

# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON D C 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

Ross Gilbert Envincio LLC c/o Pyxis Regulatory Consulting 4110 136<sup>th</sup> St NW Gig Harbor WA 98332

JUL 19 2012

Subject

Equil Lambda 9 7 CS Insecticide EPA Reg No 87276 1

Application Dated April 19 2012

Decision 464468

Dear Mr Ross

The labeling and CSF basic and alternate CSF #1 (both dated April 19 2012) referred to above submitted in connection with registration under the Federal insecticide Fungicide and Rodenticide Act as amended is acceptable subject to the comments below

Two (2) copies of the finished labeling must be submitted prior to releasing the product for shipment A stamped copy of the label is enclosed for your records. If you have any questions you may contact Samantha Hulkower at (703) 603 0683 or Hulkower Samantha@epa gov

Sincerely CubC

Mark Suarez

Product Manager (13)

Insecticide Branch

Registration Division (7505P)

Enclosure Copy of Label Stamped Accepted

# Equil Lambda 9 7 CS Insecticide JUL 19 2012

Under the Federal Insectoride, Fungicide, and Rodenticide Ad as amended, for the pesticide registered under 32 24

With EnduraCap™ Technology [Optional Marketing Language]

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

**GROUP** INSECTICIDE Contains lambda cyhalothrin the active ingredient used in Demand®

### **ACTIVE INGREDIENT**

Lambda cyhalothrin<sup>1</sup>

 $[1 \alpha(S) 3 \alpha(Z)]$  (±) cyano (3 phenoxyphenyl)methyl 3 (2 chloro 3 3 3 trifluoro 1 propenyl)

2 2 dimethylcyclopropanecarboxylate

9 7%

90 3%

OTHER INGREDIENTS TOTAL

100 0%

<sup>1</sup>Synthetic pyrethroid

### **KEEP OUT OF REACH OF CHILDREN** CAUTION

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

	FIRST AID
lf on skin or clothing	<ul> <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>
If in eyes	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 continuing rinsing eye  Call a poison control center or doctor for treatment advice
If swallowed	<ul> <li>Call a poison control center or doctor immediately for treatment advice</li> <li>Do not give any liquid to the person</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>
lf inhaled	Move person to fresh air     If person is not breathing call 911 or an ambulance then give artificial respiration preferably mouth to mouth if possible     Call a poison control center or doctor for further treatment advice

See inside label booklet for additional PRECAUTIONARY STATEMENTS

For Chemical Spill Leak Fire or Exposure Call CHEMTREC 1 800-424 9300 For Medical Emergencies Only Call 866 257 4118

EPA Reg No 87276 1

**EPA Est No** 

Equil Lambda 9 7 CS Insecticide is nct manufactured or distributed by Syngenta Crop Protection Inc seller of Demand®

Manufactured for

Envincio LLC 501 Cascade Point Lane Suite 103 Cary NC 27513

# Net Contents PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Harmful if absorbed through skin Avoid contact with skin eyes or clothing. Wash thoroughly with soap and water after handling and before eating drinking chewing gum or using tobacco or using the toilet. Remove and wash contaminated clothing before reuse. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

### **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. 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 CHEMCIAL 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.

This product is RESTRICTED for use in New York State

### PERIMETER PEST CONTROL

This product 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 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 this product can be reapplied at 21 day intervals if necessary

### Mixing Instructions

Dilute this product 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 this product. Close and shake before use in order to ensure proper mixing. Shake or reagitate applicator tank before use if application is interrupted. Mix only amount of treatment volume as required. This product may be applied by using a paintbrush or other porous applicator attached to a handle as a general surface treatment.

### **Tank Mixing**

This product 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 add this product last. If mixed with EC formulations use within 24 hours. Fill tank to desired volume and continue to agitate while making applications.

This product 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**

This product 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 PESTS (HAND APPLICATION EQUIPMENT)

Pests	Dilution Rate (Concentration of AI)	SPECIFIC USE DIRECTIONS
Ants	02floz	Ants Apply to any trails around doors and windows and other
Bedbugs (adult)	(6 mL)	places where ants may be found Locate and treat nests Where
Bees	to	ants are trailing inside apply as a residual surface treatment to
Boxelder Bugs	0 4 fl oz	active areas such as baseboards corners around pipes in and
Carpenter Bees	(12 mL) per	behind cabinets behind and under refrigerators sinks furnaces
Carpet Beetles	gallon of water	and stoves cracks and crevices. When combining baits and
Centipedes		residual surface insecticides apply surface insecticides in cracks
Cigarette Beetles	(0 015 0 03 %	and crevices along baseboards and infested surfaces and
Clover Mites	AI)	outside barrier treatments. Use baits in other areas that are
Cockroaches <sup>1</sup>		untreated by residual insecticides also see Outdoor Surfaces
Confused Flour Beetles		Use
Crickets		
Earwigs		Bedbugs Clean floors and surfaces by vacuuming Apply as a
Firebrats		coarse low pressure spray to harborage areas including crevices
Fleas <sup>2</sup>		baseboards loose plaster behind bed frames and headboards
Flies		beneath beds and furniture and to bedsprings and bed frames
Lesser Grain Borers		Do not apply to furniture surfaces or mattresses where people will
Millipedes		be laying or sitting. Infested bedding should not be treated but
Mosquitoes		should be removed placed in sealed plastic bags and taken for
Red Flour Beetles		laundering and drying at high temperatures
Rice Weevils		
Saw toothed Grain Beetles		Cockroaches Crickets Earwigs Firebrats Silverfish and
Silverfish		Spiders Apply as a coarse low pressure spray to areas where
Sowbugs		these pests hide such as baseboards corners storage areas
Spiders		closets around water pipes doors and windows attics and eaves

Pests	Dilution Rate (Concentration of AI)	SPECIFIC USE DIRECTIONS
Ticks Wasps Cockroaches Crickets Flies Litter Beetles Inmature stages such as Darkling Hide and Carrion) Mosquitoes Pillbugs Scorpions Spiders Spider Mites (Two-spotted Spruce) Ticks	0 8 fl oz (24 mL) per gallon of water (0 06 % Al)	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 Outdoor Surfaces Use  Bees Flies Mosquitoes and Wasps 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 Outdoor Surfaces Use Use caution when treating nests of stinging insects as this product does not provide instant knockdown Protective equipment for the applicator may be required Treat bee wasp and hornet nests late in the day when most insects will be present. Allow 2.3 days for the colony to die and repeat after 21 days if necessary  Carpenter Bees 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.  Pantry Pests (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.  Boxelder Bugs. Centipedes. Millipedes. Pillbugs. and.  Sowbugs. 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 treatments to prevent infestation as described below also see Outdoor Surfaces. Use.  Fleas and Ticks. To control nuisance fleas and ticks (e.g. dog ticks) app
		until frost to control both larvae and adult ticks also see Outdoor Surfaces Use  Cluster Flies 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

Pests	Dilution Rate (Concentration of Al)	SPECIFIC USE DIRECTIONS
		reduce the infestation along 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 apply this product 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 Livestock/Poultry Housing.
Termites (above ground only)	0 8 fl oz (24 mL) per gallon of water (0 06 % AI)	Structures and Pet Kennels  This product may be used on termites 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 to control subterranean termites soil treatment labeled termiticides or fumigation for extensive infestation of drywood termites or other wood infesting insects but are considered supplemental. This product is not recommended as sole protection against termites. For active termite infestations get a professional inspection.

For cockroaches the recommended rate for maintenance treatments is 0 015% and for clean out treatments is 0 03%. For control of severe infestations, use 0 06% rate.

### **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 may 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.

<sup>&</sup>lt;sup>2</sup>For outdoor use only and use 0 03% rate

<sup>&</sup>lt;sup>3</sup>For control of LIGHT beetle infestations use 0 03% rate

<sup>&</sup>lt;sup>4</sup>For residual control use 0 06% rate

<sup>&</sup>lt;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

<sup>&</sup>lt;sup>6</sup>For clean out/severe infestations use 0 06 % rate

**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. With the exception of cattle and calves that may be present only apply this product to livestock barns or housing structures when unoccupied by animals. Make interior and exterior perimeter applications in and around the livestock poultry, and pet housing structures. Normal cleaning of the structure must also be done along with applications of this product to effectively control the crawling and flying insect pests listed in the table.

This product may be used in 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 this product 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

### **Outdoor Surfaces Use**

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. Remove all exposed food and cooking utensils. Cover all food handling surfaces or wash thoroughly after treatment and before use. Do not use on edible crops

### **Perimeter 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 FI oz (mL) of Equil Lambda 9 7 CS Insecticide	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	FI oz (mL) of Equil Lambda 9 7 CS Insecticide to Dilute in Water According to Spray Tank Volumes				
Application Volume Gals of Solution per 1 000 sq ft	Rate FI oz (mL) of Equil Lambda 9 7 CS Insecticide per 1 000 sq ft	5 gals	10 gals	50 gals		
1 gal per 1 000 sq ft	0 2 fl oz (6 mL) 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)		
2 gal per 1 000 sq ft	0 2 fl oz (6 mL) 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 (6 mL) 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 this product at a volume of 5 gal /1000 sq. ft. mix 4 fl. oz of concentrate in 50 gallons of water. The percent active ingredient in the finished product dilution can be calculated with the following formula

mL needed to add times 9 7% active in concentrate divided by gal finished dilution times 3785 mL/gal = % active in dilution (Example 4 oz in 50 gal is 120 mL times 9 7 equals 1164 and 50 gal times 3785 is 189 250. Dividing 1164 by 189 250 equals 0 006% active in the tank dilution.)

NOTE Do not use water base sprays of this product in conduits motor housings junction boxes switch boxes or other electrical equipment because of possible shock hazard. Thoroughly wash out sprayer and screen with water and detergent before using this product. This product 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 institutions (including libraries sports facilities etc.) in the immediate area when occupants are present
- DO NOT apply to classrooms when in use
- 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

This product 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 more frequent.

Applicators must ensure that they are certified in the necessary pesticide certification categories to allow application of this product 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

This product 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 this product. It is suggested that the water be 5 7 pH. Adjust water pH with a buffering agent if necessary. Slowly add this product to applicator tank water with maximum agitation. Close and shake or reagitate applicator tank before use if application is interrupted. Make up only amount of treatment volume as required.

### **Tank Mixing**

This product 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 add this product laast. 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

### **INSECT CONTROL on ORNAMENTAL PLANTS**

Use this product 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

### **RESTRICTIONS**

DO NOT apply more than 0 36 lbs of the a : (52 4 fl oz of concentrate) per acre per year

### TANK DILUTION RATES FOR ORNAMENTAL PESTS

Pest	Amount Of Equil Lambda 9 7 CS Insecticide	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	15 5 fl oz per 100 gals or 44 148 mL per 100 gals	Application to ornamentals should be started prior to the establishment of high insect pest populations  Apply at 7 day intervals if retreatment is necessary. Limit more frequent treatment to spot treatments  Good spray coverage is necessary to provide the most effective level of control. Addition of a spreader sticker at specified rates may enhance the control of insects on certain species of ornamentals having waxy. hard to wet foliage  For spot treatments use 0.5 fl. oz. of this product per 1. 2.5 gals of water  Consult your state university or local. Cooperative Extension Service office for specific pest control application timing in your area.  Scale. Thoroughly cover the plant with spray including trunks stems twigs and foliage for control of scale insects (crawler stage).  Bagworm. Apply this product when bagworm larvae begin to hatch. Spray directly on the larvae. Application is the most effective when the larvae are young.
Pillbugs		

### Equil Lambda 9 7 CS Insecticide Mixing Chart for Ornamental Insect Pest Control

(Equil Lambda 9 7 CS Insecticide to add per spray tank)

Rate of Equil Lambda 9 7 CS Insecticide	25 Gals	50 Gals	100 Gals	200 Gals	300 Gals
1 5 oz 1	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

Equivalent to 3 5 mL per 1 000 sq ft (5 oz per acre) when applied at 8 gal per 1 000 sq ft Equivalent to 7 mL per 1 000 sq ft (10 oz per acre) when applied at 8 gal per 1 000 sq ft 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

Use this product 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

### **RATES FOR LAWN AND TURFGRASS PESTS**

Pest	Amount Of Equil Lambda 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 Ticks (including species which transmit Lyme disease) Bluegrass billbugs (adult) Black turfgrass ataenius (adult) Chiggers Fleas (adult) Grubs (suppression) Hyperodes weevils (adult) Mole crickets (nymphs and young adults)	Insecticide  3 4 7 mL per 1 000 sq ft  or  5 10 fl oz per acre  7 mL per 1 000 sq ft  or  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 spot treatments use 0.5 fl. oz. of this product per 1. 2.5 gals of water.  Surface Insect Control (armyworm cutworms fleas etc.) Apply this product at specified rates in 2. 5 gals of 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 to control surface feeding insect pests.  Thatch inhabiting insect Control (chinch bugs billbugs etc.) Apply this product at specified 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 product into the thatch layer. If irrigation is not available, then use high water application rates.  Subsurface Insect Control (mole crickets grubs etc.) Apply this product at specified 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 this product to turf wet with dew rain or irrigation. Water in immediately after application with ½. ½ inch of water.  Fire Ant Control. Treat individual mounds with a drench application using a watering can. Use 0.5 fl. oz. of this product per 2.5 gals of water. Thoroughly soak 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. Apply in earl

Pest	Amount Of Equil Lambda 9 7 CS Insecticide	Application Instructions
		make applications on a monthly basis to maintain protection of treated areas  Mosquito Control Apply as a general spray around landscape plantings turf and building foundations to control mosquitoes at specified rates in 2 5 gals of water per 1 000 sq ft

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  $\times$  50 = 70 mL (or 2 5 oz ) in 50 gallons of water

### Equil Lambda 9 7 CS Insecticide Mixing Chart for Turf Insect Pest Control

(Equil Lambda 9 7 CS Insecticide to add per 100 gal spray tank)

Rate of	Application Rate Per 1 000 Square Feet of Turf				
Equil Lambda 9 7 CS Insecticide	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. d	oz ) equals 29 mill	liters (mL)		

### STORAGE AND DISPOSAL

Do not contaminate water food or feed by storage or disposal

**STORAGE AND SPILL PROCEDURES** Store upright at room temperature. Keep container closed when not in use. Do not store near food or feed. Avoid exposure to extreme temperatures. In case of spillage or leakages, soak up with an absorbent material such as sand, sawdust, earth. Fuller's earth, etc. Dispose of with chemical waste.

**PESTICIDE DISPOSAL** Pesticide spray mixture or rinse water that cannot be used according to label instructions must be disposed of at or by an approved waste disposal facility

**CONTAINER DISPOSAL** Nonrefillable container Do not reuse or refill this container Triple rinse container (or equivalent) promptly after emptying

(Nonrefillable  $\leq$  5 gallons) 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  $\frac{1}{4}$  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. 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

(Nonrefillable > 5 gallons) Triple rinse as follows Empty the remaining contents into application equipment or a mix tank. Fill the container ½ 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 onto 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. 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

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