Material Safety Data Sheet

Product Name:	Cyonara Lawn and Garden	EPA Registration #:	53883-197
Manufacturer:	Control Solutions Inc. 5903 Genoa- Red Bluff Pasadena, TX 77507 281-892-2500	EPA Establishment #:	53883-TX-002

Section 2 – Chemical Composition			
Material	CAS #	% by Weight	OSHA PEL/ACGIH TLV
Lambda Cyhalothrin	91465-08-6	0.5%	None Established
Other Ingredients	-	99.5%	None Established

Section 3 – Hazard Identification

Symptoms of Toxicity: Flammability:	Causes eye and skin irritation. Lambda cyhalothrin causes neurotoxic effects such as staggering gait, muscle spasms, and convulsions. Not flammable.
Reactivity:	Stable under normal storage conditions.
Carcinogenicity:	Not carcinogenic.

Section 4 – First Aid	
Eye Contact:	Flush eyes with water for 15 minutes. Seek medical attention if irritation persists.
Inhalation:	Move person to fresh air. If person is not breathing, give artificial respiration. Call poison control center for further treatment advice.
Ingestion:	Call poison control center immediately. Have person sip a glass of water if able to swallow. Do not induce vomiting unless directed to do so by poison control center. Never give anything by mouth to an unconscious person.
Dermal Contact:	Remove contaminated clothing. Wash skin immediately with soap and water for 15 minutes. Call physician if irritation persists.
Notes/Physician's Information:	You may also contact SafetyCall® International (866) 897-8050 for emergency medical treatment information.

Section 5 – Fire and Explosion Hazards			
Flash Point:	Will not flash.	Upper Flammability Limit:	N/A
Extinguishing Media:	Water fog, foam, CO ₂ , dry chemical.	Lower Flammability Limit:	N/A
Special Procedures:	Use SCBA with full protective (bunker) gear.		
Unusual Fire Hazards:	Toxic runoff may result from firefighting.		
Reactivity/Stability:	Stable. May release hazardous combustion products such as CO, CO_2 , halogen acids, cyanuric acid, NO_x , and NH_3 . Avoid strong oxidizers and corrosives. Hazardous polymerization will not occur.		
Section 6 – Spill/Relea			
Absorbent:		absorbent pads, vermiculite, c and absorb rinse in similar ma	
Containment:	This product is toxic to aquatic organisms. Do not discharge spills into municipal wastewater or storm drains. Eliminate runoff as much as possible.		
Waste Disposal:	Dispose of waste material in municipal land-fill or through licensed TSDF. Open dumping is prohibited. Not an RCRA hazardous waste.		
Reporting:	Report all major spills federal agencies.	Report all major spills and uncontrolled releases to proper local, state, and federal agencies.	
Emergency Contact #:	Chemtrec: 1-800-424-	9300	

Section 7 – Storage and Handling Instructions		
Storage Conditions:	Do not store near feed, food, or within the reach of children. Containers should be stored in a cool, dry, well-ventilated area	
	away from flammable materials.	
Special Handling Considerations:	Exercise caution to prevent damage to or leakage from the containers.	
Container Disposal:	Reuse of empty pesticide containers is prohibited. Triple rinse (or equivalent), then offer for recycling or render unusable and dispose of in municipal landfill or through licensed TSDF.	

Section 8 – Frotective	Equipment/Engineering Controls	
Eye Protection:	End User: None required. Safety glasses recommended.	
	Manufacturing: Safety goggles or glasses with side-shields required.	
Respiratory Protection:	None required. Use MSHA/NIOSH approved respirator when necessary.	
Dermal Protection:	Refer to product labeling. Skin contact should be prevented by use of gloves,	
	long-sleeved shirt, and long pants. Wash contaminated clothing separately.	
Engineering Controls:	Manufacturing: Provide local exhaust ventilation.	
	End User: Refer to label instructions regarding application equipment.	
Other Precautions:	Clean water should be available to allow for flushing of skin and eyes in the	
	event of chemical exposure.	

Section 8 – Protective Equipment/Engineering Controls

Section 9 – Physical Data

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Odor:	Mild chemical odor	Melting Point:	N/A
Physical State:	Liquid	Flash Point:	Will not flash
Color:	Translucent, white	Specific Gravity:	1.01 (g/ml)
Bulk Density:	See specific gravity	pH:	5.5 - 6.0
Vapor Pressure:	N/A	Water Solubility:	Emulsifies
Viscosity:	N/A	Refractive Index:	N/A

Section 10 – Toxicity			
EPA Toxicity Category:	IV, Caution	Oral LD ₅₀ :	>300 mg/kg
Skin Contact:	Mildly irritating	Dermal LD ₅₀ :	>1000 mg/kg
Eye Contact:	Slightly irritating	Inhalation LC ₅₀ :	>2.2 mg/L
HMIS/NFPA Classification:	Fire - 0 Health - 2 Reactivity - 0 Special - no	Fire - 0 Dene Reactiv	Health - 1 vity - 0 Special - none
Other Comments:	Avoid cross contamination handling pesticides and be	•	

Section 11 – Ecological Data		
Aquatic:	Lambda cyhalothrin: $LC_{50} = 0.36 \text{ ug/L}$ (rainbow trout).	
Avian:	Lambda cyhalothrin: $LD_{50} = 3950 \text{ mg/kg}$ (mallard duck).	
Bioaccumulation:	Does not bioaccumulate.	
Summary:	This material is toxic to fish. Untreated effluent from cleaning should not be discharged where it will drain into lakes, streams, or ponds.	

Section 12 – Transportation		
DOT:	Non Bulk: Not regulated.	
(Highway)	Bulk: UN3082, Environmentally hazardous substance, liquid, n.o.s. (1%	
	lambda cyhalothrin), Class 9, PG III.	
IATA:	Not Regulated.	
IMDG:	UN3082, Environmentally hazardous substance, liquid, n.o.s. (1% lambda	
(Overseas)	cyhalothrin), Class 9, PG III.	

Section 13 – Regulatory	
Section 302/TPQ: (emergency planning)	Contains no components listed under section 302.
Section 304/EHS RQ: (release notification)	Contains no components listed under section 304.
CERCLA RQ: (release notification)	Not regulated under CERCLA.
Section 311/Tier II: (MSDS submission)	Health hazard: Acute.
Section 313/TRI Chemicals:	None.
RCRA Haz-Waste Code(s):	None.
CAA TQ: (air emissions)	None.

Section 14 – Other

NFPA and HMIS ratings assigned to this product are based on the hazards of its ingredient (s). Because the customer is most aware of the application of the product, he must ensure that the proper personal protective equipment (PPE) is provided consistent with information contained in the product MSDS.

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