1. IDENTIFICATION

Product name: Cyonara Lawn and Garden
Product type: Insecticide
EPA Registration No.: 53883-197
Chemical name of active ingredient(s): Lambda Cyhalothrin: [1α(S*),3α(Z)]-(±)-cyano-(3-phenoxypyphenyl)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:
For medical emergencies and health and safety inquiries, contact Safety Call:
Poison Control Center
Phone: 1-800-424-9300
Phone: 1-866-897-8050
Phone: 1-800-222-1222

2. HAZARDS IDENTIFICATIONS

OSHA HCS CLASSIFICATION (29 CFR 1910.1200)

<table>
<thead>
<tr>
<th>Acute Toxicity:</th>
<th>Acute oral</th>
<th>Acute dermal</th>
<th>Acute inhalation</th>
<th>Eye irritation</th>
<th>Skin irritation</th>
<th>Skin Sensitization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category 4</td>
<td>NC</td>
<td>4</td>
<td>NC</td>
<td>NC</td>
<td>NC</td>
<td>NC</td>
</tr>
</tbody>
</table>

NC: Not classified

SIGNAL WORD: WARNING

HAZARD STATEMENTS:
- Harmful is swallowed
- Harmful if inhaled

PICTOGRAM:

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.

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

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>COMMON NAME</th>
<th>CAS NO.</th>
<th>%</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
<th>OTHER</th>
<th>NTP/IARC/OSHA (Carcinogen)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lambda-cyhalothrin</td>
<td>91465-08-6</td>
<td>0.5</td>
<td>NE</td>
<td>NE</td>
<td>NE</td>
<td>NA</td>
</tr>
</tbody>
</table>

NE=Not established; NA=Not applicable.
4. FIRST AID MEASURES

FIRST AID

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

IF IN EYES:
- 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.

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

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.

HAZARDOUS DECOMPOSITION PRODUCTS: Product can decompose at high temperatures forming toxic gases.

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/PERSOANL 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.
SAFETY DATA SHEET  
Cyonara Lawn and Garden

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.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Translucent white liquid  
ODOR: Mild chemical odor  
PH: 5.5 – 6.0  
FLASH POINT: Will not flash  
SPECIFIC GRAVITY: 0.99 – 1.01 g/ml  
VISCOSITY: 0.89 cps@ 25°C

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 gases.  
HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY/IRRITATION STUDIES:  
Acute Oral LD_{50} (Rat): > 1,750 mg/kg  
Acute Dermal LD_{50} (Rabbit): > 5,000 mg/kg  
Acute Inhalation LC_{50} (Rat): > 2.0 mg/L/4 hr  
Eye Irritation: Slightly 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.
SAFETY DATA SHEET
Cyonara Lawn and Garden

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. Do not contaminate water when disposing of equipment washwaters. 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.

To protect the environment, do not allow pesticide to enter or run off into storm drains, drainage ditches, gutters or surface waters. Applying this product in calm weather when rain is not predicted for the next 24 hours will help to ensure that wind or rain does not blow or wash pesticide off the treatment area. Rinsing application equipment over the treated area will help avoid run off to water bodies or drainage systems.

ECO-ACUTE TOXICITY: (Lambda-cyhalothrin technical)
Bees LC50/EC50: 0.038 ug/bee
Invertebrates (water flea) LC50/EC50: 0.00036 ppm
Fish (trout) LC50/EC50: 0.00024 ppm
Fish (bluegill) LC50/EC50: 0.00021 ppm
Bird (Bobwhite quail) 8-day dietary LC50/EC50: >5300 ppm
Bird (Mallard duck) 8-day dietary LC50/EC50: >3948 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:
Not Regulated.

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.
CAUTION Harmful if swallowed. Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco.

Do not allow people or pets to contact treated areas until spray is dry.

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.

16. OTHER INFORMATION

<table>
<thead>
<tr>
<th>HAZARD RATINGS</th>
<th>NFPA</th>
<th>HMIS</th>
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<td>HEALTH:</td>
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<td>FLAMMABILITY:</td>
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