



Sulphur mills limited



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MSDS No. L0133504
Issue Date: 20/05/08
Updated on: 12/01/10

MATERIAL SAFETY DATA SHEET

Section 1: CHEMICAL IDENTITY AND USE

Trade Name: LAMBDA CYHALOTHRIN TECHNICAL

Active ingredient: Lambda-cyhalothrin

Formula: $C_{23}H_{19}ClF_3NO_3$

Chemical Classification: Pyrethroid

Chemical Name: Reaction product comprising equal quantities of (S)-a-cyano-3-phenoxy=benzyl (Z)-(1R,3R)-3-(2-chloro-3,3,3-trifluoroprop-1-enyl)-2,2-dimethylcyclopropane carboxy=late and (R)-a-cyano-3-phenoxybenzyl (Z)-(1S,3S)-3-(2-chloro-3,3,3-trifluoroprop-1-enyl)-2,2=dimethylcyclopropanecarboxylate

CAS No.: 91465-08-6

Molecular weight: 449.9

USE of product: Insecticide.

Section 2: COMPOSITION /INFORMATION ON INGREDIENTS

Ingredients	CAS No.	%	EU No.	PEL/TLV	EU class	NTP/IARC/OSHA
1. Lambda Cyhalothrin	91465-08-6	96.50	DNA	DNA	DNA	DNA
2. Other Impurities		03.50				

Section 3: HEALTH HAZARD INFORMATION

Acute Health effects

Swallowed: 79 mg/kg (male); 56 mg/kg (female) (rat).

Dermal: 632-696 mg/kg (rat).

Inhalation: 0.06 mg/l air (4 h)

Acute exposure effect: Apathy, myatonia, difficult breathing, tremor and in cases of severe intoxication, myospasms.

Emergency treatment: If inhaled, remove victim to fresh air or uncontaminated area. If in eyes, flush with water. If on skin, wash with soap and water. Remove contaminated clothing. See a doctor if irritation persists. If swallowed, induce vomiting by touching back of throat with finger or by giving an ounce of syrup of ipecac with 2 glasses of water. Do not give anything by mouth to an unconscious person.

STEL (ACGIH) DNA IDLH DNA

NFPA Hazard signals: Health=1, Fire=1, Reactivity=1

Section 4: FIRST AID MEASURES

If poisoning occurs, contact a doctor or Poisons Information Center.

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

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

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

Ingestion: Seek medical advice.

Antidote: Treat symptomatically. The effects are reversible.



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Section 5: FIRE AND EXPLOSION HAZARD

Flash point: DNA

Flammable limits: Upper explosive limit (UEL) : Not Applicable

Lower explosive limit (LEL) : Not applicable

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: HANDLING AND STORAGE PRECAUTION

Store in the closed, original container in a well -ventilated area and as cool as possible. Keep away from heat, sparks, open flame and incompatible materials. Do not store near any material intended for use or consumption by human or animals.

Section 7: ACCIDENTAL RELEASE MEASURES

Steps to be taken: Stop leak, if safe to do so. Contain spillage. Absorb in sawdust or sand for disposal. Eliminate sources of ignition. Use personal protective equipment. Stay upwind. Cordon off the area.

Section 8: WASTE DISPOSAL CONSIDERATIONS

Waste Disposal method: Local regulations should be adhered to. Incineration in controlled furnace. Destroy the empty containers in a safe and authorized place. If burnt avoid inhalation of smoke (if burning permitted). Never re-use empty packs.

Section 9: PERSONAL PROTECTIVE

Eyewash and washing facilities must be readily available. For decontamination clothes and equipment have soap and water on hand.

Section 10: PHYSICAL AND CHEMICAL INFORMATION

Appearance: White to off-white powder

Melting point : 49.2°C

Vapour pressure: 2×10^{-4} mPa (20°C) ; 2×10^{-1} mPa (60°C)



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Section 11: REACTIVITY DATA

Chemical stability: Stable to light.
Reactivity: Stable at hydrolysis at pH 5-11.
Incompatible with other material: None known
Hazardous reaction product: HCl, HCN, CO.

Section 12: TOXICITY INFORMATION

Acute toxicity
Eye contact: Mild irritant (rabbit).
Skin contact: Non irritant (rabbit).
Skin sensitization: Non sensitizer (guinea pig).
Mutagenic potential: Non mutagenic in the Ames test.

Section 13 ECOLOGICAL INFORMATION

Birds: Acute oral LD₅₀ for mallard duck >3950 mg/kg. Dietary LC₅₀ for quail >5000 mg/kg.
Fish: LC₅₀ for Rainbow trout: 0.36 µg/l; bluegill sunfish 0.21 µg/l.
For Daphnia: LC₅₀ (48 h) 0.36 µg/l.
Bees: LC₅₀ (oral) 909 ng/bee; (contact) 38 ng/bee

Section 14: TRANSPORT INFORMATION

Type of chemical: Pyrethroid.
State of chemical: Solid
Proper Shipping name: Pyrethroid Pesticide, Solid, Toxic
IMCO class: 6.1
UN Number: 3349
IMDG Code Page: 6221

Section 15: PACKING INFORMATION

Packed in 25 kg multi wall paper bags. Packing group-III.

Section 16: DISCLAIMER

Information contained in this material safety data sheet is believed to be reliable but no representation, guarantee or warranties of any kind are made as to its accuracy, suitability for a particular application or results to be obtained from them. It is up to the User/Distributor to ensure that the information contained in the material safety data sheet is relevant to the product manufactured/handled or sold by him as the case may be, *Sulphur Mills Ltd.* makes no warranties, expressed or implied, in respect of the adequacy of this document for any particular purpose.