

MATERIAL SAFETY DATA SHEET

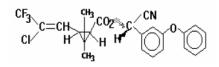
1. Chemical Product Identification

Product Name: cyhalothrin

Molecular Formula: C23H19CIF3NO3

Molecular Weight: 449.86

Structural Formula:



Chemical Name: (RS)-alpha-Cyano-3-phenoxybenzyl (Z)-(1RS,3RS)-(2-chloro-3,3,3-trifluoropropenyl)-2,2-dimethylcyclopropanecarboxylate Cyclopropanecarboxylic acid, 3-(2-chloro-3,3,3-trifluoro- 1-propenyl)-2,2-dimethyl-, cyano(3-phenoxyphenyl) methyl ester

Form: Solid

2. Composition / Information On Ingredients

Composition	CAS No.	Content %
cyhalothrin	91465-08-6	95.0
Other ingredients		5.0

3.HazardsIdentification

Emergency Overview: Caution. Hazard to humans and domestic animals. Keep out of reach of children.

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 the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.



Skin: 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.

Ingestion: Immediately call a poison control center or doctor for treatment advice. Do not induce vomiting unless directed to do so by a physician or poison control center. Have a person sip a glass of water if able to swallow. Do not give anything by mouth to an unconscious person.

Inhalation: Move person to fresh air. If person is not breathing, call an ambulance, and then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.

Note to Physician: There is no specific antidote. All treatment should be based on observed signs and symptoms of distress in the patient. Overexposure to materials other than this product may have occurred.

5. Fire-Fighting Measures

Unusual Fire, Explosion and Reactivity Hazards: During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion. **In Case of Fire:** Use dry chemical, foam or CO2 extinguishing media. Wear full protective clothing and self-contained breathing apparatus. Evacuate nonessential personnel from the area to prevent human exposure to fire, smoke, fumes or products of combustion. Prevent use of contaminated buildings, area, and equipment until decontaminated. Water runoff can cause environmental damage. If water is used to fight fire, dike and collect runoff.

6. Accidental Release Measures

Collect leaking and spilled liquid in sealable containers as far as possible. Absorb remaining liquid in lime, damp sawdust, sand or inert absorbent and remove to safe place. Do NOT wash away into sewer.

7. Handling and Storage

Provision to contain effluent from fire extinguishing. Separated from strong oxidants, food and feedstuffs. Well closed. Keep in a well-ventilated room



8. Exposure Controls/Personal Protection

Engineering Controls: Where engineering controls are indicated by use conditions or a potential for excessive exposure exists, the following traditional exposure control techniques may be used to effectively minimize

employee exposures: general area dilution/exhaust ventilation.

Eye/Face Protection: Eye and face protection requirements will vary dependent upon work environment conditions and material handling practices. Appropriate equipment should be selected for the particular use intended for this material. Eye contact should be prevented through use of chemical safety glasses with side shields or splash proof goggles. An emergency eye wash must be readily accessible to the work area.

Body Protection: Applicators and other handlers must wear long-sleeved shirts, long pants, chemical resistant, waterproof gloves, and shoes plus socks during mixing, loading, applying and clean-up and repair activities. Where overhead exposure is possible, chemical resistant headgear should be worn.

9. Physical and Chemical Properties

Decomposes : below boiling point at 275°C

Melting point: 10°C

Relative density (water = 1): 1.2

Solubility in water: none

Vapour pressure, Pa at 20°C: 0.001

Flash point: 80°C

Octanol/water partition coefficient as log Pow: 6.9

10. Stability and Reactivity

Stability: Stable under standard conditions.

Hazardous Polymerization: Will not occur.

Conditions to Avoid: None known.

11. Toxicological Information

Acute Toxicity/Irritation Studies (Finished Product)



Ingestion: Oral (LD50 Rat) :166 mg/kg body weight Dermal: Dermal (LD50 Rat) : > 2000 mg/kg body weight Inhalation: Inhalation (LD50 Rat) : > 0.086 mg/l air - 4 hours Skin Irritation: Rabbit: no irritating Eye Irritation: Rabbit: Mildly irritating skin sensitizer: Moderate skin sensitizer (guinea pigs)

12. Ecological And Ecotoxicological Information

The substance is very toxic to aquatic organisms. This substance may be hazardous to the environment; special attention should be given to honey bees. Avoid release to the environment in circumstances different to normal use.

13.DisposalConsiderations

General Disposal Guidance: Do not contaminate water, food, or feed by storage or disposal. Contamination with this product will render water, food or feed unfit for hu ma or animal consumption.

Container Disposal: Triple rinse the empty container. Add the risings to the spray mixture in the tank. Make the empty rinsed container unsuitable for further use. Dispose of the container in accordance with provincial requirements. For information on disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency.

14. Transport Information

Not applicable

15.Regulatory Information

Not applicable .

16.OtherInformation

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 presented 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 produce formulations containing this product, it is the recipients sole responsibility to ensure the transfer of all relevant information from this MSDS to their own MSDS.