

Material Safety Data Sheet

Effective Date: 30-NOV-2004
Product: LAMBDA T

I. IDENTIFICATION

Chemical Name: Lambda-Cyhalothrin
Chemical Family: Pyrethroid Insecticide
Formula: Not applicable, formulated mixture.
Synonyms: None
CAS Number: 91465-08-6
EPA Number: 100-1112-5905

II. PHYSICAL DATA

Boiling Point: Not available
Freezing Point: Not determined
Spec Gravity: 1.07 g/ml
Vapor Pressure: 1.5×10^{-9} mm/Hg
Vapor Density: Not available
Solubility: 0.004 mg/l
Volatiles: Not available
Evaporation: Not available
Melting Point: Not applicable
Appearance: Blue opaque liquid (capsule suspension)

III. INGREDIENTS

Material	CAS Number	Percent	TLV	Hazard
Lambda-Cyhalothrin Technical	91465-08-6	11.40	N/E	Toxic; Skin & eye irritant.
Naphthalene		</= 1.40	10 ppm	See note.
Petroleum Solvent			N/E	See note.
Propylene Glycol			N/E	See note.

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

IV. FIRE AND EXPLOSION HAZARD

Flash Point: >200 Degrees F.
Autoignition Temp: Not applicable
Flammable Limit: Not applicable
Extinguishing Media: Use dry chemical, foam or carbon dioxide extinguishing media.
Special Fire Fight Proc: Wear full protective clothing and self-

Material Safety Data Sheet

Effective Date: 30-NOV-2004

Product: LAMBDA T

contained breathing apparatus. Evacuate nonessential personnel from the area to prevent exposure to fire, smoke, fumes or combustion byproducts. Water runoff can cause environmental damage; dike/collect water runoff.

Fire and Expl Hazard: During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion.

V. HEALTH HAZARD

Carcinogen Information: IARC Group 2B (naphthalene)

ACUTE EFFECTS OF OVER EXPOSURE

Swallowing: Moderately toxic by ingestion. Acute Oral LD50 (rat) = 351 mg/kg.
Skin Absorption: Slightly toxic by skin absorption. Acute Dermal LD50 (rat) >2,000 mg/kg.
Inhalation: Practically non-toxic by inhalation. Acute Inhalation LC50 (rat) >2.5 mg/L/4 hours.
Skin contact: Slightly irritating with skin contact (rabbit). No data related to skin sensitization is available.
Eye Contact: Mildly irritating with eye contact (rabbit).
Chronic Effects: Lambda-Cyhalothrin Technical caused reversible paresthesia (abnormal skin sensation). Also caused reversible clinical signs of neurotoxicity in mammals.
Other Hazard: Target organs for Lambda-Cyhalothrin are the liver and nervous system. Target organs for the inert ingredients are the eyes, liver, kidney, respiratory tract, blood, CNS, stomach, thyroid, urinary bladder, and skin.

EMERGENCY AND FIRST AID PROCEDURES

Swallowing: Contact the manufacturer (Syngenta at 800-888-8372), 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.

Skin: If on skin or clothing, remove contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call the manufacturer

Material Safety Data Sheet

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Product: LAMBDA T

(Syngenta at 800-888-8372), a poison control center or doctor for treatment advice.

Inhalation: Move person to fresh air. If not breathing, call 911 then give artificial respiration, preferably mouth to mouth. Call the manufacturer (Syngenta at 800-888-8372), a poison control center or doctor for treatment advice.

Eyes: Hold eyes open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after 5 minutes, then continue rinsing. Call the manufacturer (Syngenta at 800-888-8372), a poison control center or doctor for treatment advice.

Notes to Physician: There is no specific antidote if this product is ingested. Treat symptomatically. Skin contact paresthesia effects (itching, tingling, burning or numbness) are transient, lasting up to 24 hours. Treat symptomatically.

VI. REACTIVITY

Stability: Stable
Conditions to Avoid: None known.
Polymerization: Will Not Occur
Conditions to Avoid: None known.
Incompatibility material: None known.
Hazardous Combustion: Can decompose at high temperatures forming toxic gases.

VII. SPILL OR LEAK PROCEDURES

Spill or Leak Proc: Control the spill at its source. Contain to prevent spreading or contaminating soil or entering sewage and drainage systems or any body of water. Clean up spills immediately, using appropriate PPE as listed in Section VIII. Cover entire spill with absorbent and place in compatible disposal container. Scrub area with hard water detergent (e.g. - Tide). Use absorbent to pick up wash water and place in container with other collected product. Seal and dispose.

Waste Disposal Method: This material must be disposed of according to Federal, State or Local procedures under the Resource Conservation and Recovery Act.

Material Safety Data Sheet

Effective Date: 30-NOV-2004
Product: LAMBDA T

VIII. SPECIAL PROTECTION INFORMATION

Respiration: Use a combination particulate/organic vapor respirator if occupational exposure limits are exceeded. Use a NIOSH organic vapor cartridge respirator with HE prefilter.
Ventilation: Use effective engineering controls to comply with occupational exposure limits.
Gloves: Chemical resistant (nitrile or butyl)
Eyes: Chemical splash goggles
Other: Coveralls, socks and chemical-resistant footwear.

IX. SPECIAL PRECAUTIONS

Special precaution: Keep out of reach of children. Do not store with food, feed or other material to be used or consumed by humans or animals. Do not contaminate water supplies, lakes, streams, ponds or soil with this material.
Other precaution: Store in a well-ventilated, secure area. Prevent eating, drinking, tobacco use and cosmetic application in areas where there is a potential for exposure. Wash thoroughly with soap and water after handling.

X. SHIPPING INFORMATION

Shipping name: Pyrethroid Pesticide, Liquid, Toxic (contains Lambda-Cyhalothrin), 6.1, UN3352, PG III "ERG # 151"
Hazard Class: Poison (6.1)
Identification No: UN3352
Labels Required: Poison (6)
Placarding: Poison (6)
Freight Class: Insecticides, N.O.I., Poison

Chemical Name	Equivalent R.Q.
Naphthalene	100 lbs (>800 gallons)

XI. GENERAL PRODUCT INFORMATION

Helena Chemical Company
PH: 901-761-0050
CHEMTREC: 800-424-9300

01-DEC-2004 09:03:00
Page 5 Of 5

Material Safety Data Sheet

Effective Date: 30-NOV-2004
Product: LAMBDA T

National Fire Protection Association Rating:
(Rating level: 4-Extreme, 3-High, 2-Moderate, 1-Slight, 0-Minimum

Health: 2 Fire: 1 Reactivity: 0

S.A.R.A. Title III Hazard Classification: (Yes/No)

Immediate (Acute) Health: Y Delayed (Chronic) Health: Y
Sudden Release of pressure: N Fire: N
Reactive: N

Mail inquiries to: 225 Schilling Blvd., Suite 300 Collierville, TN 38017
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