

GROUP 3 INSECTICIDE

# CYZMIC® CS



## Controlled Release Insecticide

### With CapVantage Technology

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.

#### ACTIVE INGREDIENT:

Lambda-cyhalothrin\*:

[1  $\alpha$ (S\*),3  $\alpha$ (Z)]- (±)-cyano-(3-phenoxyphenyl) methyl-3-(2-chloro-3,3,3-trifluoro-1-propenyl)-  
2,2-dimethylcyclopropanecarboxylate ..... 9.7%

OTHER INGREDIENTS: ..... 90.3%

TOTAL ..... 100.0%

\*Synthetic pyrethroid

### KEEP OUT OF REACH OF CHILDREN CAUTION/PRECAUCIÓN

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.

(If you do not understand the label, find someone to explain it to you in detail.)

See additional precautionary statements and directions for use in booklet.

EPA Reg. No. 53883-389

EPA Est. No. 53883-TX-002

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ADAMA

Manufactured by:

**Control  
Solutions Inc.**

5903 Genoa-Red Bluff, Pasadena, TX 77507

A member of Adama

Consumer and Professional Solutions

EPA 121319

## FIRST AID

**IF SWALLOWED:**

- Call a poison control center or doctor immediately for treatment advice.
- Have person sip a glass of water if able to swallow.
- Do not induce vomiting unless told to do so by the poison control center or doctor.
- Do not give anything by mouth to an unconscious person.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact SafetyCall® International for emergency medical treatment at (866) 897-8050.

## PRECAUTIONARY STATEMENTS

### Hazards to Humans and Domestic Animals

**CAUTION:** Harmful if swallowed. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet.

## ENVIRONMENTAL HAZARDS

This product is extremely toxic to fish. 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 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. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Apply this product only as specified on this label.

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 foraging the treatment area.

## PHYSICAL AND CHEMICAL HAZARDS

Do not use this product in or on electrical equipment due to the possibility of shock hazard.

## PRODUCT INFORMATION

**CYZMIC CS** is a unique formulation utilizing CapVantage™ Technology which is a proprietary blend of ingredients for use with the active ingredient Lambda-cyhalothrin.

## 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.

Do not allow children or pets to contact treated surfaces until spray has dried.

### **Application Restrictions for Residential Outdoor Surface and Space Sprays:**

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

1. Applications to soil or vegetation around structure;
2. Applications to lawns, turf, and other vegetation;
3. Applications to building foundations, up to a maximum height of 3 feet above grade;
4. Applications to underside of eaves, soffits, doors, or windows permanently protected from rainfall by a covering, overhang, awning or other structure;
5. Applications around potential pest entry points into buildings, when limited to a surface band not to exceed one inch in width;
6. Applications made through the use of a coarse, low pressure spray to only those portions of surfaces that are directly above bare soil, lawn, turf, mulch or other vegetation, as listed on this label, and not over an impervious surface, drainage or other condition that could result in runoff into storm drains, drainage ditches, gutters, or surface waters, in order to control occasional invaders or aggregating pests.

Do not water the treated area to the point of runoff.

Do not make applications during rain.

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.

### **PERIMETER PEST CONTROL**

**CYZMIC 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: industrial buildings, houses, patios, porches, closets, furniture, apartment buildings, mobile homes, laboratories, buses, greenhouses (non-commercial), stores, factories, warehouses, wineries, vessels, railcars, trucks, trailers, aircraft (cargo and other non-cabin areas only), schools, nursing homes, hospitals, mausoleums, restaurants, hotels, correctional facilities, 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, retreat at 21-day intervals to maintain control. More frequent treatments are limited to spot treatments.

### **Mixing Instructions**

Dilute **CYZMIC 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 (nonfood/ 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 **CYZMIC CS**. Close and shake

before use in order to ensure proper mixing. Shake or re-agitate applicator tank before use if application is interrupted. Mix only amount of treatment volume as required. **CYZMIC CS** may be applied by using a paintbrush or other porous applicator attached to a handle as a general surface treatment.

#### **Tank Mixing**

**CYZMIC 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, add **CYZMIC CS** last. If mixed with EC formulations, use within 24 hours. Fill tank to desired volume and continue to agitate while making applications.

It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

**CYZMIC CS** may be tank mixed with an Insect Growth Regulator (IGR). Follow all restrictions and precautions which appear on the labels of these products.

#### **Foam Applications**

**CYZMIC 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 listed 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 Bedbugs(adult) 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 Mosquitoes Red Flour Beetles Rice Weevils Saw-toothed Grain Beetles Silverfish Sow bugs Spiders Stink Bugs Ticks Wasps	0.2 f.l. oz. (6 mL) to 0.4 f.l. 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. 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:</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.</p> <p>Do not apply to furniture surfaces or mattresses where people will be laying or sitting. Infested bedding should not be treated, but should be removed, placed in sealed plastic bags, and taken for laundering and drying at high temperatures.</p>

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Pests	Dilution Rate (Concentration of AI)	SPECIFIC USE DIRECTIONS
Cockroaches <sup>1</sup> Crickets <sup>6</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) Stink Bugs <sup>6</sup> Ticks <sup>6</sup>	0.8 f.l. oz. (24 mL) per gallon of water  (0.06% AI)	<p><b>Cockroaches, Crickets, Earwigs, Firebrats, Silverfish, Spiders and Stink Bugs:</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><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 Outdoor Surfaces Use. Use caution when treating nests of stinging insects as <b>CYZMIC CS</b> does not provide instant knockdown. Protective equipment for the applicator against stinging pests 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.</p> <p>Yards or other frequented areas enclosed by landscaping can benefit from the creation of a mosquito barrier to reduce invading mosquitoes by the treatment of perimeter vegetation. Apply <b>CYZMIC CS</b> at specified rates in 2-5 gals. of water per 1,000 sq. ft. <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>

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Pests	Dilution Rate (Concentration of AI)	SPECIFIC USE DIRECTIONS
		<p><b>Pantry Pests (i.e., Carpet beetle, Cigarette beetle, Confused flour beetle, Lesser grain borer, Red flour beetle, Rice weevil, and Saw-toothed grain beetle):</b> 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. Destroy any foodstuff accidentally contaminated with treatment solution.</p> <p><b>Boxelder Bugs, Centipedes, Millipedes, Pillbugs, and Sow bugs:</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 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. 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.</p> <p>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>. <b>Do not apply directly to animals.</b></p>

(continued)

Pests	Dilution Rate (Concentration of AI)	SPECIFIC USE DIRECTIONS
		<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 lofts.</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 <b>CYZMIC CS</b> 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>
Termites (above ground only)	0.2 f l. oz. (6mL) to 0.4 f l. oz. (12 mL) per gallon of water  (0.015-0.03% AI)	<b>CYZMIC CS</b> 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.

(continued)



Pests	Dilution Rate (Concentration of AI)	SPECIFIC USE DIRECTIONS
<p><sup>1</sup> For cockroaches, the rate for maintenance treatments is 0.015% and for clean-out treatments is 0.03%. 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: 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. Clean food contact surfaces and equipment with an effective cleaning compound and rinse 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. Do not contaminate 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. Do not treat 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. Limit the use of application equipment such as the Micro-Injector® or Actisol® applicator in food areas 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. 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 **CYZMIC CS** to effectively control the crawling and flying insect pests listed in the table.

With the exception of cattle and calves that may be present, only apply **CYZMIC CS** to livestock barns or housing structures when unoccupied by animals. Apply to floors, vertical, and overhead surfaces where crawling or listed flying insect pests are or may be present. Cover feeders, waterers, and feed carts 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 listed 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 may 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 interior applications of **CYZMIC CS** in areas where animals, except cattle and calves, 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 animals.

#### **Outdoor Surfaces Use**

For control of ants, bees, centipedes, cockroaches, crickets, fleas, flies, millipedes, mosquitoes, scorpions, sowbugs, stick bugs, pillbugs, spiders, termites (above ground only), ticks, wasps, and other listed 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 alteration to control subterranean termites, or fumigation for extensive infestation of drywood termites or other wood-infesting insects. The purpose of such applications of **CYZMIC CS** 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 or foundation treatment, but are merely a supplement. This product is not recommended as sole protection against termites. For active termite infestations, get a professional inspection.

#### **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

Fl. oz. (mL) of <b>CYZMIC CS</b>	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. of <b>CYZMIC CS</b> per 1,000 sq. ft.	Fl. oz. (mL) of <b>CYZMIC CS</b> to Dilute in Water According to Spray Tank Volumes		
		5 gallons	10 gallons	50 gallons
1 gal. per 1,000 sq. ft.	0.2 fl. oz. (6mL)	1 fl. oz. (30 mL)	2 fl. oz. (60 mL)	10 fl. oz. (300 mL)
	0.4 fl. oz. (12 mL)	2 fl. oz. (60 mL)	4 fl. oz. (120 mL)	20 fl. oz. (600 mL)
	0.8 fl. oz. (24 mL)	4 fl. oz. (120 mL)	8 fl. oz. (240 mL)	40 fl. oz. (1200 mL)
2 gal. per 1,000 sq. ft.	0.2 fl. oz. (6mL)	0.5 fl. oz. (15 mL)	1 fl. oz. (30 mL)	5 fl. oz. (150 mL)
	0.4 fl. oz. (12 mL)	1 fl. oz. (30 mL)	2 fl. oz. (60 mL)	10 fl. oz. (300 mL)
	0.8 fl. oz. (24 mL)	2 fl. oz. (60 mL)	4 fl. oz. (120 mL)	20 fl. oz. (600 mL)
5 gal. per 1,000 sq. ft.	0.2 fl. oz. (6mL)	0.2 fl. oz. (6 mL)	0.4 fl. oz. (12 mL)	2 fl. oz. (60 mL)
	0.4 fl. oz. (12 mL)	0.4 fl. oz. (12 mL)	0.8 fl. oz. (24 mL)	4 fl. oz. (120 mL)
	0.8 fl. oz. (24 mL)	0.8 fl. oz. (24 mL)	1.6 fl. oz. (48 mL)	8 fl. oz. (240 mL)

**Example calculation:** to apply the mid-rate of **CYZMIC 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 **CYZMIC CS** dilution can be calculated with the following formula:

mL needed to add times 9.7% active in concentrate, divided by gal. finished dilution times 3,785 mL/gal. = % active in dilution. (Example: 4 oz. in 50 gal. is 120 mL times 9.7 equals 1,164, and 50 gal. times 3,785 is 189,250. Dividing 1,164 by 189,250 equals 0.006% active in the tank dilution.)

**NOTE:** Do not use water based sprays of **CYZMIC CS** 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 **CYZMIC CS**. **CYZMIC 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 ANIMALS 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**

**CYZMIC CS** may be used for applications to maintain indoor or outdoor areas where turf and ornamentals are grown: 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 **CYZMIC 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**

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

#### **Tank Mixing**

**CYZMIC 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, add **CYZMIC CS** last. Fill tank to desired volume and continue to agitate while making applications. If mixed with EC formulations, use within 24 hours.

It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

Follow all restrictions and precautions which appear on the labels of these products.

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

**CYZMIC 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 pre-spray 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.i. (52.4 fl. ozs. of concentrate) per acre per year.

**TANK DILUTION RATES FOR ORNAMENTAL PESTS**

<b>PEST</b>	<b>AMOUNT OF CYZMIC CS</b>	<b>APPLICATION INSTRUCTIONS</b>
Ants (Including Imported fire Ants)	1.5 - 5 fl. oz. per 100 gals.	Application to ornamentals should be started prior to the establishment of high insect pest populations.
Armyworms	or	
Azalea caterpillars		Apply at 7-day intervals if retreatment is necessary. Limit more frequent treatment to spot treatments.
Aphids		
Bagworms	44 - 148 mL per	Good spray coverage is necessary to provide the most effective level of control. Addition of a spreader-sticker at labeled rates may enhance the control of insects on certain species of ornamentals having waxy, hard to wet foliage.
Black vine weevils (adult)	100 gals.	
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		

*(continued)*

PEST	AMOUNT OF CYZMIC CS	APPLICATION INSTRUCTIONS
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 Stink bugs Striped beetles Striped oakworms Thrips Tip moths Tussock moth larvae Wasps	1.5 - 5 fl. oz. per 100 gals.  or  44 - 148 mL per 100 gals.	For spot treatments use 0.5 fl. oz. <b>CYZMIC CS</b> 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.  <b>Scale:</b> Thoroughly cover the plant with <b>CYZMIC CS</b> spray, including trunks, stems, twigs, and foliage for control of scale insects (crawler stage).  <b>Bagworm:</b> Apply <b>CYZMIC CS</b> when bagworm larvae begin to hatch. Spray directly on the larvae. Application is the most effective when the larvae are young.
Broadmites Brown softscales California redscales (crawlers) Clover mites Mealybugs Pineneedlescales (crawlers) Spider mites Whiteflies	3 - 5 fl. oz. per 100 gals.  or  88 - 148 mL per 100 gals.	

**CYZMIC CS Mixing Chart for Ornamental Insect Pest Control**  
(CYZMIC CS to add per spray tank)

Rate of CYZMIC CS	25 Gallons	50 Gallons	100 Gallons	200 Gallons	300 Gallons
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**

CYZMIC 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.



#### RATES FOR LAWN AND TURFGRASS PESTS

PEST	AMOUNT OF CYZMIC CS*	APPLICATION INSTRUCTIONS
Ants (Including Imported Fire Ants) Armyworms Centipedes Chinch Bugs <sup>1</sup> Crickets Cutworms Earwigs Fleas (adult) Grasshoppers Japanese beetles (adult) Millipedes Mites Mosquitoes (adult) Pillbugs Sod webworms Sow bugs Stink Bugs Ticks (including species which transmit Lyme disease)	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 spot treatments, use 0.5 fl. oz. of <b>CYZMIC CS</b> per 1 - 2.5 gals. of water.  <b>Surface Insect Control (armyworm, cutworms, fleas, etc.):</b> Apply <b>CYZMIC CS</b> at labeled 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.

*(continued)*

PEST	AMOUNT OF CYZMIC CS <sup>1</sup>	APPLICATION INSTRUCTIONS
Bluegrass billbugs (adult) Black turfgrass ataeenius (adult) Chiggers Fleas (adult) Grubs (suppression) Hyperodes weevils (adult) Mole crickets (nymphs and young adults)	7 ml per 1,000 sq. ft or 10 fl. oz. per acre	<p><b>Thatch Inhabiting Insect Control (chinch bugs, billbugs, etc.):</b> Apply <b>CYZMIC CS</b> at labeled 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>CYZMIC CS</b> into the thatch layer. If irrigation is not available, then use high water application rates.</p> <p><b>Subsurface Insect Control (mole crickets, grubs, etc.):</b> Apply <b>CYZMIC CS</b> at labeled 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>CYZMIC CS</b> to turf wet with dew, rain or irrigation. Water-in immediately after application with ¼ - ½ inch of water.</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>CYZMIC 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. Apply in early morning or late evening hours. You may make applications 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. Apply <b>CYZMIC CS</b> at labeled rates in 2 - 5 gals. of water per 1,000 sq. ft.</p>
<sup>1</sup> Not for use on chinch bugs in New York state.		
<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>		

**CYZMIC CS Mixing Chart for Turf Insect Pest Control**

(CYZMIC CS to add per 100 gal. spray tank)

Rate of CYZMIC CS	Application Rate Per 1,000 Square Feet of Turf				
	2 Gallons	4 Gallons	6 Gallons	8 Gallons	10 Gallons
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.

Conversion Rate: 1 fluid ounce (fl. oz.) equals 29 milliliters (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:**

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 ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Offer for recycling if available. If recycling is not available: then dispose of container in a sanitary landfill or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

### LIMITATION OF WARRANTY AND LIABILITY

Read the entire direction for use, conditions of warranties and limitations of liability before using this product. If terms are not acceptable, return the unopened product container at once. By using this product, user or buyer accepts the following **CONDITIONS, DISCLAIMER OF WARRANTIES, and LIMITATIONS OF LIABILITY.**

**CONDITIONS:** The directions for use of this product must be followed carefully. However, it is impossible to eliminate all risk associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of Control Solutions, Inc. All such risks shall be assumed by the user or buyer.

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# CYZMIC® CS



## Controlled Release Insecticide

### With CapVantage Technology

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.

#### ACTIVE INGREDIENT:

Lambda-cyhalothrin\*:

[1  $\alpha$ (S\*),3  $\alpha$ (Z)]-(±)-cyano-(3-phenoxyphenyl) methyl-3-(2-chloro-3,3,3-trifluoro-1-propenyl)-  
2,2-dimethylcyclopropanecarboxylate ..... 9.7%

OTHER INGREDIENTS: ..... 90.3%

TOTAL ..... 100.0%

\*Synthetic pyrethroid

### KEEP OUT OF REACH OF CHILDREN CAUTION/PRECAUCIÓN

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.

(If you do not understand the label, find someone to explain it to you in detail.)

See additional precautionary statements and directions for use in booklet.

EPA Reg. No. 53883-389

EPA Est. No. 53883-TX-002

**NET CONTENTS: 1 QUART**



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