

71532-23

5/30/2012

1/18



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON D C 20460

OFFICE OF  
PREVENTION PESTICIDES  
AND TOXIC SUBSTANCES

May 30, 2012

Dr Matthew Brooks,  
Director, AG-Chem Consulting  
(Agent for LG Life Sciences)  
12208 Quinque Lane  
Clifton, VA 20124

Subject Notification "to add '*Not for Use in California*' for stink bug"  
Lambdastar 9 7% CS (EPA Reg No 71532-23)  
Date of Application March 06, 2012

Dear Dr Brooks

The Agency is in receipt of your Application for Pesticide Notification under Pesticide Registration (PR) Notice 98-10 for the subject product The Registration Division (RD), after conducting a review of your request for its applicability, finds that the action requested falls within the scope of the subject notice

Please note that we have approved the amended labeling for this product with the understanding that it is consistent with the Agency's previously stamped accepted label(s), and other than the above stated, no other changes have been made to the labeling and/or the Confidential Statement of Formula (CSF)

The label submitted with the application have been stamped "Notification" and will be placed in our records If you have any questions regarding this letter, please contact me or Dr B A Akinlosotu at (703) 605-0653

Sincerely,

A handwritten signature in black ink, appearing to read "Mark Suarez".

Mark Suarez,  
Product Manager 13  
Insecticide Branch  
Registration Division (7505P)

Handwritten initials "SM" in black ink.



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 LG Life Sciences/ 71532-23	2 EPA Product Manager Mark Suarez	3 Proposed Classification <input checked="" type="checkbox"/> None <input type="checkbox"/> Restricted
4 Company/Product (Name) LG Life Sciences / Lambdastar 9 7% CS	PM# 13	
5 Name and Address of Applicant (Include ZIP Code) LG Life Sciences c/o Ag-Chem Consulting 12208 Quinque Lane Clifton VA 20124 <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

**Explanation Use additional page(s) if necessary (For section I and Section II)**

Notification to add Not for Use in California language to Stink Bug Spp Brown Marmorated and Kudzu Bug  
 This notification is consistent with the provisions of PR Notice 98 10 and EPA regulations at 40CFR 152 46 and no other changes have been made to the labeling or the confidential statement of formula of 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 this notification is not consistent with the terms of PR Notice 98 10 and 40CFR152 46 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 checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Water Soluble Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Metal <input checked="" type="checkbox"/> Plastic <input type="checkbox"/> Glass <input type="checkbox"/> Paper <input type="checkbox"/> Other (Specify) _____		
* Certification must be submitted		If Yes* Unit Packaging wgt 1 gal	No per container 4	If Yes Package wgt	No per container
3 Location of Net Contents Information <input checked="" type="checkbox"/> Label <input type="checkbox"/> Container		4 Size(s) Retail Container 1 gal 2.5 gal		5 Location of Label Directions <input checked="" type="checkbox"/> On Container	
6 Manner in Which Label is Affixed to Product <input checked="" type="checkbox"/> Lithograph Paper glued 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 Dr Matthew Brooks	Title Regulatory Consultant	Telephone No (Include Area Code) 703 266 0128

**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

6 Date Application Received  
(Stamped)

2 Signature 	3 Title Regulatory Consultant
4 Typed Name Matthew Brooks	5 Date Mar, 7, 2012



**AG-CHEM CONSULTING**  
 PESTICIDE SCIENCE AND REGISTRATION  
 12208 QUINQUE LANE CLIFTON VA 20124  
 (703) 266-0128 [MWBROOKS@AG.CHEM.COM](mailto:MWBROOKS@AG.CHEM.COM)  
 (703) 266-4377 FAX

March 6, 2012

Mark Suarez  
 Product Manager 13  
 Insecticide Branch  
 Registration Division (7504P)  
 One Potomac Yard (South Building)  
 2777 S Crystal Drive  
 Arlington, VA 22202

**Subject: Lambdastar 9.7% CS**  
**Notification to add "Not for Use in California" to stink bug**  
**EPA Reg No 71532-23**

Dear Mr. Suarez,

Ag-Chem Consulting, on behalf of LG Life Sciences, hereby submits the following Notification to add "Not for Use in California" to stink bug for above product. The change is noted in red on page 4 on the label. No other changes have been made to the label.

Should you have any questions or require additional information, please do not hesitate to contact me at 703-266-0128.

Very Sincerely,

Dr. Matthew Brooks  
 Director, Ag-Chem Consulting  
 An Authorized Representative for LG Life Sciences

```

cccc
cccc
   c c
  cc cc
     c

cccc
cccc
cccc
   c c
  cc cc
     c

cccc
cccc
   c c
  cc cc
     c

cccc
cccc
   c c
  cc cc
     c
  
```

4/18

**NOTIFICATION**

**LAMBDA STAR 9 7% CS**  
Insecticide

**MAY 3 0 2012**

Intended for use by commercial applicators for use in on and around buildings and structures for the control of listed pest including on lawns ornamental trees and shrubs around residential institutional public commercial agricultural and industrial buildings and parks recreational areas and athletic fields

**Active Ingredient**

Lambda cyhalothrin<sup>1</sup>

[1 α(S\*) 3 α(Z)] (±) cyano (3 phenoxyphenyl)methyl-3-(2-chloro 3,3,3-trifluoro-1 propenyl)-

2,2-dimethylcyclopropanecarboxylate

Other Ingredients

9.7%

90.3%

Total

100.0%

<sup>1</sup>Synthetic pyrethroid

EPA Registration No. 71532-23

EPA Establishment No.

**KEEP OUT OF REACH OF CHILDREN**  
**WARNING**

Net Contents \_\_\_\_\_

**PRECAUTIONARY STATEMENTS**

**Hazards to Humans and Domestic Animals**

**See additional precautionary statements and directions for use in booklet**

<b>First Aid</b>	
Have the product container or label with you when calling a poison control center or doctor or going for treatment	
<b>If swallowed</b>	<ul style="list-style-type: none"> <li>• Call a poison control center or doctor immediately for treatment advice</li> <li>• Have person sip a glass of water if able to swallow</li> <li>• Do not induce vomiting unless told to do so by the poison control center or doctor</li> <li>• Do not give anything by mouth to an unconscious person</li> </ul>
<b>If in eyes</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water 15-20 minutes</li> <li>• Remove contact lenses if present after the first 5 minutes then continuing rinsing eye</li> <li>• Call a poison control center or doctor for treatment advice</li> </ul>
<b>If on skin or clothing</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing</li> <li>• Rinse skin immediately with plenty of water for 15-20 minutes</li> <li>• Call a poison control center or doctor for treatment advice</li> </ul>
<b>If inhaled</b>	<ul style="list-style-type: none"> <li>• Move person to fresh air</li> <li>• If person is not breathing call 911 or an ambulance then give artificial respiration preferably mouth to mouth if possible</li> <li>• Call a poison control center or doctor for further treatment advice</li> </ul>
Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact the Poison Control Center at 1-800-222-1222	
<b>FOR CHEMICAL EMERGENCY Spill leak fire exposure or accident call CHEMTREC 1-800-424-9300</b>	

[ ] Denotes Optional Language

[EcoCap Technology]

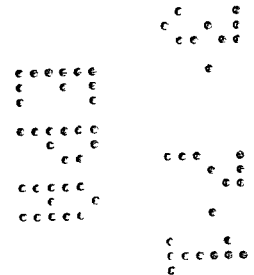
[LG s EcoCap Technology]

[Contains LG s EcoCap Technology]

[Featuring EcoCap Technology]

[EcoCap Technology 2 walled capsules- 1 result dead insects]

[No VOCs]



**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 eyes skin or clothing Avoid breathing spray mist Wear protective eye wear Wear long-sleeved shirt and long pants socks shoes and gloves Wash thoroughly with soap and water after handling and before eating drinking chewing gum or using tobacco Remove and wash contaminated clothing before reuse See additional precautionary statements and directions for use in booklet

**Environmental Hazards**

This product is extremely toxic to fish and other aquatic organisms Do not contaminate water when cleaning equipment or disposing of equipment wash 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 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**

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

**IMPORTANT** 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 plantscapes ornamental gardens or parks or on lawns or grounds

**PREMISE AND PERIMETER PEST CONTROL**

**LAMBDA STAR 9 7% CS** is for use as a general surface (nonfood/nonfeed areas) crack and crevice or spot treatment in on and around buildings and structures and their immediate surroundings and on modes of transport Areas of use include but are not limited to industrial buildings houses apartment buildings laboratories buses greenhouses (non commercial) stores warehouses vessels railcars trucks trailers aircraft (cargo and other non-cabin areas only) schools nursing homes hospitals restaurants hotels livestock/poultry housing pet kennels food granaries food grain mills and food

manufacturing processing and servicing establishments

Nonfood/nonfeed areas of food/feed handling establishments include garbage rooms lavatories floor drains (to sewers) entries and vestibules offices locker rooms machine rooms boiler rooms garages mop closets and storage (after canning or bottling)

For indoor applications **LAMBDASTAR 9 7% CS** can be reapplied at 21 day intervals if necessary

**Mixing Instructions**

Dilute **LAMBDASTAR 9 7% CS** with water for application using hand-held or power-operated application equipment as a coarse spray for crack and crevice or spot and general surface (non-food/nonfeed areas only) treatments Application equipment that delivers low volume treatments such as the Micro Injector® or Actisol® applicator may also be used to make crack and crevice or spot and general surface treatments Fill applicator tank with the desired volume of water and add **LAMBDASTAR 9 7% CS** Close and shake before use in order to ensure proper mixing Shake or reagitator applicator tank before use if application is interrupted Mix only amount of treatment volume as required **LAMBDASTAR 9 7% CS** may be applied by using a paintbrush or other porous applicator attached to a handle as a general surface treatment

**Tank Mixing**

**LAMBDASTAR 9 7% CS** may be tank mixed with other currently registered pesticides unless expressly prohibited by the product label A small volume mixing test with the other products is recommended to ensure compatibility If other chemicals are added to the applicator tank **LAMBDASTAR 9 7% CS** should be added last If mixed with EC formulations use within 24 hours Fill tank to desired volume and continue to agitate while making applications

**LAMBDASTAR 9 7% CS** may be tank mixed with an Insect Growth Regulator (IGR) Observe all restrictions and precautions which appear on the labels of these products

**Foam Applications**

**LAMBDASTAR 9 7% CS** may be converted to a foam and the foam used to treat structural voids to control or prevent pests including ants bees termites (above ground only) wasps or other arthropods harboring in walls under slabs or in other void areas

**RATES FOR PREMISE PESTS (HAND APPLICATION EQUIPMENT)**

Pests	Dilution Rate (Concentration of AI)	SPECIFIC USE DIRECTIONS
Ants <b>Bedbugs (adults and nymphs)</b> Bees Boxelder Bugs Carpenter Bees Carpet Beetles Centipedes Cigarette Beetles Clover Mites Cockroaches <sup>1</sup> Confused Flour Beetles Crickets Earwigs Firebrats Fleas <sup>2</sup> Flies Lesser Grain Borers Millipedes	0.2 fl oz (6 mL) to 0.4 fl oz (12 mL) per gallon of water  (0.015 - 0.03% AI)	<p><b>Ants</b> Apply to any trails around doors and windows and other places where ants may be found For best results locate and treat nests Where ants are trailing inside apply as a residual surface treatment to active areas such as baseboards corners around pipes in and behind cabinets behind and under refrigerators sinks furnaces and stoves cracks and crevices When combining baits and residual surface insecticides apply surface insecticides in cracks and crevices along baseboards and infested surfaces and outside barrier treatments Use baits in other areas that are untreated by residual insecticides also see <b>Outdoor Surfaces Use</b></p> <p><b>Bedbugs (Adults and Instars)</b> Clean floors and surfaces by vacuuming 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 Lambdastar 9 7% CS to furniture surfaces or mattresses Only treat those surfaces with EPA registered insecticides or exempt products that allow such</p>

<p>Mosquitoes  Red Flour Beetles  Rice Weevils  Saw toothed Grain Beetles  Silverfish  Sowbugs  Spiders  † Stink bug spp (including Brown Marmorated and Kudzu Bug)  Termites* (above ground only)  Ticks  Wasps</p>		<p>direct applications Mattresses and boxsprings should be encased in covers that effectively cut off any possible surviving bedbugs Infested bedding drapes and clothing can be treated with registered or exempt products or placed in plastic bags or laundered and dried at high temperatures Applicators may use monitoring devices such as NightWatch Bedbug Monitor to determine success of eradication efforts</p> <p><b>Cockroaches Crickets Earwigs Firebrats Silverfish and Spiders</b> Apply as a coarse low pressure spray to areas where these pests hide such as baseboards corners storage areas closets around water pipes doors and windows attics and eaves cabinets behind and under refrigerators sinks furnaces and stoves the underside of shelves drawers and similar areas Pay particular attention to cracks and crevices also see <b>Outdoor Surfaces Use</b></p>
<p>Cockroaches<sup>1</sup>  Crickets<sup>5</sup>  Flies<sup>5</sup>  Litter Beetles<sup>3</sup> (adults/ immature stages such as Darkling Hide and Carrion)  Mosquitoes<sup>4</sup>  Pillbugs  Scorpions  Spiders<sup>6</sup>  Spider Mites (Two spotted Spruce)  Ticks<sup>6</sup></p>	<p>0.8 fl oz  (24 mL) per  gallon of  water    (0.06% AI)</p>	<p><b>Bees Flies Mosquitoes and Wasps</b> 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 and storage sheds also see <b>Outdoor Surfaces Use</b> Use caution when treating nests of stinging insects since LambdaStar 9.7% CS does not provide instant knockdown Protective equipment may be required for the applicator For best results treat bee wasp and hornet nests late in the day when most insects will be present Allow 2-3 days for colony to die and retreat if necessary</p> <p><b>Carpenter Bees</b> Apply coarse spray to thoroughly wet wood surfaces where bees have been previously active or to provide protection against further damage Apply early in the spring to prevent bees from invading wood When bees have infested wood surface applications can help control embedded larvae and bees that emerge from the wood</p> <p><b>Pantry Pests</b> (i.e. Carpet beetle Cigarette beetle Confused flour beetle Lesser grain borer Red flour beetle Rice weevil and Saw toothed grain beetle) Apply to cupboards shelving and storage areas Remove all utensils uncovered foodstuffs (or any having original package opened) and shelf paper before making application Allow treated surfaces to dry and cover shelves with clean paper before replacing any utensils foodstuff or other items Any foodstuff accidentally contaminated with treatment solution should be destroyed</p> <p><b>Boxelder Bugs Centipedes Millipedes Pillbugs and Sowbugs</b> Apply around doors and windows and other places where these pests may be found or where they may enter premises Treat baseboards storage areas and other locations Apply barrier treatments to prevent infestation as described below also see <b>Outdoor Surfaces Use</b></p> <p><b>Fleas and Ticks</b> To control nuisance fleas and ticks (e.g. dog ticks) apply to kennels yards runs and other areas where pets may frequent For best coverage to control ticks apply using a coarse fan spray to vegetation brush branches rock walls and other areas near habitation where ticks may harbor or frequent Treat entire area rather than making spot treatments and retreat as necessary to maintain control Do not apply to pasture or cropland and do not allow animals and people access to treated areas until the deposit has dried Applications can begin in the spring and can continue until frost to control both larvae and adult ticks also see <b>Outdoor Surfaces Use</b></p>

✓ †Not for use in California

	<p><b>Cluster Flies</b> Apply in late summer or early fall before flies are observed alighting on surfaces. Apply thoroughly on siding, under eaves, and around windows and doors, paying particular attention to south-facing surfaces, but do not allow runoff to occur. Heavy precipitation prior to frost may require retreatments to maintain protection. In winter and spring when flies become active and are emerging, interior crack and crevice and void treatments can help reduce the infestation, along with ULV or general surface application in infested attics or unoccupied lots.</p> <p><b>Litter Beetles (Darkling Hide and Carrion Beetles) and Flies In Animal Housing (Such As Poultry Houses)</b> To control adult litter beetles, apply LAMBDA STAR 9.7% CS to walls and floors at cleanout before reintroduction of animals. This will suppress beetles that escaped earlier treatment and will help delay onset of future infestations. Pay attention to areas where beetles frequently occur, such as walls, supports, cages, stalls, and around feeders. To help control flies, apply a directed application to horizontal surfaces and overhead areas and allow to dry before reintroduction of animals. Also see <b>Livestock/Poultry Housing Structures and Pet Kennels</b>.</p>
<p><sup>1</sup>For cockroaches, the recommended rate for maintenance treatments is 0.015% and for clean out treatments is 0.03%. In addition, more frequent applications may be necessary on concrete surfaces. For control of severe infestations, use 0.06% rate.</p> <p><sup>2</sup>For outdoor use only and use 0.03% rate.</p> <p><sup>3</sup>For control of LIGHT beetle infestations, use 0.03% rate.</p> <p><sup>4</sup>For residual control, use 0.06% rate.</p> <p><sup>5</sup>In all states except California, rates for flies may be increased to 0.06% when environmental conditions are severe and/or populations are high.</p> <p><sup>6</sup>For clean out/severe infestations, use 0.06% rate.</p>	

**Application Within Food Handling Establishments**

For 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.

Use as a crack and crevice or spot treatment in and around both food and nonfood areas. Apply in small amounts directly into cracks and crevices, using equipment capable of delivering 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. Food contact surfaces and equipment should be cleaned with an effective cleaning compound and rinsed with potable water before using.

Limit individual spot treatments to an area no larger than 20% of the treated surface. Individual spot treatments should not exceed two sq. ft. Take extreme care that the product is not introduced into the air. Avoid contamination of food and food processing surfaces.

**Application Within Food Serving Areas**

For facilities where foods are served, such as dining rooms. Apply as a crack and crevice or spot treatment to selective surfaces such as baseboards, under elements of construction, and into cracks and crevices. Avoid treating surfaces likely to be contacted by food. (Do not apply when facility is in operation or foods are exposed.) Food must be covered or removed in area being treated. Do not apply directly to food or allow applications to contaminate food.



**NOTE** Application of 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 Use of application equipment such as the Micro Injector or Actisol applicator in food areas should be limited to crack and crevice treatment only

**Livestock/Poultry Housing Structures and Pet Kennels**

Apply as a general surface (including directed sprays) and/or crack and crevice treatment Control is enhanced when interior and exterior perimeter applications are made in and around the livestock poultry and pet housing structures Normal cleaning practices of the structure also must be followed along with applications of **LAMBDA STAR 9 7% CS** to effectively control the crawling and flying insect pests listed in the table

For unoccupied areas of livestock barns or housing structures apply to floors vertical and overhead surfaces where crawling or flying insect pests are or may be present Feeders waterers and feed carts should be covered before application to prevent contamination Do not apply to milk rooms or feed rooms Pay attention to animal areas including stanchions pipes windows and doors and areas where insect pests hide or congregate Exterior applications to south facing walls and foundation perimeters can help prevent interior infestations of flying and crawling insect pests

For poultry houses apply to floor area (birds grown on litter) or to walls posts and cage framing (birds grown in cages) Application should also be made into cracks and crevices around insulation Reapply after each growout or sanitization procedure Indoor control can be enhanced by making perimeter treatments around the outside of building foundations to prevent immigrating adult beetles Apply in a uniform band 1 - 3 ft up and 2 - 6 ft out from foundation Maintaining a year-round treatment program will prevent background populations from reaching problem levels

**RESTRICTIONS**

- **DO NOT** make applications of **LAMBDA STAR 9 7% CS** in areas where animals are present in the facility Allow treated surfaces to completely dry before restocking the facility
- **DO NOT** make applications to any animal feedstuffs water or watering equipment
- **DO NOT** contaminate any animal food feed or water in and around livestock poultry or pet housing when making applications
- **DO NOT** apply directly to sewers or drains or to any area like a gutter where drainage to sewers storm drains water bodies or aquatic habitat can occur except as directed by this label
- **DO NOT** water the treated area to the point of run off
- **DO NOT** make applications during rain

**Outdoor Surfaces Use**

For control of ants centipedes cockroaches crickets fleas flies millipedes mosquitoes scorpions sowbugs pillbugs spiders termites\* (above ground only) ticks wasps and other similar perimeter arthropod pests

All outdoor applications must be limited to spot or crack-and-crevice treatments only except for the following permitted uses

- (1) Treatment to soil or vegetation around structures
- (2) Applications to lawn turf and other vegetation
- (3) Applications to building foundations up to a maximum height of 3 feet

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

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 alteration to control subterranean termites or fumigation for extensive infestation of drywood termites or other wood infesting insects The use of **LambdaStar 9 7% CS** on termites is to kill workers or winged reproductive forms which may be present in treated channels at the time of treatment These applications are not a substitute for mechanical alteration soil treatment or foundation treatment but are considered supplemental This product is not recommended as sole protection against termites For active termite infestations get a professional inspection

**Premise Perimeter Barrier Treatments**

Apply a continual band of insecticide around building foundations and around windows doors service line entrances eaves vents and other areas to reduce the potential for entry by crawling pests Before 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 roof 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

Amount of concentrate is dependent upon pest species (see pest table and comments) infestation levels and service interval desired

**Rate Table For Perimeter Barrier Applications**

Application Rate Fl oz (mL) of LAMBDASTAR 9 7% CS	Gals of Water <sup>1</sup>	Area of Coverage (sq ft)
0 2 fl oz (6mL)	1 5 gals	800-1600 sq ft
0 4 fl oz (12 mL)	1 5 gals	800-1600 sq ft
0 8 fl oz (24 mL)	1 5 gals	800-1600 sq ft

<sup>1</sup>Application volume may be greater than 5 gals /800-1600 sq ft if required under heavy vegetative or landscaping materials in order to obtain desired coverage

**Examples Of Dilutions For Perimeter Barrier Applications**

Application Volume Gals of Solution per 1,000 sq ft	Application Rate Fl oz (mL) of LAMBDASTAR 9 7% CS per 1,000 sq ft	Fl oz (mL) of LAMBDASTAR 9 7% CS to Dilute in Water According to Spray Tank Volumes		
		5 gals	10 gals	50 gals
1 gal per 1 000 sq ft	0 2 fl oz (6mL) 0 4 fl oz (12 mL) 0 8 fl oz (24 mL)	1 fl oz (30 mL) 2 fl oz (60 mL) 4 fl oz (120 mL)	2 fl oz (60 mL) 4 fl oz (120 mL) 8 fl oz (240 mL)	10 fl oz (300 mL) 20 fl oz (600 mL) 40 fl oz (1200 mL)

11/18

2 gal per 1 000 sq ft	0.2 fl oz (6mL) 0.4 fl oz (12 mL) 0.8 fl oz (24 mL)	0.5 fl oz (15 mL) 1 fl oz (30 mL) 2 fl oz (60 mL)	1 fl oz (30 mL) 2 fl oz (60 mL) 4 fl oz (120 mL)	5 fl oz (150 mL) 10 fl oz (300 mL) 20 fl oz (600 mL)
5 gal per 1 000 sq ft	0.2 fl oz (6mL) 0.4 fl oz (12 mL) 0.8 fl oz (24 mL)	0.2 fl oz (6 mL) 0.4 fl oz (12 mL) 0.8 fl oz (24 mL)	0.4 fl oz (12 mL) 0.8 fl oz (24 mL) 1.6 fl oz (48 mL)	2 fl oz (60 mL) 4 fl oz (120 mL) 8 fl oz (240 mL)

**Example Calculation** To apply the mid-rate of LambdaStar 9 7% CS at a volume of 5 gal / 1 000 sq ft mix 4 oz of concentrate in 50 gallons of water

The percent active ingredient in the finished LambdaStar 9 7% CS dilution can be calculated with the following formula

$$\frac{(\text{mL needed to add}) \times (9.7\% \text{ active in concentrate})}{(\text{gal finished dilution}) \times (3.785 \text{ ml/gal})} = \% \text{ active in dilution}$$

(Example 4 oz in 50 gals is 20 mL times 9.7% equals 1.94 and 50 gal times 3.785 is 189.250  
Dividing 1.94 by 189.250 equals 0.0102% active in the tank dilution)

**NOTE** Do not use water base sprays of **LAMBDASTAR 9 7% CS** 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 **LAMBDASTAR 9 7% CS** **LAMBDASTAR 9 7% CS** 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

**LET TREATED SURFACES DRY BEFORE ALLOWING HUMANS AND PETS TO CONTACT SURFACES**

**RESTRICTIONS**

- **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

**LAWNS/TURFGRASS AND ORNAMENTALS**

**LAMBDASTAR 9 7% CS** 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 (Including trees shrubs flowers evergreens foliage plants and groundcovers) Application rates for turf and ornamentals 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 **LAMBDASTAR 9 7% CS** 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

**IMPORTANT** Time application to flowering plants during periods when pollinating insects are not present such as early morning or late evening

**RESTRICTIONS**

- **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
- 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 ft of coastal marshes or streams that drain into coastal marshes

**Mixing Instructions**

**LAMBDASTAR 9 7% CS** is to be mixed with water and may be used in all types of standard application equipment Fill applicator tank with the desired volume of water and add **LAMBDASTAR 9 7% CS** It is suggested that the water be 5 - 7 pH Adjust water pH with a buffering agent if necessary Slowly add **LAMBDASTAR 9 7% CS** to applicator tank water with maximum agitation Close and shake or reagitae applicator tank before use if application is interrupted Make up only amount of treatment volume as required

**Tank Mixing**

**LAMBDASTAR 9 7% CS** may be tank mixed with other currently registered pesticides unless expressly prohibited by the product label A small volume mixing test with the other products is recommended to ensure compatibility If other chemicals are added to the applicator tank **LAMBDASTAR 9 7% CS** 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 which appear on the labels of these products

**ORNAMENTAL INSECT PEST CONTROL**

**LAMBDASTAR 9 7% CS** is for use to control the pests listed in the table below in such areas as residential landscaped areas and landscaped areas around institutional public commercial and industrial buildings parks recreational areas and athletic fields (including trees shrubs flowers evergreens foliage plants and groundcovers)

**NOTE** While phytotoxicity testing has been carried out on a wide range of ornamental plants under various environmental conditions and no phytotoxicity has been observed certain cultivars may be sensitive to the final spray solution

It is advised to prespray a selection of ornamental plants and observe them for 7-10 days prior to treating large areas if local use experience is unavailable This is especially advisable if LambdaStar 9 7% CS is being mixed with another product or ingredient besides water [See **Tank Mixing** instructions]

**RESTRICTIONS**

- **DO NOT** apply more than 0.36 lbs of the a.i. (52.4 fl. ozs. of concentrate) per acre per year

**TANK DILUTION RATES FOR ORNAMENTAL PESTS**

Pest	Amount Of <b>LAMBDA STAR 9 7% CS</b>	Application Instructions
Ants (Including Imported fire Ants) Armyworms Azalea caterpillars Aphids Bagworms 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 (adults) June beetles (adults) Lace bugs Leaf-feeding caterpillars Leafhoppers Leafminers (adults) 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) Spiders Spittlebugs Striped beetles Striped oakworms Stink bug spp (including Brown Marmorated and Kudzu Bug) Thrips Tip moths Tussock moth larvae Wasps	1 5 5 fl oz per 100 gals  or  44 - 148 mL per 100 gals	<p>Application to ornamentals should be started prior to the establishment of high insect pest populations. Make reapplications as necessary to keep pest populations under control using higher rates as pest pressure increases.</p> <p>Apply at 7 day intervals if retreatment is necessary. More frequent treatments should be limited to spot treatments. Be aware as plants grow new foliage will be unprotected until treated.</p> <p>Good spray coverage is necessary to provide the most effective level of control. Addition of a spreader-sticker at recommended rates may enhance the control of insects on certain species of ornamentals having waxy hard to wet foliage.</p> <p>For spot treatments use 0.5 fl oz <b>LAMBDA STAR 9 7% CS</b> per 1 - 2.5 gals of water.</p> <p>Consult your state university or local Cooperative Extension Service office for specific pest control application timing in your area.</p> <p><b>Scale</b> Thoroughly cover the plant with <b>LAMBDA STAR 9 7% CS</b> spray including trunks, stems, twigs, and foliage for control of scale insects (crawler stage).</p> <p><b>Bagworm</b> Apply <b>LAMBDA STAR 9 7% CS</b> when bagworm larvae begin to hatch. Spray directly on the larvae. Application is the most effective when the larvae are young.</p>
Broadmites Brown softscales California redscales (crawlers)	3 - 5 fl oz per 100 gals	

14/18

Clover mites Mealybugs Pineneedlescales (crawlers) Spider mites Whiteflies	or  88 -148 mL per 100 gals	
----------------------------------------------------------------------------------------	--------------------------------------	--

**LAMBDASTAR 9 7% CS Mixing Chart for Ornamental Insect Pest Control**

(LAMBDASTAR 9 7% CS to add per spray tank)

Rate of LAMBDASTAR 9 7% CS	25 Gals	50 Gals	100 Gals	200 Gals	300 Gals
1.5 oz <sup>1</sup>	0.4 oz	0.8 oz	1.5 oz	3.0 oz	4.5 oz
3 oz <sup>2</sup>	0.8 oz	1.5 oz	3.0 oz	6.0 oz	9.0 oz
5 oz <sup>3</sup>	1.3 oz	2.5 oz	5.0 oz	10.0 oz	15.0 oz

<sup>1</sup> Equivalent to 3.5 mL per 1 000 sq ft (5 oz per acre) when applied at 8 gal per 1 000 sq ft  
<sup>2</sup> Equivalent to 7 mL per 1 000 sq ft (10 oz per acre) when applied at 8 gal per 1 000 sq ft  
<sup>3</sup> Equivalent to 9.5 mL per 1 000 sq ft (14 oz per acre) when applied at 8 gal per 1 000 sq ft

**LAWN/TURFGRASS INSECT PEST CONTROL**

LAMBDASTAR 9 7% CS is for use to control the pests listed in the table below around such areas as residential institutional public commercial and industrial buildings parks recreational areas and athletic fields

**RESTRICTIONS**

- KEEP CHILDREN AND PETS OFF TREATED AREAS UNTIL SPRAY HAS DRIED FOLLOWING APPLICATION
- DO NOT apply when turfgrass is waterlogged or when soils are saturated with water (i.e. will not accept irrigation)
- DO NOT apply more than 0.36 lbs of a.i. (52.4 fl. oz. of concentrate) per acre per year

**POWER SPRAY RATES FOR LAWN AND TURFGRASS PESTS**

Pest	Amount Of LAMBDASTAR 9 7% CS *	Application 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	3.4 - 7 mL per 1 000 sq ft  or  5 -10 fl. oz per acre	Application to turf should be started prior to the establishment of high insect pest populations and significant turf damage. Make reapplications as necessary to keep pest populations under control using higher rates as pest pressure increases.  Apply at 7-day intervals if retreatment is necessary. More frequent treatments should be limited to spot treatments.  For <b>spot treatments</b> use 0.5 fl. oz of <b>LAMBDASTAR 9 7% CS</b> per 1 - 2.5 gals of water.  <b>Surface Insect Control (armyworm, cutworms, fleas, etc.)</b> For best results apply <b>LAMBDASTAR 9 7% CS</b> at recommended rates in 2 - 5 gals of

<p>Stink bug spp (including Brown Marmorated and Kudzu Bug)</p> <p>Ticks (including species which transmit Lyme disease)</p>		<p>water per 1 000 sq ft The use of a spreader-sticker may be useful if high rainfall amounts are forecast otherwise the addition of adjuvants is not necessary under normal conditions for surface insect control in turf Delay watering or mowing for 12 24 hours for optimum control of surface-feeding insect pests</p>
<p>Bluegrass billbugs (adult)</p> <p>Black turfgrass ataenius (adult)</p> <p>Chiggers</p> <p>Fleas (adult)</p> <p>Grubs (suppression)</p> <p>Hyperodes weevils (adult)</p> <p>Mole crickets (nymphs and young adults)</p>	<p>7 mL per 1 000 sq ft</p> <p>or</p> <p>10 fl oz per acre</p>	<p><b>Thatch Inhabiting Insect Control (chinch bugs, billbugs, etc )</b> For best results apply <b>LAMBDA STAR 9 7% CS</b> at recommended rates in 2 10 gals of water per 1 000 sq ft The use of a nonionic wetting agent penetrant or similar adjuvant is recommended at label rates Lightly irrigate after application with up to 1/2 inch of water to move the <b>LAMBDA STAR 9 7% CS</b> into the thatch layer If irrigation is not available then use high water application rates for optimum results</p>
<p>Mole Crickets<sup>1</sup> (mature adults)</p> <p>Chinch Bugs<sup>1</sup></p>	<p>14 mL per 1 000 sq ft</p> <p>or</p> <p>20 fl oz per acre</p>	<p><b>Subsurface Insect Control (mole crickets, grubs, etc )</b> For best results apply <b>LAMBDA STAR 9 7% CS</b> at recommended rates in 4 10 gals of water per 1 000 sq ft The use of a nonionic wetting agent penetrant or similar adjuvant is strongly recommended following label rates Use the highest water application rates possible with your sprayer Apply <b>LAMBDA STAR 9 7% CS</b> to turf wet with dew rain or irrigation Water-in immediately after application with 1/4 1/2 inch of water for optimum results</p> <p><b>Fire Ant Control</b> Treat individual mounds with a drench application using a watering can Use 0 5 fl oz of <b>LAMBDA STAR 9 7% CS</b> per 2 5 gals of water Thoroughly soak each mound and a 3 ft diameter circle around each mound Gently apply the mixture to avoid disturbing the mound Disturbing the mound may cause the ants to migrate and reduce the effectiveness of the treatment For best results apply in early morning or late evening hours Applications can be made on a monthly basis to maintain protection of treated areas</p> <p><b>Mosquito Control</b> Apply as a general spray around landscape plantings turf and building foundations to control mosquitoes For best results apply <b>LAMBDA STAR 9 7% CS</b> at recommended rates in 2 - 5 gals of water per 1 000 sq ft Higher volumes applied result in better coverage and will improve control</p>
<p><sup>1</sup> Not for use on mature adult mole crickets and chinch bugs in New York state</p>		
<p>* Example To treat the listed turf pests at the 7 mL per 1 000 sq ft rate determine the gallons of dilution per 1 000 sq ft needed to adequately cover the turf At a 5 gallon per 1 000 sq ft dilution take the 7 mL and divide it by the 5 (gallon) to get 1 4 mL to be added per gallon For a 50 gallon tank therefore this would be 1 4 mL X 50 = 70 mL (or 2 5 oz ) in 50 gallons of water</p>		

16/18

### LAMBDASTAR 9 7% CS Mixing Chart for Turf Insect Pest Control

(LAMBDASTAR 9 7% CS to add per 100 gal spray tank)

Rate of LAMBDASTAR 9 7% CS	Application Rate Per 1,000 Square Feet of Turf				
	2 gal	4 gal	6 gal	8 gal	10 gal
5 oz per acre	5.7 oz	2.9 oz	1.9 oz	1.4 oz	1.2 oz
10 oz per acre	11.5 oz	5.7 oz	3.8 oz	2.9 oz	2.3 oz
20 oz per acre	23.0 oz	11.5 oz	7.7 oz	5.7 oz	4.6 oz
Conversion Rate	1 fluid ounce (fl oz) equals 29 milliliters (mL)				



**STORAGE AND DISPOSAL**

**Prohibitions** Do not contaminate water food or feed by storage or disposal Open dumping is prohibited Do not reuse empty container

**Storage** Keep container closed when not in use Do not store near food or feed Shake well before use Protect from freezing In case of spill or leak on floor or paved surfaces soak up with sand earth or synthetic absorbent Remove to chemical waste storage area until proper disposal can be made

**Pesticide Disposal** Pesticide wastes are toxic 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 of the nearest EPA Regional Office for guidance

**Container Disposal** For Containers equal to or less than 5 Gallons 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 1/4 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 if available or puncture and dispose of in a sanitary landfill or by incineration or by other procedures allowed by state and local authorities For Containers greater than 5 Gallons 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 Fill the container 1/4 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 Turn the container over on to its other 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 if available or puncture and dispose of in a sanitary landfill or by incineration Do not burn unless allowed by state and local ordinances CONTAINER IS NOT SAFE FOR FOOD FEED OR DRINKING WATER

**CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY**

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

The Directions for Use of this product must be followed carefully It is impossible to eliminate all risks inherently associated with the use of this product Crop injury ineffectiveness or other unintended consequences may result because of such factors as manner of use or application weather or crop conditions presence of other materials or other influencing factors in the use of the product which are beyond the control of LG Life Science LTD or Seller To the extent consistent with applicable law all such risks shall be assumed by Buyer and User and Buyer and User agree to hold LG Life Science LTD and Seller harmless for any claims relating to such factors

LG Life Science LTD warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use subject to the inherent risks referred to above when used in accordance with directions under normal use conditions This warranty does not extend to the use of the product contrary to label instructions or under abnormal conditions or under conditions not reasonably foreseeable to or beyond the control of Seller or LG Life Science LTD and Buyer and User assume the risk of any such use To the extent consistent with applicable law LG Life Science LTD MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE To the extent consistent with applicable law LG Life Science LTD or seller shall not be liable for any incidental consequential or special damages resulting from the use or handling of this

18/18

product TO THE EXTENT CONSISTENT WITH APPLICABLE LAW THE EXCLUSIVE REMEDY OF THE USER OR BUYER AND THE EXCLUSIVE LIABILITY OF LG Life Science LTD AND SELLER FOR ANY AND ALL CLAIMS LOSSES INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY CONTRACT NEGLIGENCE TORT STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR AT THE ELECTION OF LG Life Science LTD OR SELLER THE REPLACEMENT OF THE PRODUCT

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

LG Life Science LTD  
910 Sylvan Avenue  
Englewood Cliffs NJ 07632

EPA Reg No 71532-23  
EPA Est No XXXXX XX-XXX

Actisol® is a registered trademark of Roussel-Uclaf  
Micro-Injector® is a registered trademark of Whitmire Micro-gen Research Laboratories Inc