

# Cyonara™ 9.7

INSECTICIDE

Contains Sigma Technology



For use by commercial applicators 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<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%

**Other Ingredients:** .....

90.3%

**Total:** .....

100.0%

<sup>1</sup>Synthetic pyrethroid

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

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

EPA Reg. No. 53883-145

EPA Est. No. 53883-TX-002

Manufactured by:  
**Control Solutions Inc.**  
5903 Genoa-Red Bluff  
Pasadena, TX 77507

**NET CONTENTS: 8 FL. OZ**

EPA102306/NOTIF 090911/REV B



**PRECAUTIONARY STATEMENTS**  
**Hazards to Humans and Domestic**  
**Animals**

**WARNING**

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

### **First Aid**

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 (866) 897-8050 for emergency medical treatment information.

<b>If swallowed:</b>	<ul style="list-style-type: none"><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>
<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 continue 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>

(continued)

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<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>
<b>FOR CHEMICAL EMERGENCY Spill, leak, fire, exposure, or accident call CHEMTREC 1-800-424-9300</b>	

### **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 Chemical Hazards**

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

### **General Information**

CYONARA 9.7 is a unique formulation utilizing Sigma 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. Do not apply to

institutions (including libraries, sports facilities, etc.) in the immediate area when occupants are present.

## **STRUCTURAL AND PERIMETER PEST CONTROL**

**CYONARA 9.7** 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, **CYONARA 9.7** can be reapplied at 21-day intervals if necessary.

### **Mixing Instructions**

Dilute **CYONARA 9.7** 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<sup>®</sup> or Actisol<sup>®</sup> 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 **CYONARA 9.7**. 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. **CYONARA 9.7** may be applied by using a paintbrush or other porous applicator attached to a handle as a general surface treatment.

### **Tank Mixing**

**CYONARA 9.7** 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, **CYONARA 9.7** 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.

**CYONARA 9.7** 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**

**CYONARA 9.7** 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 STRUCTURAL 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	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>

Pests	Dilution Rate (Concentration of AI)	SPECIFIC USE DIRECTIONS
Clover Mites Cockroaches <sup>1</sup> Confused Flour Beetles Crickets Earwigs Firebrats Fleas <sup>2</sup>	0.2 fl. oz. (6 mL) to 0.4 fl. oz. (12 mL) per gallon of water  (0.015-0.03% AI)	<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. 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.

Pests	Dilution Rate (Concentration of AI)	SPECIFIC USE DIRECTIONS
Flies Lesser Grain Borers Millipedes Mosquitoes Red Flour Beetles Rice Weevils Saw-toothed Grain Beetles Silverfish Sowbugs	0.2 fl. oz. (6 mL) to 0.4 fl. oz. (12 mL) per gallon of water  (0.015-0.03% AI)	<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>

Pests	Dilution Rate (Concentration of AI)	SPECIFIC USE DIRECTIONS
Spiders Stink Bugs <sup>6</sup> Termites* (above ground only) Ticks Wasps	0.2 fl. oz. (6 mL) to 0.4 fl. oz. (12 mL) per gallon of water  (0.015-0.03% AI)	<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 as CYONARA 9.7 does not provide instant knockdown. Protective equipment for the applicator may be required. For best results, 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 if necessary.

Pests	Dilution Rate (Concentration of AI)	SPECIFIC USE DIRECTIONS
Cockroaches <sup>1</sup> Crickets <sup>9</sup> Flies <sup>5</sup> Litter Beetles <sup>3</sup> (adults/ immature stages such as Darkling, Hide, and Carrion)	0.8 fl. oz. (24 mL) per gallon of water  (0.06% AI)	<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>

Pests	Dilution Rate (Concentration of AI)	SPECIFIC USE DIRECTIONS
Mosquitoes <sup>4</sup> Pillbugs Scorpions Spiders <sup>5</sup> Spider Mites (Two-spotted, Spruce) Ticks <sup>6</sup>	0.8 fl. oz. (24 mL) per gallon of water  (0.06% AI)	<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>

Pests	Dilution Rate (Concentration of AI)	SPECIFIC USE DIRECTIONS
	0.8 fl. oz. (24 mL) per gallon of water  (0.06% AI)	<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>

Pests	Dilution Rate (Concentration of AI)	SPECIFIC USE DIRECTIONS
	0.8 fl. oz. (24 mL) per gallon of water  (0.06% AI)	<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.



Pests	Dilution Rate (Concentration of AI)	SPECIFIC USE DIRECTIONS
	0.8 fl. oz. (24 mL) per gallon of water  (0.06% AI)	<b>Litter Beetles (Darkling, Hide, and Carrion Beetles) and Flies In Animal Housing (Such As Poultry Houses):</b> To control adult litter beetles, apply CYONARA 9.7 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>

<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.

<sup>2</sup>For outdoor use only and use 0.03% rate.

<sup>3</sup>For control of LIGHT beetle infestations, use 0.03% rate.

<sup>4</sup>For residual control, use 0.06% rate.

<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>6</sup>For clean-out/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 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 **CYONARA 9.7** 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 **CYONARA 9.7** 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, Stink Bugs, 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.

\*The use of **CYONARA 9.7** 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 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.

### **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**

<b>Application Rate: Fl. oz. (mL) of CYONARA 9.7</b>	<b>Gals. of Water<sup>1</sup></b>	<b>Area of Coverage (sq. ft.)</b>
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 CYONARA 9.7 per 1,000 sq. ft.	Fl. oz. (mL) of CYONARA 9.7 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)	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 CYONARA 9.7 at a volume of 5 gal./1000 sq. ft., mix 4 oz of concentrate in 50 gallons of water. The percent active ingredient in the finished CYONARA 9.7 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 189250. Dividing 1164 by 189250 equals 0.006% active in the tank dilution.)

**NOTE:** Do not use water base sprays of **CYONARA 9.7** 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 **CYONARA 9.7**. **CYONARA 9.7** 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 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**

**CYONARA 9.7** 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 **CYONARA 9.7** 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**

**CYONARA 9.7** 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 **CYONARA 9.7**. It is suggested that the water be 5 - 7 pH. Adjust water pH with a buffering agent if necessary. Slowly add **CYONARA 9.7** to applicator tank water with maximum agitation. Close and shake or reagitrate

applicator tank before use if application is interrupted. Make up only amount of treatment volume as required.

#### **Tank Mixing**

**CYONARA 9.7** 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, **CYONARA 9.7** 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**

**CYONARA 9.7** 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.

**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 CYONARA 9.7	Application Instructions
Ants (Including Imported fire Ants) Armyworms Azalea caterpillars Aphids Bagworms Black vine weevils (adult) Boxelder bugs Budworms California oakworms Cankerworms	1.5 - 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 recommended rates may enhance the control of insects on certain species of ornamentals having waxy, hard to wet foliage.

Pest	Amount Of <b>CYONARA 9.7</b>	Application Instructions
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	1.5 - 5 fl. oz. per 100 gals.  or  44 - 148 mL per 100 gals.	For spot treatments use 0.5 fl. oz. <b>CYONARA 9.7</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.

Pest	Amount Of CYONARA 9.7	Application Instructions
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	1.5 - 5 fl. oz. per 100 gals.  or  44 - 148 mL per 100 gals.	<p><b>Scale:</b> Thoroughly cover the plant with <b>CYONARA 9.7</b> spray, including trunks, stems, twigs, and foliage for control of scale insects (crawler stage).</p> <p><b>Bagworm:</b> Apply <b>CYONARA 9.7</b> when bagworm larvae begin to hatch. Spray directly on the larvae. Application is the most effective when the larvae are young.</p>

<b>Pest</b>	<b>Amount Of CYONARA 9.7</b>	<b>Application Instructions</b>
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.	

<b>Pest</b>	<b>Amount Of CYONARA 9.7</b>	<b>Application Instructions</b>
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.	

**CYONARA 9.7 Mixing Chart for Ornamental Insect Pest Control**  
**(CYONARA 9.7 to add per spray tank)**

Rate of CYONARA 9.7	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**

**CYONARA 9.7** 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 CYONARA 9.7*	Application Instructions
Ants (Including Imported Fire Ants) Armyworms Centipedes Crickets Cutworms Earwigs Fleas (adult)	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>CYONARA 9.7</b> per 1 - 2.5 gals. of water.



Pest	Amount Of CYONARA 9.7*	Application Instructions
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	<b>Surface Insect Control (armyworm, cutworms, fleas, etc.):</b> For best results, apply <b>CYONARA 9.7</b> at recommended 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 for optimum control of surface-feeding insect pests.

Pest	Amount Of CYONARA 9.7*	Application Instructions
Bluegrass billbugs (adult) Black turfgrass ataenius (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	<b>Thatch Inhabiting Insect Control (chinch bugs, billbugs, etc.):</b> For best results, apply <b>CYONARA 9.7</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>CYONARA 9.7</b> into the thatch layer. If irrigation is not available, then use high water application rates for optimum results.

Pest	Amount Of CYONARA 9.7*	Application Instructions
Mole Crickets <sup>1</sup> (mature adults) Chinch Bugs <sup>1</sup>	14 mL per 1,000 sq. ft.  or  20 fl. oz. per acre	<p><b>Subsurface Insect Control (mole crickets, grubs, etc.):</b> For best results, apply <b>CYONARA 9.7</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>CYONARA 9.7</b> to turf wet with dew, rain or irrigation. Water-in immediately after application with ¼ - ½ 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>CYONARA 9.7</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. You may make applications on a monthly basis to maintain protection of treated areas.</p>

Pest	Amount Of CYONARA 9.7*	Application Instructions
		<b>Mosquito Control:</b> Apply as a general spray around landscape plantings, turf, and building foundations to control mosquitoes. For best results, apply <b>CYONARA 9.7</b> at recommended rates in 2 - 5 gals. of water per 1,000 sq. ft.
<sup>1</sup> Not for use on mature adult mole crickets and chinch bugs in New York state.		
<sup>*</sup> 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.		

**CYONARA 9.7 Mixing Chart for Turf Insect Pest Control**  
**(CYONARA 9.7 to add per 100 gal. spray tank)**

Rate of CYONARA 9.7	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**

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

**Storage and Spill Procedures:** Store upright at room temperature. 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.

(continued)

## **STORAGE AND DISPOSAL** (continued)

### **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  $\frac{1}{4}$  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. 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.

(continued)

## **STORAGE AND DISPOSAL** (continued)

### **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 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. 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.

(continued)



## **STORAGE AND DISPOSAL** (continued)

**For Bulk containers: (Refillable Container)** Refill this container with pesticides only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the re-filler. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or re-circulate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this procedure two more times.

## **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 should 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 CONTROL SOLUTIONS, INC. or Seller. All such risks shall be assumed by Buyer and User, and Buyer and User agree to hold CONTROL SOLUTIONS, INC. and Seller harmless for any claims relating to such factors.

CONTROL SOLUTIONS, INC. 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 CONTROL SOLUTIONS, INC. , and Buyer and User assume the risk of any such use. CONTROL SOLUTIONS, INC. 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 fullest extent permitted by law, Control Solutions, Inc. or seller shall not be liable for any incidental, consequential or special damages resulting from the use or handling of this product. THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF CONTROL SOLUTIONS, INC. 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 CONTROL SOLUTIONS, INC. OR SELLER, THE REPLACEMENT OF THE PRODUCT.

CONTROL SOLUTIONS, INC. 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 CONTROL SOLUTIONS, INC.

Control Solutions, Inc.  
5903 Genoa-Red Bluff Road  
Pasadena, TX 77507-1041  
EPA Reg. No. 53883-145  
EPA Est. No. 53883-TX-002

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Micro-gen Research Laboratories, Inc.

# Cyonara™ 9.7



**INSECTICIDE**

**Contains Sigma Technology**

For use by commercial applicators 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<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%

**Other Ingredients:** ..... 90.3%

**Total:** ..... 100.0%

<sup>1</sup>Synthetic pyrethroid

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

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

**EPA Reg. No. 53883-145    EPA Est. No. 53883-TX-002**

**NET CONTENTS:**

**8 FL. OZ.**



Manufactured by:

**Control  
Solutions Inc.**

5903 Genoa-Red Bluff  
Pasadena, TX 77507

EPA102306/NOTIF 090911/REV B

# Cyonara™ 9.7

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EPA Reg. No. 53883-145

EPA Est. No. 53883-TX-002

**NET CONTENTS: 1 QUART**



Manufactured by:

**Control  
Solutions Inc.**

5903 Genoa-Red Bluff  
Pasadena, TX 77507



0 72693 31975 2

EPA102306/NOTIF 090911/REV B

**PRECAUTIONARY STATEMENTS**  
**Hazards to Humans and Domestic Animals**

**WARNING**

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

<b>First Aid</b>	
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 (866) 897-8050 for emergency medical treatment information.	
<b>If swallowed:</b>	<ul style="list-style-type: none"><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>
<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 continue 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>
<b>FOR CHEMICAL EMERGENCY Spill, leak, fire, exposure, or accident call CHEMTREC 1-800-424-9300</b>	

## **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 Chemical Hazards**

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

## **General Information**

CYONARA 9.7 is a unique formulation utilizing Sigma 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. Do not apply to institutions (including libraries, sports facilities, etc.) in the immediate area when occupants are present.

## **STRUCTURAL AND PERIMETER PEST CONTROL**

**CYONARA 9.7** 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, **CYONARA 9.7** can be reapplied at 21-day intervals if necessary.

#### **Mixing Instructions**

Dilute **CYONARA 9.7** 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 **CYONARA 9.7**. 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. **CYONARA 9.7** may be applied by using a paintbrush or other porous applicator attached to a handle as a general surface treatment.

#### **Tank Mixing**

**CYONARA 9.7** 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, **CYONARA 9.7** 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.

**CYONARA 9.7** 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

**CYONARA 9.7** 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 STRUCTURAL PESTS (HAND APPLICATION EQUIPMENT)

Pests	Dilution Rate (Concentration of AI)	SPECIFIC USE DIRECTIONS
Ants	0.2 fl. oz.	<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> .
Bedbugs	(6 mL)	
(adult)	to	
Bees	0.4 fl. oz.	
Boxelder Bugs	(12 mL) per gallon	
Carpenter	of water	
Bees		
Carpet Beetles	(0.015-0.03% AI)	
Centipedes		
Cigarette		
Beetles		
Clover Mites		
Cockroaches <sup>1</sup>		
Confused Flour		
Beetles		
Crickets		
Earwigs		
Firebrats		
Fleas <sup>2</sup>		

(continued)

Pests	Dilution Rate (Concentration of AI)	SPECIFIC USE DIRECTIONS
Flies Lesser Grain Borers Millipedes Mosquitoes Red Flour Beetles Rice Weevils Saw-toothed Grain Beetles Silverfish Sowbugs Spiders Stink Bugs <sup>6</sup> Termites* (above ground only) Ticks Wasps	0.2 fl. oz. (6 mL) to 0.4 fl. oz. (12 mL) per gallon of water  (0.015-0.03% AI)	<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. 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> <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>

(continued)

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)	0.8 fl. oz. (24 mL) per gallon of water  (0.06% AI)	<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 as CYONARA 9.7 does not provide instant knockdown. Protective equipment for the applicator may be required. For best results, 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 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>

(continued)

Pests	Dilution Rate (Concentration of AI)	SPECIFIC USE DIRECTIONS
Mosquitoes <sup>4</sup> Pillbugs Scorpions Spiders <sup>6</sup> Spider Mites (Two-spotted, Spruce) Ticks <sup>6</sup>	0.8 fl. oz. (24 mL) per gallon of water  (0.06% AI)	<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>

(continued)

Pests	Dilution Rate (Concentration of AI)	SPECIFIC USE DIRECTIONS
	0.8 fl. oz. (24 mL) per gallon of water  (0.06% AI)	<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> <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>

(continued)

Pests	Dilution Rate (Concentration of AI)	SPECIFIC USE DIRECTIONS
	0.8 fl. oz. (24 mL) per gallon of water  (0.06% AI)	<b>Litter Beetles (Darkling, Hide, and Carrion Beetles) and Flies In Animal Housing (Such As Poultry Houses):</b> To control adult litter beetles, apply CYONARA 9.7 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><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 **CYONARA 9.7** 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 **CYONARA 9.7** 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, Stink Bugs, 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.

\*The use of **CYONARA 9.7** 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 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.

### **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

<b>Application Rate: Fl. oz. (mL) of CYONARA 9.7</b>	<b>Gals. of Water<sup>1</sup></b>	<b>Area of Coverage (sq. ft.)</b>
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

<b>Application Volume Gals. of Solution per 1,000 sq. ft.</b>	<b>Application Rate Fl. oz. (mL) of CYONARA 9.7 per 1,000 sq. ft.</b>	<b>Fl. oz. (mL) of CYONARA 9.7 to Dilute in Water According to Spray Tank Volumes</b>		
		<b>5 gals.</b>	<b>10 gals.</b>	<b>50 gals.</b>
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 CYONARA 9.7 at a volume of 5 gal./1000 sq. ft., mix 4 oz of concentrate in 50 gallons of water. The percent active ingredient in the finished CYONARA 9.7 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 189250. Dividing 1164 by 189250 equals 0.006% active in the tank dilution.)

**NOTE:** Do not use water base sprays of **CYONARA 9.7** 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 **CYONARA 9.7**. **CYONARA 9.7** 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 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**

**CYONARA 9.7** 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 **CYONARA 9.7** 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**

**CYONARA 9.7** 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 **CYONARA 9.7**. It is suggested that the water be 5 - 7 pH. Adjust water pH with a buffering agent if necessary. Slowly add **CYONARA 9.7** 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**

**CYONARA 9.7** 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, **CYONARA 9.7** 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**

**CYONARA 9.7** 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.

### **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>CYONARA 9.7</b>	Application Instructions
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		
Azalea caterpillars	or	Apply at 7-day intervals if retreatment is necessary. Limit more frequent treatment to spot treatments.
Aphids		
Bagworms	44 - 148 mL per	
Black vine weevils (adult)	100 gals.	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.
Boxelder bugs		
Budworms		
California oakworms		
Cankerworms		
Cockroaches		
Crickets		
Cutworms		
Eastern tent caterpillars		For spot treatments use 0.5 fl. oz. <b>CYONARA 9.7</b> per 1 - 2.5 gals. of water.
Elm leaf beetles		Consult your state university or local Cooperative Extension Service office for specific pest control application timing in your area.
European sawflies		
Fall webworms		
Flea beetles		
Forest tent caterpillars		
Gypsy moth larvae		
Japanese beetles (adults)		
June beetles (adults)		
Lace bugs		
Leaf-feeding caterpillars		

(continued)

Pest	Amount Of <b>CYONARA 9.7</b>	Application Instructions
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.	<p><b>Scale:</b> Thoroughly cover the plant with <b>CYONARA 9.7</b> spray, including trunks, stems, twigs, and foliage for control of scale insects (crawler stage).</p> <p><b>Bagworm:</b> Apply <b>CYONARA 9.7</b> when bagworm larvae begin to hatch. Spray directly on the larvae. Application is the most effective when the larvae are young.</p>

(continued)



Pest	Amount Of CYONARA 9.7	Application Instructions
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.	

**CYONARA 9.7 Mixing Chart for Ornamental Insect Pest Control**  
(CYONARA 9.7 to add per spray tank)

Rate of CYONARA 9.7	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**

**CYONARA 9.7** 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**

<b>Pest</b>	<b>Amount Of CYONARA 9.7*</b>	<b>Application Instructions</b>
Ants (Including Imported Fire Ants)	3.4 - 7 mL per 1,000 sq. ft.	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.
Armyworms	or	
Centipedes	5 - 10 fl. oz. per acre	Apply at 7-day intervals if retreatment is necessary. More frequent treatments should be limited to spot treatments.
Crickets		
Cutworms		For <b>spot treatments</b> , use 0.5 fl. oz. of <b>CYONARA 9.7</b> per 1 - 2.5 gals. of water.
Earwigs		<b>Surface Insect Control (armyworm, cutworms, fleas, etc.):</b> For best results, apply <b>CYONARA 9.7</b> at recommended 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 for optimum control of surface-feeding insect pests.
Fleas (adult)		
Grasshoppers		
Japanese beetles		
(adult)		
Millipedes		
Mites		
Mosquitoes (adult)		
Pillbugs		
Sod webworms		
Sow bugs		
Stink Bugs		
Ticks (including species which transmit Lyme disease)		

(continued)

Pest	Amount Of CYONARA 9.7*	Application Instructions
Bluegrass billbugs (adult) Black turfgrass ataenius (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	<b>Thatch Inhabiting Insect Control (chinch bugs, billbugs, etc.):</b> For best results, apply <b>CYONARA 9.7</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>CYONARA 9.7</b> into the thatch layer. If irrigation is not available, then use high water application rates for optimum results.
Mole Crickets <sup>1</sup> (mature adults) Chinch Bugs <sup>1</sup>	14 mL per 1,000 sq. ft.  or  20 fl. oz. per acre	<b>Subsurface Insect Control (mole crickets, grubs, etc.):</b> For best results, apply <b>CYONARA 9.7</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>CYONARA 9.7</b> to turf wet with dew, rain or irrigation. Water-in immediately after application with ¼ - ½ inch of water for optimum results.

(continued)

Pest	Amount Of CYONARA 9.7 <sup>1</sup>	Application Instructions
		<p><b>Fire Ant Control:</b> Treat individual mounds with a drench application using a watering can. Use 0.5 fl. oz. of <b>CYONARA 9.7</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. 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. For best results, apply <b>CYONARA 9.7</b> at recommended rates in 2 - 5 gals. of water per 1,000 sq. ft.</p>
<sup>1</sup> Not for use on mature adult mole crickets and 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>		

**CYONARA 9.7 Mixing Chart for Turf Insect Pest Control****(CYONARA 9.7 to add per 100 gal. spray tank)**

Rate of CYONARA 9.7	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

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

**Storage and Spill Procedures:** Store upright at room temperature. 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  $\frac{1}{4}$  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. 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.

**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  $\frac{1}{4}$  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 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. 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.

(continued)

**STORAGE AND DISPOSAL** (continued)

**For Bulk containers: (Refillable Container)** Refill this container with pesticides only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the re-filler. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or re-circulate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this procedure two more times.

**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 should 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 CONTROL SOLUTIONS, INC. or Seller. All such risks shall be assumed by Buyer and User, and Buyer and User agree to hold CONTROL SOLUTIONS, INC. and Seller harmless for any claims relating to such factors.

CONTROL SOLUTIONS, INC. 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 CONTROL SOLUTIONS, INC. , and Buyer and User assume the risk of any such use. CONTROL SOLUTIONS, INC. 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 fullest extent permitted by law, Control Solutions, Inc. or seller shall not be liable for any incidental, consequential or special damages resulting from the use or handling of this product. THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF CONTROL SOLUTIONS, INC. 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 CONTROL SOLUTIONS, INC. OR SELLER, THE REPLACEMENT OF THE PRODUCT.

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EPA Reg. No. 53883-145  
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# Cyonara™ 9.7

**INSECTICIDE**  
**Contains Sigma Technology**



For use by commercial applicators 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<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%

**Other Ingredients:** ..... 90.3%

**Total:** ..... 100.0%

<sup>1</sup>Synthetic pyrethroid

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

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

EPA Reg. No. 53883-145

EPA Est. No. 53883-TX-002

**NET CONTENTS: 1 QUART**

Manufactured by:

**Control  
Solutions Inc.**

5903 Genoa-Red Bluff  
Pasadena, TX 77507



EPA102306/NOTIF 090911/REV B