



MATERIAL SAFETY DATA SHEET

PRODUCT : Lambda cyhalothrin Technical

PRODUCT DESIGNATION : Insecticide

Section 1. Product & Company Identification

Common Name : Lambda cyhalothrin Technical

Grade : Technical

Active Ingredient : Lambda cyhalothrin

Chemical Name of Active Ingredient (IUPAC) : (R)-a-cyano-3-phenoxybenzyl (1S)-cis-3-[(Z)-2-chloro-3,3,3-trifluoropropenyl]-2,2-dimethylcyclopropanecarboxylate and (S)-a-cyano-3-phenoxybenzyl (1R)-cis-3-[(Z)-2-chloro-3,3,3-trifluoropropenyl]-2,2-dimethylcyclopropanecarboxylate

Chemical Family of A. I. : Pyrethroid

Molecular Formula of A. I. : $C_{23}H_{19}ClF_3NO_3$

Molecular Mass of A. I. : 449.85

Manufacturer & Supplier : **M/s PERFECT SOLUTIONS**
Office Add: B-371, Paschim Vihar, New Delhi - 110063 (India)
Factory Add: 15/1, 15/2, 15/3 Industrial Estate, Vidisha - 464001 (M.P)

Telephone Number : +91 8375844625

Section 2. Composition / Information on Ingredients

Identity	CAS RN	% W/W content
Lambda Cyhalothrin	91465-08-6	96.50
Other Impurities	00000-00-0	3.50



Section 3. Hazards Identification

Emergency Overview

Appearance and odour: Green/brown liquid

Warning Statements: Keep out of reach of children

Potential Health Effects Likely Routs of Exposure: Skin contact, Inhalation and Ingestion.

Eye Contact: Irrigate the eyes with large amount water or normal saline occasionally lifting upper and lower lids until no evidence of chemical remains and obtain a medical help.

Skin contact: Remove contaminated clothing and shoes immediately. Wash contaminated area with soap or mild detergent and large amount of water until no effects of chemical remains. If symptoms persists get medical help.

Ingestion: Remove by gastric lavage and catharsis, maintain blood pressure and airway, Give oxygen if respiration is depressed. Do not perform gastric lavage if victim is victim is unconscious. Get medical attention immediately.

Section 4. First Aid Measures

Emergency and First Aid Procedure –

If in Eyes: Rinse eyes well with water for at least 15 minutes.

Inhalation: Remove from source of contaminated to open space/fresh air, maintain respiration.

If on Skin: Remove any contaminated clothing, wash skin with soap and water.

If Ingestion: Seek medical advice

If Inhalation:

Note to Physician: Lambdacyhalothrin Technical has no specific antidote if ingested. Treat symptomatically.

Antidote: Treat symptomatically. The effects are reversible.

Section 5. Fire Fighting Measures

Extinguishing Media: Water, carbon dioxide, Dry Chemical, Foam.

SPECIAL FIRE-FIGHTING PROCEDURES: Keep out of smoke, cool exposed containers with water spray. Fight fire from upwind position. Use self-contained breathing equipment. Avoid runoff by diking to prevent entry into sewers or waterways.



Section 6. Accidental Release Measures

Personal Protection: Avoid contact with the spilled material or contaminated surfaces. Do not smoke, eat or drink during the cleanup process. Personnel involved in cleanup should wear full body protective clothing and equipment.

Steps to be taken in case of a spill: Control the spill at its source. Contain the spill to prevent from spreading or contaminating soil or from entering sewage and drainage systems or any body of water. Clean up spills immediately, observing precautions in Protective Equipment Section. Sweep up material and place in a compatible disposal container. Scrub area with hard water detergent (e.g. commercial products such as Tide, Joy, Spic and Span). Pick up wash liquid with additional absorbent and place into compatible disposal container. Once all material is cleaned up and placed in a disposal container, seal container and arrange for disposition.

Section 7. Handling & Storage

Precautions in Handling: Use appropriate (impervious) clothing, gloves and closed foot ware to prevent the repeated contact with skin. Use flash proof and dust resistant goggles to prevent the contact with eyes.

Precautions in Storage: Keep the product in original container tightly closed and correctly labeled. Store in suitable, cool, dry, well ventilated place under lock and key; away from the reach of the children, animals, food and animal feeding stuffs. Store away from the incompatible substances and source of ignition.

Section 8. Exposure Control, Personal Protection

Personal Protection: Wear suitable mask

Protective Gloves: Wear impervious gloves

Eye Protection: Wear flash proof and dust resistant goggles.

Skin Protection: Wear impervious clothing and closed foot ware.

Section 9. Physical and Chemical Properties

Appearance / state : White to off-white powder.

Colour : White



Odour	: Odourless
Melting point	: 49.2°C
Boiling point	: N/A
Specific gravity	: 0.47g/cm ³ at 20°C
Vapour pressure	: 2 X10 ⁻⁴ mPa at 20°C; 2 x 10 ⁻¹ mPa (60°C)
pH	: 5
Flash Point	: 225°C

Section 10. Stability & Reactivity

Chemical Stability: Stable to light.

Hazardous Reaction Product: HCl, HCN, CO

Reactivity: Stable at hydrolysis at ph 5-11.

Section 11. Toxicological Information

Route(s) of Entry

Ingestion: LD ₅₀ , oral, rat	: >5,000 mg/kg body weight
Skin: LD ₅₀ , dermal, rat	: > 2000 mg/kg body weight
Inhalation: 4 hour LC ₅₀ , rat	: is >2.79 mg/L air
Eye Irritation (rabbit)	: Sever irritant
Dermal Irritation (rabbit)	: Sever irritant
Sensitization (guinea pig)	: Non- sensitizer

Section 12. Ecological Information

Acute Oral Toxicity in Birds	: In Mallard ducks >3950 mg/kg of body weight
Acute Toxicity in Fish (96 hrs LC ₅₀)	: Rainbow trout : 0.36lg/l
Acute Toxicity Honey bees	: Oral LC50 48 Hrs. 38 ng/bee

Section 13. Disposal Consideration



Waste Treatment Methods: Wastes resulting from the use of this product may be disposed on site (by use according to the label) or at an approved waste disposal facility. Further information can be obtained from the EPA or the equivalent state and local agencies

Containers: Completely empty bag into application equipment. Check with EPA, State, and local authorities for the current regulations applicable to your area for disposal of waste containers.

Section 14. Transport Information

The data provided in this section is for information only. Please apply the appropriate regulations to properly classify your shipment for transportation.

IMDG Classification

Shipping name : Pyrethroid Pesticide, Solid, Toxic
EMS : F-A, S-F
Label : 6.1
Packing group : III
UN number : 3349
Marine pollutant : Yes

Section 15. Regulatory Information

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 SARA Title III – Section 312 Threshold Planning Quantity N/A SARA Title III – Section 313 Reportable Ingredients None CERCLA – None Listed CALIFORNIA PROP 65 STATUS – Not listed

Section 16. Other Information

All information and instructions provided in this Material Safety Data Sheet (MSDS) are based on the current state of scientific and technical knowledge at the date indicated on the present MSDS and are resented in good faith and believed to be correct. This information applies to the product as such. In case of new formulations or mixes, it is necessary to ascertain that a new danger will not appear. It is the responsibility of persons on receipt of



this MSDS to ensure that the information contained herein is properly read and understood by all people who may use, handle, dispose or in any way come in contact with the product. If the recipient subsequently produces formulations containing this product, it is the recipient's sole responsibility to ensure the transfer of all relevant information from this MSDS to their own MSDS. Accordingly, no guarantee or warrantee expressed or implied is made by PERFECT SOLUTIONS., as to the results to be obtained based upon the user's use of the information, nor does PERFECT SOLUTIONS., assume any liability arising out of user's use of the information.

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