart above to determine that this rate is equivalent to 102 mL; 102 times 11.4% = 1163; 50 gal. times 3,785 is 189250. Divide 1163 by 189250 = 0.006% active ingredient in the tank dilution).

STORAGE AND DISPOSAL

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

Pesticide Storage: Store in original containers only. Keep container closed when not in use. Do not store near food or feed. In case of spill or leak on floor or paved surfaces, soak up with sand, earth, or synthetic absorbent. Remove to chemical waste area.

Pesticide Disposal: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use 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.

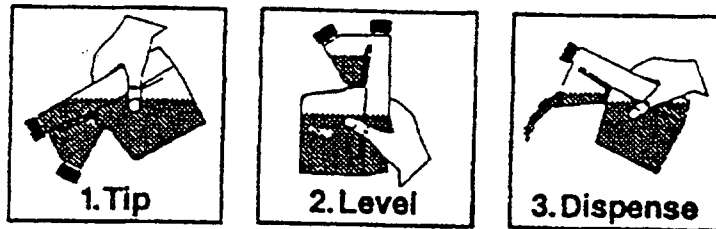
Container Handling:

Nonrefillable container. Do not reuse or refill this container.

Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available 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.

[For the 1 qt Tip N Pour package]
CONTAINER USE DIRECTIONS:

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1. Remove the measuring chamber cap and induction seal. Replace cap and securely tighten. Tip container until liquid fills measuring chamber.
2. Return container to level position. No adjustment is needed.
3. Remove measuring chamber cap and dispense into proper application equipment.

For multiple dose measuring: remove fill chamfer cap and dispense according to markings on side of bottle.

**IMPORTANT INFORMATION
READ BEFORE USING PRODUCT**

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Rev. 8/21/2009