



Safety Data Sheet

Report Date 08-Nov-15

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1. Identification

Product Name : LAMBDA T
Synonyms : None
Product Use : Lambda-cyhalothrin, Pyrethroid Insecticide
Manufacturer/Supplier : Helena Chemical Company
Address : 225 Schilling Blvd. Collierville, TN 38017
General Information : 901-761-0050
Transportation Emergency Number : CHEMTREC:800-424-9300

2. Hazard Identification



Signal Word : Danger
Skin Irritation : Causes mild skin irritation
Eye Irritation : Causes eye irritation
Acute Toxicity Oral : 351 mg/kg (male rat)
Acute Toxicity Dermal : >2,000 mg/kg (rat)

Hazard Categories : Oral Tox-4; Eye/Skin Irr-2B/3; Specific Target Organ Tox, Single/Repeated: 3/2; Carcinogen-1B

Hazard Statement : Harmful if swallowed
Causes eye irritation
Causes mild skin irritation
May cause drowsiness or dizziness
May cause damage to organs through prolonged or repeated exposure
May cause cancer

3. Composition / Information on Ingredients

Component	CAS Number	Weight %
Naphthalene	91-20-3	<1.5
Propylene Glycol	57-55-6	Trade Secret
Petroleum Solvent	Trade Secret	Trade Secret
Lambda-cyhalothrin	91465-08-6	11.4
Other nonhazardous ingredients	Nonhazardous	>87.1



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4. First Aid Measures

- Eye** : Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after 5 minutes, then continue rinsing. Call a poison control center or doctor for treatment advice.
- Skin** : 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.
- 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.
- 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.
- Indication of Immediate Medical Attention and Special Treatment Needed** : There is no specific antidote if ingested. Treat symptomatically. Skin contact parasthesia effects are transient, lasting up to 24 hours. Treat symptomatically. Contains petroleum distillate-vomiting may cause aspiration pneumonia.

5. Fire Fighting Measures

- Extinguishing Media** : Use dry chemical, foam or carbon dioxide extinguishing media. If water is used to fight fire, dike and collect runoff.
- Specific Hazards Arising from the Chemical** : During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion.
- Special Fire Fight Proc** : Wear full protective clothing and self-contained breathing apparatus. Evacuate nonessential personnel from the area to prevent exposure to fire, smoke, fumes or products of combustion.

6. Accidental Release Measures

- Personal Precautions** : Keep unprotected and unnecessary personnel out of spill area.
- Protective Equipment** : Splashproof goggles or face shield, chemical-resistant gloves, coveralls, socks and chemical-resistant footwear. Use NIOSH-approved respirator with organic vapor cartridge with an R, P or HE filter. Eyewash and emergency shower should be available in work area.
- Emergency Procedures** : Control the spill at its source. Contain to prevent spreading or contaminating soil or entering sewage and drainage systems or any body of water.
- Methods and Materials for Containment and Cleanup** : Clean up spills immediately, using appropriate PPE. 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.

7. Handling and Storage



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Precautions for Safe Handling : Prevent eating, drinking, tobacco use and cosmetic application in areas where there is a potential for exposure to the material. Wash thoroughly with soap and water after handling.

Conditions for Safe Storage : Store locked up. Store the material in a well-ventilated, secure area out of reach of children and domestic animals. Do not store food, beverages or tobacco products in the storage area.

8. Exposure Controls / Personal Protection

TLV/PEL : Lambda-cyhalothrin: no TLV or PEL established. Napthalene: PEL=10 ppm, TLV=10 ppm (skin).

Appropriate Engineering Controls : Use effective engineering controls to comply with occupational exposure limits.

Personal Protective Equipment : Splashproof goggles/face shield, chemical-resistant gloves/coveralls/socks/chemical-resistant footwear. Use NIOSH-approved respirator with organic vapor cartridge and R, P or HE filter. Eyewash/emergency shower should be available.

9. Physical and Chemical Properties

Odor/Appearance : Blue opaque liquid (capsule suspension)

Flash Point, °F : >200 Degrees F.

Boiling Point, °F : Not available

Melting Point(Freezing point), °C : Not available

Vapor Pressure, mm Hg @ 20 °C : 1.5×10^{-9} mmHg @68 Deg. F.

Vapor Density : Not available

Solubility in Water : 0.004 mg/L

Molecular Formula : Not applicable, formulated mixture.

Density, g/mL @ 25 °C : 1.060-1.070

Evaporation Rate(Butyl Acetate = 1) : Not available

Octanol/Water Partition Coefficient : Not available

pH : 4.5 to 6.0 (neat)

Flammable Limits (approximate volume % in air) : Not available

Auto-ignition Temperature : Not available

Decomposition temperature : Not available

10. Stability and Reactivity

Reactivity : Not reactive

Chemical Stability : Stable

Hazardous Decomposition Products : Not available



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Hazardous Polymerization : Will not occur
Conditions to Avoid : Not available
Incompatible Materials : None known

11. Toxicological Information

Acute Toxicity (Oral LD50) : 351 mg/kg (male rat). Harmful if swallowed.
Acute Toxicity (Dermal LD50) : >2,000 mg/kg (rat). Not classified as hazardous under 29 CFR 1910.1200 (2012).
Acute Toxicity Inhalation LC50 : >2.5 mg/L/4 hours. Not classified as hazardous under 29 CFR 1910.1200 (2012).
Likely Routes of Exposure : Dermal, inhalation
Skin Irritation : Causes mild skin irritation.
Eye Irritation : Causes eye irritation.
Skin Sensitization : Not available
Carcinogenic : Naphthalene=IARC Group 2B (possible human carcinogen); NTP=Anticipated Carcinogen.
Chronic Effects : STOT, Single Exposure: May cause drowsiness or dizziness. STOT, Repeated Exposure: May cause damage to organs through prolonged or repeated exposure.
Other Hazards : Not a developmental or reproductive toxicant.

12. Ecological Information

Ecotoxicity : Lambda-cyhalothrin: Fish (rainbow trout) 96-hour LC50 0.19 ppb; Bird (mallard duck) LD50 oral>3,950 mg/kg; Invertebrate (water flea) 48-hour EC50 0.04 ppb.
Persistence and Degradability : Lambda-cyhalothrin: Not persistent in soil or water.
Bioaccumulative Potential : No information found
Mobility in Soil : Lambda-cyhalothrin: Immobile in soil. Sinks in water (after 24 hours).
Other Adverse Effects : No information found

13. Disposal Considerations

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

14. Transport Information

UN Proper Shipping Name : Pyrethroid Pesticide, Liquid, Toxic (contains Lambda-Cyhalothrin)
Transport Hazard Class : Toxic (6.1)
UN Identification Number : UN3352
Packaging Group : PG III



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- Environmental Hazards** : Marine Pollutant under international regulations. Not listed as a Marine Pollutant per 49 CFR 172.101, Appendix B.
- Transport in Bulk** : If shipped in single package >800 gallons, ship as: RQ, UN3352, Pyrethroid Pesticide, Liquid, Toxic (contains Lambda-Cyhalothrin), 6.1, PG III "ERG # 151"
- Special Precautions for Transportation** : Reportable Quantity (RQ), Naphthalene=100 lbs./800 gal.
- Freight Classification** : Pesticides, N.O.I., Insecticides, Poison

15. Regulatory Information

National Fire Protection Association Rating :

Health: 2 Fire: 1 Reactivity: 0
Rating Level: (4-Extreme, 3-High, 2-Moderate, 1-Slight, 0-Minimum)

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

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

FIFRA Information : This Chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labelling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

EPA Registration Number : 100-1112-5905

FIFRA Signal Word : Warning

FIFRA Label Statement : Restricted Use Pesticide Due to Toxicity to Fish and Aquatic Organisms

FIFRA Label Statement : May be fatal if swallowed. Cause moderate eye irritation.

FIFRA Label Statement : Harmful if absorbed through skin. Avoid contact with eyes, skin or clothing.

FIFRA Label Statement : Prolonged or frequently repeated skin contact may cause allergic reaction in some individuals.

FIFRA Label Statement : Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum

FIFRA Label Statement : or using tobacco. Remove and wash contaminated clothing before reuse.

FIFRA Label Statement : No additional label statements.

16. Other Information

Data of Preparation/Revision : 08-November-2015