1. IDENTIFICATION

Product Name: LAMBDA-CY AG

EPA Registration No. 83222-42

Chemical Name of active ingredient(s):

Company Name:

Lambda-cyhalothrin

Direct Ag Source, LLC

30473 260th St. Eldora, IA 50627

For Medical and Chemical Emergencies, Spill, Leak, Phone: 1-800-424-9300

Fire, Exposure, or Accident, Call Chemtrec:

2. HAZARDS IDENTIFICATIONS

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

PHYSICAL PROPERTIES:

Appearance: Vary pale yellow liquid Odor: Moderate mineral spirits-like

PHYSICAL AND CHEMICAL HAZARDS: Combustible liquid. Do not use or store near heat or open flame. Do not use this product in or on electrical equipment due to the possibility of shock hazard.

3. COMPOSITION/INFORMATION ON INGREDIENTS

ACTIVE INGREDIENT	CAS NUMBER	%
Lambda-cyhalothrin	91456-08-6	11.4
Other Ingredients		88.6

4.FIRST AID MEASURES

FIRST AID		
IF SWALLOWED	 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. 	
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. 	
IF ON SKIN OR CLOTHING	 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	 Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice. 	

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For medical emergencies call Prosar 24 hours a day at 1-877-250-9291.

Note to Physician – Contains petroleum distillate – vomiting may cause aspiration pneumonia.

5. FIRE FIGHTING MEASURES

FLASH POINT: 64.4°C (141.8°F)

AUTOIGNITION TEMPERATURE: Not available

FLAMMABLE LIMITS: Not applicable

EXTINGUISHING MEDIA: Water fog, foam, carbon dioxide, dry chemical, halogenated agents.

FIRE & EXPLOSION 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.

FIRE-FIGHTING EQUIPMENT: Self-contained breathing apparatus with full facepiece and protective clothing.

6. ACCIDENTAL RELEASE MEASURES

ACTION TO TAKE FOR SPILLS/LEAKS: This material is harmful to aquatic organisms. Releases to natural waters should be reported to appropriate water pollution control authorities. Releases of untreated effluent to the sewer should be immediately reported to the public treatment works. Make sure all personnel involved in the spill cleanup follow good industrial hygiene practices. A small spill can be handled routinely. Use adequate ventilation to prevent inhalation. Wear suitable protective clothing and eye protection to prevent skin and eye contact. Use the following procedures:

- 1. Do not allow material to enter streams, sewers or other waterways.
- 2. Spread absorbent on the liquid such as clay, sand, sawdust, or dirt. Sweep up and place in a suitable container for disposal and label the contents.
- 3. Rinse with a small amount of water and use absorbent to collect the wash solution. Absorb any excess liquid as indicated above, and add to the disposal container.
- 4. Seal drum and dispose of contaminated material in a facility permitted for hazardous waste. Large spills should be handled according to a spill plan. Otherwise, in case of emergency call, day or night, 800-424-9300, Chemtrec.

7. HANDLING AND STORAGE

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

PRECAUTIONS TO BE TAKEN IN HANDLING: Keep container closed when not in use. Handle and open container in a manner as to prevent spillage. Do not contaminate water, food or feed by storage, disposal or by cleaning equipment. Do not reuse empty container. If container is damaged or spill occurs, use product immediately or dispose of product and damaged container as indicated in Section 13.

PRECAUTIONS TO BE TAKEN IN STORAGE: Store in original containers only. Keep container closed when not in use. Do not store near food or feed. In case of spill or leak on floor or paved surfaces, soak up with sand, earth, or synthetic absorbent. Remove to chemical waste area.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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

SKIN PROTECTION: Wear coveralls over long-sleeved shirt and long pants, chemical-resistant footwear plus socks, chemical-resistant apron when mixing or loading or exposed to the concentrate, and chemical-resistant headgear for overhead exposure.

EYE PROTECTION: Use chemical goggles. If vapor exposure causes eye discomfort, use a NIOSH approved full-face respirator.

HAND PROTECTION: Chemical-resistant gloves, such as barrier laminate or butyl rubber ≥14 mils.

SAFETY DATA SHEET DIRECT AG SOURCE, LLC LAMBDA-CY AG

RESPIRATOR REQUIREMENTS: For exposures in enclosed areas, use a NIOSH approved respirator with an organic vapor (OV) cartridge or canister with any R, P or HE prefilter.

ENGINEERING CONTROLS: Use only with adequate ventilation. Local exhaust ventilation may be necessary for some operations. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

USER SAFETY RECOMMENDATIONS:

Users should:

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

EXPOSURE LIMITS:

Chemical Name	OSHA/PEL	ACGIH/TLV	OTHER
Lambda-cyhalothrin	NE	NE	

NE: Not Established

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Very pale yellow liquid **ODOR:** Moderate mineral spirits-like

FLASH POINT: 141.8°F

pH: 5.45

SPECIFIC DENSITY: 0.9435 @25°C

10. STABILITY AND REACTIVITY

STABILITY: This product is stable under normal use and storage.

CONDITIONS TO AVOID: Not known

MATERIALS TO AVOID: Oxidizing agents, alkalies, calcium hypochlorite.

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

gases.

HAZARDOUS POLYMERIZATION: Not known to occur.

11.TOXICOLOGICAL INFORMATION

ACUTE TOXICITY/IRRITATION STUDIES:

Acute Oral LD_{50} (Rat): 81 mg/kg Acute Dermal LD_{50} (Rat): >2,000 mg/kg

Acute Inhalation LC₅₀ (Rat): 0.622 mg/L air (4-hours)

Eye Irritation (Rabbit): Mildly irritating
Dermal Irritation (Rabbit): Slightly irritating
Dermal Sensitization: Not availabel

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.

TARGET ORGANS: Lambda-cyhalothrin technical: Liver, nervous system

CARCINOGENICITY:

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

SAFETY DATA SHEET DIRECT AG SOURCE, LLC LAMBDA-CY AG

> CARCINOGENICITY: ACGIH: Not listed IARC: Not listed NTP: Not listed OSHA: Not listed

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL HAZARDS: This pesticide is extremely toxic to fish and aquatic organisms and toxic to wildlife. Do not apply when weather conditions favor drift from treated areas. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas.

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 and rain does not blow or wash pesticide off the treatment area. Rinsing application equipment over the treated area will help avoid runoff to water bodies or drainage systems.

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.

13. DISPOSAL CONSIDERATIONS

PESTICIDE DISPOSAL: 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. Discarded product is not a hazardous waste under RCRA, 40 CFR 261.

CONTAINER DISPOSAL: Do not reuse empty containers. Place in trash or offer for recycling if available. If partly filled, call your local solid waste agency or 1-800-CLEANUP for disposal instructions. Never place unused product down any indoor or outdoor drain.

14.TRANSPORT INFORMATION

DOT CLASSIFICATION:

UN 3352, Pyrethroid pesticides, liquid, toxic, 6.1, PGIII

(Combination packages with inner packagings less than 4 liters (1.057 gallons) may be reclassified as a Consumer Commodity (ORM -D). These packages cannot be shipped by air freight.)

INTERNATIONAL TRANSPORTATION:

IMO (vessel): Contact registrant
IATA (air): Contact registrant

15. REGULATORY INFORMATION

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

NFPA HAZARD RATINGS NFPA

HEALTH: 3 0 MINIMAL
FLAMMABILITY: 2 1 SLIGHT
REACTIVITY: 0 2 MODERATE
3 HIGH

4 SEVERE

MSDS DATE: 6-26-2012.

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