

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

COMPANY ADDRESS:	EMERGENCY TELEPHONE NUMBERS:
RedEagle International LLC 5143 S. Lakeland Drive - Suite 4 Lakeland, FL 33813	(800) 424-9300 (CHEMTREC, transportation and spills) (800) 222-1222 American Association of Poison Control Centers
PRODUCT NAME:	Lambda- cyhalothrin
CHEMICAL NAME:	[1a(S*),3a(Z)]-(±)-cyano-(3-phenoxyphenyl)methyl-3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2- dimethyl cyclopropane carboxylate
PRODUCT USE:	Insecticide
PRODUCT CODE:	EPA Reg. No. 85678-91

SECTION 2 - HAZARDS IDENTIFICATION SUMMARY

This chemical is considered hazardous according to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Health hazards	Acute toxicity- Oral	Category 3
	Acute toxicity, inhalation	Category 2
	Acute toxicity – Dermal	Category 2
	Aspiration hazard	Category 1

Label elements



Signal word WARNING

Hazard Statements:

Toxic if swallowed.
 Fatal if inhaled.
 Harmful in contact with skin
 Causes eye irritation.
 May be fatal if swallowed and enters airways.
 Causes damage to organs through prolonged or repeated exposure.
 Very toxic to aquatic life with long lasting effects.

SECTION 3 – COMPOSITION, INFORMATION OF INGREDIENTS

COMPONENT	PERCENTAGE	CAS No.
Lambda-cyhalothrin [1a(S*),3a(Z)]-(±)-cyano-(3-phenoxyphenyl)methyl-3-(2-chloro- 3,3,3-trifluoro-1-propenyl)-2,2-dimethyl cyclopropane carboxylate	11.4	91465-08-6
Solvent Naphtha	83.16	64742-94-5
Other ingredients	5.44	n/a

SECTION 4 - FIRST AID MEASURES

IF IN EYES: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses if present, after the first 5 minutes, then continue 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 SWALLOWED: SPEED IS ESSENTIAL. Immediate medical attention required. If available give an absorbent such as activated charcoal, bentonite, or Fuller's Earth. Call a poison control center or doctor immediately for treatment advice. Do not induce vomiting unless told to do so by poison control center or doctor. Have a person sip a glass of water if able to swallow. Do not give anything by mouth to an unconscious person.

IF INHALED: Move the person to fresh air, if person is not breathing, call 911 or an ambulance, then give artificial respiration. Do not use mouth-to-mouth method. Use pocket mask with one-way valve or another proper respiratory medical device. Call a poison control center or doctor for further treatment advice.

NOTE TO PHYSICIAN: This product is a pyrethroid. If large amounts have been ingested, the stomach and intestines should be evacuated. Treatment is symptomatic and supportive. Digestible fats, oils, or alcohol may increase absorption and should be avoided. This product contains petroleum distillate. Vomiting may cause aspiration pneumonia.

Have a product container or label with you when calling a poison control center or doctor, or going for treatment.

SECTION 5 - FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: Use foam, dry chemical, carbon dioxide, or water spray when fighting fires involving this material.

FIRE AND EXPLOSION HAZARD Evacuate area. When heated, vapors dangerous to health may be formed.

FIRE FIGHTING INSTRUCTIONS: During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Evacuate area and fight fire from a safe distance. Dike and collect water used to fight fire to prevent environmental damage due to run off. This material is toxic to aquatic life with long lasting effects.

FIRE FIGHTING EQUIPMENT: Full firefighting turn-out gear (Bunker gear) including self-contained breathing apparatus with full face piece.

HAZARDOUS COMBUSTION PRODUCTS: Product will emit toxic fumes when heated.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

IN CASE OF SPILLS OR LEAKS: Stop the source of the spill if safe to do so. Contain the spill to prevent further contamination of soil, surface water, or ground water. Clean up spills immediately. Observe precautions in Section 8 of this document. Keep unnecessary and unprotected personnel from entering.

SMALL SPILL: Absorb small spills with sand, vermiculite, or other absorbent inert ingredients. Place material in a container for proper disposal.

LARGE SPILL: Dike spill using absorbent or impervious material such as clay or sand. Recover and contain as much free liquid as possible for reuse or disposal. Allow absorbed material to solidify and scrape up for disposal. After removal, clean contaminated area thoroughly with water. Pick up wash liquid with additional absorbent for disposal. Minimize use of water to prevent environmental contamination.

CAUTION: Minimize use of water to prevent runoff into municipal sewers or other open bodies of water and minimize environmental contamination. Be sure to isolate any contaminated water. Contact your State Pesticide or Environmental Control Agency, or nearest EPA Regional Office for guidance on disposal.

SECTION 7 - HANDLING AND STORAGE

KEEP OUT OF REACH OF CHILDREN!

HANDLING: Use only in a well-ventilated area. Do not inhale mist or vapors. Wear proper safety

equipment specified in Section 8 when mixing, loading, or otherwise handling concentrate. Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove clothing if pesticide gets inside clothing. Then wash thoroughly and put on clean clothing. Remove PPE after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing. Persons with a history of skin sensitization should not be used in any process involving this material. Do not reuse containers.

STORAGE: Keep pesticide in original container. Keep container tightly closed when not in use. Store in a locked storage area. Avoid cross contamination with other pesticides or fertilizers during handling and storage. Store in a cool, dry place. Do not contaminate water, feed, or food by storage and disposal. Do not store diluted spray.

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE LIMITS: None established.

ENGINEERING CONTROLS: Do not breathe vapor or mists. If specific use conditions create an environment for excessive exposure, use proper ventilation. Facilities storing or utilizing this material should be equipped with activated charcoal, an eyewash facility, and a safety shower.

PERSONAL PROTECTIVE EQUIPMENT:

EYE PROTECTION: Protective eyewear. An emergency eyewash or water supply should be readily accessible to the work area.

SKIN PROTECTION: Wear coveralls over a long-sleeved shirt and long pants, chemical resistant shoes plus socks, and chemical-resistant gloves made of any waterproof material.

Wear a chemical resistant apron when cleaning equipment, mixing, or loading. For overhead exposure wear chemical-resistant headgear. An emergency shower or water supply should be readily accessible to the work area.

RESPIRATOR: Normally not required. If vapors or mists may exceed acceptable levels, wear NIOSH approved air-purifying respirator approved for pesticides. If there is a potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air-purifying respirators may not provide adequate protection, use positive-pressure, air-supplied respirator.

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.

USER SAFETY RECOMMENDATIONS: 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.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Light yellow clear liquid
Odor:	Aromatic solvent odor
pH:	5.5-6.0 [Conc. (1%)]
Boiling Point:	No data available
Freezing Point:	No data available
Flash Point:	No data available
Evaporation Rate:	No data available
Flammability:	No information available
Flammability Limits:	No data available
Vapor Pressure:	No data available
Vapor Density:	No data available
Relative Density:	0.93-0.95 (7.75-7.85 lb/gal)
Solubility:	No data available
Partition Coefficient:	No data available
Auto-Ignition Temperature:	Not applicable
Decomposition Temperature:	No data available
Viscosity:	No data available

SECTION 10 - STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable under normal handling and storage conditions.

HAZARDOUS REACTION/POLYMERIZATION: Under normal storage conditions and use, hazardous reactions will not occur.

CONDITIONS TO AVOID: Extreme temperatures.

INCOMPATIBLE MATERIALS: Avoid strong oxidizers, strong acids, strong bases, heat, and sources of ignition.

HAZARDOUS DECOMPOSITION PRODUCTS: Oxides of nitrogen, carbon, sulfur, and hydrogen chloride.

SECTION 11 - TOXICOLOGICAL INFORMATION

ACUTE TOXICITY:

Oral LD ₅₀ (rat):	81 mg/kg
Dermal LD ₅₀ (rabbit):	>2,000 mg/kg
Inhalation LC ₅₀ (rat):	0.62 mg/L, 4hr aerosol
Eye irritation (rabbit):	Moderately irritating to the eye
Skin irritation (rabbit):	Slightly irritating.
Inhalation	Harmful by inhalation
Skin contact	May be harmful in contact with skin. May be harmful if absorbed through the skin
Ingestion:	May be fatal if swallowed

Sensitization No information available

Carcinogenicity Lambda Cy tech is not a developmental or reproductive toxicant. No treatment related tumors in rats or mice

Reproductive effects Not available

SECTION 12 - ECOLOGICAL INFORMATION

ECOTOXICITY: Extremely toxic to fish and aquatic life with long lasting effects. Do not apply to areas where surface water is present, or to intertidal areas below the mean high-water mark. Do not apply where runoff might occur. Do not apply when weather conditions favor drift from treated areas. Do not contaminate water when cleaning equipment or disposing of equipment wash water or rinsate. Toxic to bees exposed to direct treatment. Do not apply while bees are actively visiting the treated area.

MOBILITY IN SOIL: No data available on the degradability of the product.

SECTION 13 - DISPOSAL CONSIDERATIONS

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

PESTICIDE DISPOSAL:

Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative of the nearest EPA Regional Office for guidance.

CONTAINER HANDLING:

Containers 5 gallons or less: Nonrefillable container. Do not reuse or refill containers. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full of 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. Once

cleaned, offered for recycling or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill or by other procedures approved by State and local authorities. Do not cut or weld metal containers.

Containers larger than 5 gallons: Nonrefillable container. Do not reuse or refill containers. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment. Fill the container ¼ full of water. Replace and tighten closures. Tip container on its side and roll back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip 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. Once cleaned, offer for recycling or reconditioning if appropriate. If recycling is not available, puncture or dispose of in a sanitary-landfill or incineration or if allowed by State and local authorities, by burning. If burned, stay out of smoke.

SECTION 14 - TRANSPORT INFORMATION

DOT:

UN/ID no	UN3352
Proper shipping name	Pyrethroid pesticide, liquid, toxic (Lambda-Cyhalothrin)
Hazard Class	6.1
Packing Group	III
Description	UN3352 Pyrethroid pesticide, liquid, toxic (Lambda-Cyhalothrin) 6.1, III

IATA

UN/ID no	UN3352
Proper shipping name	Pyrethroid pesticide, liquid, toxic
Hazard Class	6.1
Packing Group	III
Description	UN3352, Pyrethroid pesticide, liquid, toxic (Lambda-Cyhalothrin), 6.1, III

IMDG

UN/ID no	UN3352
Proper shipping name	Pyrethroid pesticide, liquid, toxic (Lambda-Cyhalothrin)
Hazard Class	6.1
Packing Group	III
Description	UN3352, Pyrethroid pesticide, liquid, toxic (Lambda-cyhalothrin), 6.1, III, MARINE POLLUTANT
EmS	F-A, S-A
Environmental hazards	Yes

SECTION 15 - REGULATORY INFORMATION

EPA/FIFRA:	RESTRICTED USE PESTICIDE
CERCLA REPORTABLE QUANTITY:	Not listed.
SARA	
311/312:	Acute health; Chronic health
313:	This product does not contain substances which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.
TSCA:	Exempted - solely for FIFRA regulated use.

CALIFORNIA PROP 65: WARNING: This product does not contain substances known to the State of California to cause cancer and/or reproductive/developmental effects.

SECTION 16 - OTHER INFORMATION

NFPA (National Fire Protection Association) HAZARD RATINGS

HEALTH	FLAMMABILITY	REACTIVITY
3	2	0

4=Severe 3=Serious 2=Moderate 1=Slight 0=Minimal

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This Safety Data Sheet (SDS) serves different purposes than and DOES NOT REPLACE OR MODIFY THE EPA APPROVED PRODUCT LABELING (attached to and accompanying the product container). This SDS provides important health, safety, and environmental information for employers, employees, emergency responders and others handling large quantities of the product in activities generally other than product use, while the labeling provides that information specifically for product use in the ordinary course. Use, storage and disposal of pesticide products are regulated by the EPA under the authority of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) through the product labeling, and all necessary and appropriate precautionary, use, storage, and disposal information is set forth on that labeling. This data sheet is not a guarantee of safety. Users are responsible for ensuring that they have all current information necessary to safely use the product described by this data sheet for their specific purpose.

It is a violation of federal law to use a pesticide product in any manner not prescribed on the EPA-approved label.