Last Updated: June 10, 2010

Material Safety Data Sheet

Section 1 – Product Identification

Product Name:	Cyzmic™ CS	EPA Registration #:	53883-261
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	9.7	None Established
Inert Ingredients	N/A	90.3	None Established

Section 3 – Hazard Identification

Symptoms of Toxicity: Lambda cyhalothrin may induce neurotoxic effects including staggering gait, muscle tremors and convulsions.

Flammability: This product is not flammable.

Reactivity: Stable under normal conditions.

Section 4 – 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 call SafetyCall Int'l (866) 897-8050 for ememergency medical information.

Dermal Contact:
- 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.

Eye Contact:
- 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.

Ingestion:
- Call a poison control center or doctor immediately for treatment advice.
- Do not give any liquid to the person.
- 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.

Inhalation:
- 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.

Section 5 – Fire and Explosion Hazards

Flash Point:	Not applicable
Extinguishing Media:	Water fog, foam, carbon dioxide, dry chemical, halogenated agents.
Special Firefighting Procedures:	Self-contained breathing apparatus with full-face piece and protective clothing.
Unusual Fire Hazards:	Possible toxic smoke, vapors, fallout and runoff water can result from fires depending on extent of combustion and presence of other combustible materials. Contaminated buildings, areas, and equipment must be properly decontaminated before reuse.
Reactivity/Stability:	Stable under normal conditions. Combustion products include carbon dioxide, carbon monoxide, nitrogen oxides, ammonia, cyanuric acid, biuret, halogen, halogen acids, and trace amounts of carbonyl halide. Hazardous polymerization will not occur.

Section 6 – Spill/Release Procedures

Absorbent:	Clay granules, sawdust, or vermiculite. Apply directly to spill and sweep into suitable container. Rinse with water and absorb in similar manner.
Containment:	Do not discharge into municipal wastewater or public storm drains. Eliminate runoff as much as possible.
Waste Disposal:	Dispose of waste and contaminated material through proper channels. An authorized hazardous waste disposal facility (TSDF) is recommended. Discarded product is not a hazardous waste under RCRA, 40 CFR 261.
Reporting:	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 and Spill Procedures: Do not contaminate water, food or feed by storage or disposal. Store upright at room temperature. Keep container closed when not in use. Do not store near food or feed. Avoid exposure to extreme temperatures. In case of spillage or leakages, soak up with an absorbent material such as sand, sawdust, earth, Fuller's earth, etc. Dispose of with chemical waste.

Pesticide Disposal: Pesticide, spray mixture or rinse water that cannot be used according to label instructions must be disposed of at or by an approved waste disposal facility.

Container Disposal:
For Containers equal to or less than 5 Gallons: Nonrefillable container. Do not reuse or refill this container. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Offer for recycling if available.
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.
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.

Section 8 – Protective Equipment/Engineering Controls

Eye Protection:	Eye contact with the material should be avoided through the use of chemical safety glasses, goggles or a face-shield, selected in regard to exposure potential.
Respiratory Protection:	Not normally needed for this product when diluted in water for end-use application. When needed, use MSHA/NIOSH approved respirator for pesticides.
Dermal Protection:	Chemical resistant gloves, long pants, long-sleeved shit. Remove and wash contaminated clothing before reuse. Wash separately from other laundry.
Engineering Controls:	Manufacturing: Provide general and/or local exhaust ventilation to control airborne levels below the exposure guidelines. End use: Generally not required when treatment dilution is used but local exhaust or ventilation may be used if necessary.
Other Precautions:	An adequate supply of clean, potable water should be available to allow thorough flushing of skin and eyes in event of contact with this compound.

Section 9 – Physical Data

Odor:	Mild odor	Melting Point:	Not Available
Physical State:	Viscous liquid	Flash Point:	Will not flash
Color:	White	Specific Gravity:	1.05 (g/ml)
Bulk Density:	See specific gravity	pH:	6.3
Vapor Pressure:	Not Available	Water Solubility:	Disperses
Viscosity:	At τ10 (10) [Pa·s] (20 °C): 0.25 η	Refractive Index:	Not Available

Section 10 – Toxicity

EPA Toxicity Category:	III, Caution	Oral LD_{50}:	>550 mg/kg
Skin Contact:	Moderately irritating	Dermal LD_{50}:	>5000 mg/kg
Eye Contact:	Minimally irritation	Inhalation LC_{50}:	>2.04 mg/1
NFPA Classification:	Fire – 0 Reactivity – 0	Health – 2 Special - none	
Other Comments:	Avoid cross contamination. Always wash hands thoroughly after handling pesticides and before eating, drinking, or smoking.		

Section 11 – Ecological Data

Aquatic:	Lambda cyhalothrin: LC_{50} = 0.36 ug/L (rainbow trout)
Avian:	Lambda cyhalothrin: LD_{50} = 3950 mg/kg (mallard duck)
Bioaccumulation:	Has potential to bioaccumulate.
Summary:	This material is toxic to fish. Do not contaminate waterways by cleaning of equipment or by disposal of wastes. Untreated effluent should not be discharged where it will drain into lakes, streams, or ponds.

Section 12 – Transportation

DOT:	Not regulated
IATA:	Not regulated
IMDG:	Environmentally hazardous substance, liquid, n.o.s. (9.7% lambda cyhalothrin), UN3082, Class 9, PG III, marine pollutant
Federal Motor Carrier Classification:	Insecticides, liquid/dry, NOIBN

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.