

SAFETY DATA SHEET

Cyonara 9.7

1. IDENTIFICATION

Product name: **Cyonara 9.7**
 Product type: Insecticide
 EPA Registration No.: 53883-145
 Chemical name of active ingredient(s): Lambda Cyhalothrin: [1 α (S*),3 α (Z)]-(\pm)-cyano-(3-phenoxyphenyl)methyl-3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2-dimethylcyclopropanecarboxylate

Manufacturer/Registrant: Control Solutions, Inc.
 5903 Genoa-Red Bluff
 Pasadena, TX 77507

For fire, spill, and/or leak emergencies, contact Chemtrec: Phone: 1-800-424-9300
 For medical emergencies and health and safety inquiries, contact Safety Call: Phone: 1-866-897-8050
 Poison Control Center Phone: 1-800-222-1222

2. HAZARDS IDENTIFICATIONS

OSHA HCS CLASSIFICATION (29 CFR 1910.1200)

Acute Toxicity:

| | Acute oral | Acute dermal | Acute inhalation | Eye irritation | Skin irritation | Skin Sensitization |
|-----------------|------------|--------------|------------------|----------------|-----------------|--------------------|
| Category | 4 | NC | 4 | 2B | NC | NC |

NC: Not classified

SIGNAL WORD: WARNING

HAZARD STATEMENTS:

- Harmful if swallowed
- Harmful if inhaled
- Causes eye irritation
- Environmental toxicity

PICTOGRAMS:



PRECAUTIONARY STATEMENTS:

- Wash hand thoroughly after handling. Do not eat, drink or smoke when using this product. If swallowed: Call a poison center or a doctor if you feel unwell. Rinse mouth.
- In inhaled: remove a person to fresh air and keep comfortable for breathing. If in eyes: rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: get medical advice.

SAFETY DATA SHEET

Cyonara 9.7

- Wash hands thoroughly after handling. If in eyes: rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: get medical advice.

Contact Safety Call® International for emergency medical treatment at (866) 897-8050.

PHYSICAL AND CHEMICAL HAZARDS: Do not use this product in or on electrical equipment due to the possibility of shock hazard.

STORAGE AND DISPOSAL: See Section 7 and 13.

OTHER HAZARDS: See Section 11 and 12.

3. COMPOSITION/INFORMATION ON INGREDIENTS

| COMMON NAME | CAS NO. | % | OSHA PEL | ACGIH TLV | OTHER | NTP/IARC/OSHA (Carcinogen) |
|--------------------|------------|-----|----------|-----------|-------|----------------------------|
| Lambda-cyhalothrin | 91465-08-6 | 9.7 | NE | NE | NE | NA |

NE=Not established; NA=Not applicable.

4. FIRST AID MEASURES

| FIRST AID | |
|--|--|
| IF SWALLOWED: | <ul style="list-style-type: none"> • 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. |
| IF IN EYES: | <ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continuing rinsing eye. • Call a poison control center or doctor for treatment advice. |
| IF ON SKIN OR CLOTHING: | <ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice. |
| IF INHALED: | <ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. • Call a poison control center or doctor for further treatment advice. |
| <p>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 at (866) 897-8050 for emergency medical treatment information. For chemical Emergency: Spill, leak, fire, exposure, or accident call CHEMTREC 1-800-424-9300.</p> | |

5. FIRE FIGHTING MEASURES

FLASH POINT: Not applicable

FLAMMABLE LIMITS: Not applicable

EXTINGUISHING MEDIA: Water fog, CO₂, foam, dry chemical.

UNUSUAL FIRE, EXPLOSION HAZARDS: Pesticide fires have potential to produce irritating or toxic gases.

FIRE-FIGHTING PROCEDURES: Wear full protective clothing and self-contained breathing apparatus. Evacuate nonessential personnel from the area to prevent human exposure to fire, smoke, fumes or products of combustion. Prevent use of contaminated buildings, area and equipment until decontaminated. Water runoff can cause environmental damage.

SAFETY DATA SHEET

Cyonara 9.7

HAZARDOUS DECOMPOSITION PRODUCTS: Product can decompose at high temperatures forming toxic and irritating fumes.

6. ACCIDENTAL RELEASE MEASURES

Clean up spills immediately. Isolate hazard area. Keep unnecessary and unprotected personnel from entering.

ACTION TO TAKE FOR SPILLS/LEAKS: 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.

7. HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING: Do not contaminate water, food, or feed by storage or disposal or cleaning of equipment. Carefully open containers and after partial use close container tightly. Avoid contact with skin, eyes or clothing. Avoid breathing spray mist. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

PRECAUTIONS TO BE TAKEN IN STORAGE: Store in cool, dry area away from children and domestic animals.

STORAGE TEMPERATURE (MIN/MAX): Normal ambient temperatures.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

THE FOLLOWING RECOMMENDATIONS FOR EXPOSURE CONTROLS/PERSONAL PROTECTION ARE INTENDED FOR THE MANUFACTURE, FORMULATION, PACKAGING AND USE OF THIS PRODUCT.

FOR COMMERCIAL APPLICATIONS AND/OR ON-FARM APPLICATIONS CONSULT THE PRODUCT LABEL.

EYE PROTECTION: Wear goggles or face shield.

HAND PROTECTION: Chemical-resistant gloves.

SKIN PROTECTION: Long-sleeve shirt, long pants, shoes plus socks.

RESPIRATOR REQUIREMENTS: For most conditions, no respiratory protection required. However, if handling without sufficient ventilation, use NIOSH approved air-purifying respirator with any N, P or R95 class filter and an organic vapor cartridge.

VENTILATION: Whenever possible, adequate ventilation should be used to minimize the need for personal protective equipment.

ADDITIONAL PROTECTIVE MEASURES:

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

USER SAFETY RECOMMENDATIONS:

Users Should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

EXPOSURE GUIDELINES: Refer to Section 3.

ENGINEERING CONTROLS: Provide local exhaust ventilation. Minimize airborne concentrations.

SAFETY DATA SHEET

Cyonara 9.7

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Colorless liquid
ODOR: Mild chemical
pH: 5.31
FLASH POINT: Not flammable
DENSITY: 1.048 g/ml
VISCOSITY(centistokes): 1.62.702 (20°C); 78.676 (40°C)
SOLUBILITY IN WATER: Not available
MELTING POINT: Not available
SOLUBILITY: Not available

10. STABILITY AND REACTIVITY

STABILITY: Stable under normal conditions.
CONDITIONS TO AVOID: Avoid excessive heat.
HAZARDOUS DECOMPOSITION PRODUCTS: Product can decompose at high temperatures forming toxic and irritating fumes.
HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY/IRRITATION STUDIES:

Acute Oral LD₅₀ (Rat): 310.2 mg/kg
Acute Dermal LD₅₀ (Rabbit): > 5,000 mg/kg
Acute Inhalation LC₅₀ (Rat): > 2.02 mg/L/4 hr
Eye Irritation: Mildly irritating
Skin Irritation: Slightly irritating
Dermal Sensitization: Not a skin sensitizer

REPRODUCTIVE/DEVELOPMENTAL EFFECTS:

Lambda-cyhalothrin technical: Not a developmental or reproductive toxicant.

CHRONIC/SUBCHRONIC TOXICITY STUDIES:

Lambda-cyhalothrin technical: Reversible paresthesia (abnormal skin sensation). Reversible clinical signs of neurotoxicity in mammals.

CARCINOGENICITY:

Lambda-cyhalothrin technical: No treatment-related tumors in rats or mice.

OTHER TOXICITY INFORMATION:

In humans, contact with exposed skin may result in temporary itching, tingling, burning or numbness, called paresthesia. The effect may result from splash, aerosol, or hot vapor contact, or transfer to the face from contaminated gloves and hands. The symptoms normally disappear within 24 hours. Face and genital areas are especially susceptible to this effect. Paresthesia involving the face is also known as "subjective facial sensation" or SFS.

TARGET ORGANS:

Lambda-cyhalothrin technical: Liver, nervous system

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL HAZARDS: This pesticide is extremely toxic to fish and aquatic organisms. Do not contaminate water when cleaning equipment or disposing of equipment wash waters. Do not apply directly to water. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas.

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.

SAFETY DATA SHEET

Cyonara 9.7

ECO-ACUTE TOXICITY: (Lambda-cyhalothrin technical)

| | |
|--|--------------|
| Bees LC ₅₀ /EC ₅₀ : | 0.038 ug/bee |
| Invertebrates (water flea) LC ₅₀ /EC ₅₀ : | 0.00036 ppm |
| Fish (trout) LC ₅₀ /EC ₅₀ : | 0.00024 ppm |
| Fish (bluegill) LC ₅₀ /EC ₅₀ : | 0.00021 ppm |
| Bird (Bobwhite quail) 8-day dietary LC ₅₀ /EC ₅₀ : | >5,300 ppm |
| Bird (Mallard duck) 8-day dietary LC ₅₀ /EC ₅₀ : | >3,948 ppm |

ENVIRONMENTAL FATE:

Lambda-cyhalothrin technical: Not persistent in soil or water, Immobile in soil. Sinks in water after 24 hours.

13. DISPOSAL CONSIDERATIONS

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: Dispose of product containers, waste containers, and residues according to label instructions and local, state, and federal health and environmental regulations.

14. TRANSPORT INFORMATION

DOT CLASSIFICATION:

Not regulated

INTERNATIONAL TRANSPORTATION:

IMO (vessel): UN3082, Environmentally hazardous substance, n.o.s. (lambda-cyhalothrin), 9, PGIII, Marine Pollutant

IATA (air): UN3082, Environmentally hazardous substance, n.o.s. (lambda-cyhalothrin), 9, PGIII, Marine Pollutant

(NOTE: *Limited quantity exception allowed.*)

15. REGULATORY INFORMATION

FIFRA INFORMATION:

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information for safety data sheet, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label.

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.

SARA TITLE III CLASSIFICATION:

| | |
|------------------|--|
| Section 302: | Not applicable. |
| Section 311/312: | Acute health hazard (immediate) Chronic health hazard (delayed) |
| Section 313: | Not applicable |

CA PROPOSITION 65: Not applicable

CERCLA RQ: Not applicable

RCRA CLASSIFICATION: Under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste.

TSCA STATUS: The ingredients of this product are listed on the TSCA inventory or are exempt.

SAFETY DATA SHEET

Cyonara 9.7

16. OTHER INFORMATION

| HAZARD RATINGS | NFPA | HMIS | |
|----------------|------|------|------------|
| HEALTH: | 1 | 2 | 0 MINIMAL |
| FLAMMABILITY: | 0 | 0 | 1 SLIGHT |
| REACTIVITY: | 0 | 0 | 2 MODERATE |
| | | | 3 HIGH |
| | | | 4 SEVERE |

MSDS DATE: 5-29-2014. Supersedes version dated 5-24-2011. Changes made to all sections.

The information and recommendations contained herein are based upon data believed to be correct. However, no warranty of any kind, expressed or implied, is made with respect to the information contained herein.