



Lambda 9.7 CS Insecticide

MATERIAL SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Equil Lambda 9.7 CS Insecticide
DESCRIPTION: A liquid pyrethroid insecticide.
EPA Reg. Number: 87276-1

COMPANY IDENTIFICATION:

Envincio LLC
501 Cascade Pointe Lane, Suite 103
Cary, NC 27513
www.envincio.com

2. COMPOSITION/INFORMATION ON INGREDIENTS

ACTIVE INGREDIENTS	CAS NO.	% COMPOSITION
Lambda-cyhalothrin	91465-08-6	9.7
Chemical Name:	[1 α (S*),3 α (Z)]-(\pm)-cyano-(3-phenoxyphenyl)methyl-3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2, 2-dimethylcyclopropanecarboxylate	
Chemical Formula:	C ₂₃ H ₁₉ ClF ₃ NO ₃	
Other ingredients		90.3

Ingredients not precisely identified are proprietary or non-hazardous. Values are not product specifications.

3. HAZARD IDENTIFICATION

HAZARDS TO HUMANS AND DOMESTIC ANIMALS: Harmful if absorbed through skin. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

ENVIRONMENTAL HAZARDS: This product is extremely toxic to fish, highly toxic to bees and may affect aquatic organisms. Refer to Section 12 (Ecological Information) for more information.

HAZARDOUS DECOMPOSITION PRODUCTS: This product may thermally decompose in a fire generating irritating and possibly toxic gasses.

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 contact 1-866-257-4118 for emergency medical treatment information.

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.

5. FIRE-FIGHTING MEASURES

FLASH POINT (PMA-4): Not applicable

FLAMMABLE LIMITS (LFL-UFL): Not applicable

FIRE AND EXPLOSION HAZARDS: Not a fire or explosion hazard.

MEANS OF EXTINCTION: Foam, dry chemical or CO₂.

FIRE FIGHTING INSTRUCTIONS: Evacuate nonessential personnel to prevent exposure to fire, smoke, fumes or products of combustion. Prevent use of contaminated buildings, area and equipment until decontaminated. Dike and collect any runoff to prevent entry to drains or water bodies. Contaminated buildings, areas and equipment must be decontaminated before reuse.

FIREFIGHTING EQUIPMENT: Self-contained breathing apparatus and full bunker gear.

NFPA RATINGS: Health – 1 / Flammability – 1 / Instability – 0

6. ACCIDENTAL RELEASE MEASURES

Clean up spills immediately observing the precautions in Section 8 of this MSDS. Control spill at the source and dike spill to prevent material from entering soil, sewers, waterways or low areas. Cover entire spill with absorbing material and place into compatible disposal containers. Scrub the area with hard water detergent (e.g., Tide, Joy, Spic and Span) and pick up wash liquid with absorbent and place into compatible disposal containers. Once all material is cleaned up and placed in disposal containers, seal the containers and arrange for disposition.

7. HANDLING AND STORAGE

Avoid contact with skin, eyes or clothing. Avoid breathing spray mist or vapor. Wash thoroughly with soap and water after handling and 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. Wash contaminated clothing before reuse and discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.



Lambda 9.7 CS Insecticide

MATERIAL SAFETY DATA SHEET

Do not contaminate water, food, or feed by storage or disposal. Keep container closed when not in use. Do not store near food or feed. Shake well before use. Protect from freezing. In case of spill or leak on floor or paved surfaces, soak up with sand, earth, or synthetic absorbent. Remove to chemical waste storage area until proper disposal can be made.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Handle only with adequate ventilation. Facilities storing or utilizing this material should be equipped with an eyewash station and a safety shower.

PROTECTIVE CLOTHING: Chemical-resistant gloves (such as barrier laminate or butyl rubber or nitrile rubber or viton), long-sleeved shirt and long pants, shoes plus socks.

GENERAL: 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. Follow manufacturer's instruction for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

9. PHYSICAL DATA

APPEARANCE: White viscous liquid

ODOR: Slight aromatic petroleum odor

pH: 6.1 - 6.5

VISCOSITY η AT τ 10 (10) [Pa·s] (20 °C): 0.25

SPECIFIC GRAVITY/BULK DENSITY: 1.057 g/mL

10. STABILITY AND REACTIVITY

CONDITIONS TO AVOID: None known.

CHEMICAL STABILITY: Stable under normal use and storage conditions.

HAZARDOUS DECOMPOSITION PRODUCTS: Thermal decomposition may generate carbon monoxide and dioxide, nitrogen oxides, ammonia, cyanuric acid, biuret, halogen, halogen acids and possible trace amounts of carbonyl halide.

INCOMPATIBILITY WITH OTHER MATERIALS: Oxidizing agents, alkalis, calcium hypochlorite.

POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION

ACUTE ORAL TOXICITY:

Oral LD₅₀ (rat): > 550 mg/kg

ACUTE DERMAL TOXICITY:

Dermal LD₅₀ (rat): > 5,000 mg/kg

ACUTE INHALATION TOXICITY:

Inhalation LC₅₀ (rat): > 2.04 mg/L (4-hour)

EYE IRRITANT:

Rabbit – Causes minimal eye irritation

SKIN IRRITATION:

Rabbit – Causes moderate skin irritation

SENSITIZATION:

Guinea Pig – Not a contact sensitizer

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:

None known.

CARCINOGENICITY:

ACGIH: Not listed

IARC: Not listed

NTP: Not listed

OSHA: Not listed

MUTAGENIC DATA: No evidence of mutagenic effects during in vivo and in vitro assays.

ADDITIONAL DATA: Not known to cause reproductive or birth defects at normal exposure levels.

12. ECOLOGICAL INFORMATION

This product is extremely toxic to fish and other aquatic organisms. Do not contaminate water when cleaning equipment or disposing of equipment wash water. Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Apply this product only as specified on this label. When making applications, care should be used to avoid household pets, particularly fish and reptile pets.



Lambda 9.7 CS Insecticide

MATERIAL SAFETY DATA SHEET

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.

AQUATIC TOXICITY:

Rainbow Trout (LC₅₀): 0.19 ppb

Bluegill Sunfish (LC₅₀): 0.21 ppb

Water Flea (EC₅₀): 0.04 ppb

AVIAN TOXICITY: Mallard Duck (LD₅₀): > 3,950 mg/kg

OTHER: Bees (LD₅₀): 0.038 µg/bee (contact)

13. DISPOSAL CONSIDERATIONS

Do not contaminate water, food or feed by disposal.

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: Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Refer to the product label for additional container disposal instructions.

14. TRANSPORT INFORMATION

When shipped by land or air in containers ≤ 119 gallons (450L):

DOT PROPER SHIPPING NAME: Not regulated by DOT.

When shipped by land in containers > 119 gallons (450L):

DOT PROPER SHIPPING NAME: UN3082, Environmentally Hazardous Substance, Liquid, N.O.S. (Lambda-cyhalothrin), 9, PG III, Marine Pollutant

When shipped by vessel:

DOT PROPER SHIPPING NAME: UN3082, Environmentally Hazardous Substance, Liquid, N.O.S. (Lambda-cyhalothrin), 9, PG III, Marine Pollutant

DOT EMERGENCY RESPONSE GUIDE: 171

15. REGULATORY INFORMATION

FIFRA –

All pesticides are governed under the Federal Insecticide, Fungicide, and Rodenticide Act. The regulatory information presented below is pertinent only when this product is handled outside of the normal use and application as a pesticide.

SARA TITLE III – SECTION 302 EXTREMELY HAZARDOUS SUBSTANCES: Not Listed

SARA TITLE III – SECTION 311/312 HAZARD CATEGORIES: Immediate, Delayed

SARA TITLE III – SECTION 312 THRESHOLD PLANNING QUANTITY: Not applicable

SARA TITLE III – SECTION 313 REPORTABLE INGREDIENTS: Acetophenone (98-86-2) 8-10%

CERCLA – Acetophenone (98-86-2) - 5000 lbs

CALIFORNIA PROP 65 STATUS – This product does not contain any chemicals known to the state of California to cause cancer or reproductive toxicity.

16. OTHER INFORMATION

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by CPR.

DISCLAIMER:

Envincio LLC warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. This warranty does not extend to the use of this product contrary to label instructions, or under abnormal conditions or under conditions not reasonably foreseeable to or beyond the control of Seller or Envincio LLC, and Buyer and User assume the risk of any such use. To the extent consistent with applicable law, ENVINCIO LLC MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.



Lambda 9.7 CS

Insecticide

MATERIAL SAFETY DATA SHEET

To the extent consistent with applicable law Envincio LLC or Seller shall not be liable for any incidental, consequential or special damages resulting from the use or handling of this product.

To the extent consistent with applicable law,

THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF ENVINCIO LLC AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF ENVINCIO LLC OR SELLER, THE REPLACEMENT OF THE PRODUCT.

Envincio LLC and Seller offer this product, and Buyer and User accept it, subject to the foregoing Conditions of Sale and Limitation of Warranty and Liability, which may not be modified except by written agreement signed by a duly authorized representative of Envincio LLC.