

MATERIAL SAFETY DATA SHEET
ALPHA-CYPERMETHRIN 10% SC

1. IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY

Identification of the substance	: Alpha-cypermethrin 10% SC
Use of the substance	: Insecticide
Manufacturer/supplier	: Tagros Chemicals India Limited
Address	: "Jhaver Centre", Rajah Annamalai Building, IV Floor, 72, Marshalls Road, Egmore, Chennai-600 008, India
Emergency telephone number	: +91-44-42007400
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E-mail	: info@tagros.com

2. HAZARDS IDENTIFICATION

POTENTIAL HEALTH EFFECTS: EMERGENCY OVERVIEW

Eyes	: This product may cause slight irritation to eyes.
Skin	: This product may cause paresthesia.
Ingestion	: Harmful if swallowed.
Inhalation	: No hazard in normal use. Product is unlikely to cause any discomfort or irritation.
Environment	: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical name	CAS No.	EC No.	Classification	Con. (%) w/w
Alpha-Cypermethrin, A racemate comprising (S)- α -cyano-3-phenoxybenzyl (1R, 3R)-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate and (R)- α -cyano-3-phenoxybenzyl (1S, 3S)-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate	67375-30-8	257-842-9	T; R25 Xn; R48/22 Xi; R37 N; R50-53	10.0
Others	---	---	----	90.0

4. FIRST AID MEASURES

Contact with eyes	: Rinse immediately with plenty of water keeping eyelids open. Seek medical advice and show the container or this material safety data sheet.
Contact with skin	: Immediately remove contaminated clothing and footwear and flush skin with plenty of water. Wash affected area thoroughly with soap and water as soon as possible.
Ingestion	: Do not induce vomiting. Immediately rinse mouth then drink plenty of water. Seek medical attention immediately.
Inhalation	: If inhaled, remove to fresh air and keep at rest. Obtain medical aid if required.

5. FIRE FIGHTING MEASURES

Flash point	: Non-flammable
Extinguishing media	: If product is involved in a fire, alcohol resistant foam, dry extinguishing media or carbon dioxide.
Special exposure hazards	: Thermal decomposition products may emit toxic fumes of hydrogen cyanide and oxides of carbon and nitrogen.
Protective equipment for fire-fighting	: Do not breathe fumes. Wear protective clothing and self contained breathing apparatus.
Fire fighting guidance	: Whenever pyrethroid products are involved in a major fire, advise the fire service to wear protective clothing and breathing apparatus. Inform the fire service and other relevant authorities that pyrethroids are highly toxic for fish, and that water should be used only to cool unaffected stock. In this way, the accumulation of polluted run-off from the site is prevented.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions	: Avoid contact with spilled material or contaminated surfaces. If ordinary clothing becomes contaminated remove it immediately. When dealing with the spillage do not eat, drink or smoke and wear personal protective clothing as detailed in section 8.
Environmental precautions	: Do not let product contaminate subsoil. Do not allow product to enter drains. Do not flush into surface water. Prevent further spillage if safe.
Methods for cleaning up	: Adsorb spillages onto sand, earth or any suitable adsorbent material. Transfer to a container for disposal. Wash the spillage area with water. Washings must be prevented from entering surface water drains.

7. HANDLING AND STORAGE

Handling	: Wear chemically impervious gloves such as neoprene or nitrile. Wear safety glasses, goggles or face shield. Mechanical ventilation should be used when handling this product in enclosed spaces. Read and observe all precautions and instructions on the label.
Storage	: Store in original containers, upright and closed. Store in areas that are cool, dry and well ventilated. Store away from seeds, fertilizers and animal feed stuff.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure limit value	: ADI: 0.02 mg/kg bw (JECFA)
Engineering controls	: Mechanical ventilation should be used when handling this product in closed spaces.
Respiratory protection	: NIOSH approved organic vapor respirator in absence of mechanical ventilation.
Hand protection	: Wear chemical resistant PVC or nitrile gloves.
Eye protection	: Wear safety goggles with imperforated side shield and face shield.
Skin protection	: Avoid contact with skin. Wear apron, boots and full protective suit.
Environmental exposure controls	: Keep away from food, drink and animal feed stuff. This material and its container must be disposed of as hazardous waste. Avoid release to the environment. Refer to special instructions/safety data sheet.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	: Liquid
Color	: White
Odour	: Odorless
Molecular Weight	: 416.3 (Alphacypermethrin)
pH	: pH range: 5 to 8
Persistent foam	: Maximum: 60 ml after 1 min.
Solubility in water	: Miscible
Wet sieve test	: Maximum: 2% of the formulation shall be retained on a 75 µm test sieve.

10. STABILITY AND REACTIVITY

Stability	: Stable under normal conditions.
Conditions to avoid	: Avoid excessive heat and direct sunlight.
Materials to avoid	: None under normal condition of use
Incompatibility	: Strong oxidizing and alkaline agents.

11. TOXICOLOGICAL INFORMATION

Acute toxicity	
Rat LD₅₀ oral, Rats	: >300-2000 mg/kg bw
Rat LD₅₀ dermal, Rats	: >2000 mg/kg bw
Skin irritation	: Non-irritant to skin of rabbits
Eye irritation	: Non-irritant to eye of rabbits

Skin sensitization	: Non-sensitiser to skin of Guinea pigs
Long term studies	
Carcinogenicity	: Non-carcinogenic in rat and mice
Mutagenicity	: Non-mutagenic
Reproductive toxicity	: Non-reprotoxic and teratogenic

12. ECOLOGICAL INFORMATION

Ecotoxicity

<i>Cyprinus carpio</i>	: LC ₅₀ : 0.00084 mg/l (alpha-cypermethin)
<i>Daphnia magna</i>, 24 hours	: EC ₅₀ : 0.14 µg/l water (alpha-cypermethin)
<i>Chlorella vulgaris</i>, 72 hours	: EC ₅₀ : 15.26 µg/ml (alpha-cypermethin)
Bees, 24 hours (oral)	: LD ₅₀ : 0.06 µg/bee (alpha-cypermethin)
Mobility	: No indication of a build-up of alpha-cypermethrin residues in the surface soil layers, or any evidence to suggest significant leaching into sub-surface soil layers.
Persistence and degradability	: Under aerobic conditions of alpha-cypermethrin half-lives were 27 and 13 weeks for sandy clay loam and clay loam respectively.

13. DISPOSAL CONSIDERATIONS

Product disposal	: Do not empty into drains or waterways. Disposal of product would usually be by incineration in an appropriate licensed commercial incinerator. Advice may be obtained from local waste regulation authorities.
Container disposal	: Puncture container to avoid re-use. Dispose of empty container in a sanitary landfill or by incineration, or, if allowed by local authorities, by burning. If burned, stay out of smoke. Follow advice on product label and/or leaflet.

14. TRANSPORT INFORMATION

UN number	: 3352
UN class	: 6.1
UN packaging group	: III
Proper Shipping Name	: PYRETHROID PESTICIDE LIQUID, TOXIC
Additional information	: Alphacypermethrin designated as marine pollutant

15. REGULATORY INFORMATION

Classification	: Xn: Harmful N: Dangerous for the environment
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Risk Phrases	: R22: Harmful if swallowed. R48/22: Harmful: danger of serious damage to health by prolonged exposure if swallowed R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Safety Phrases	: S2: Keep out of the reach of children. S13: Keep away from food, drink and animal feeding stuffs. S20/21: When using does not eat, drink or smoke. S23: Do not breathe gas/fumes/vapour/spray. S24/25: Avoid contact with skin and eyes. S36/37/39 - Wear suitable protective clothing, gloves and eye/face protection. S29/56: Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point. S61: Avoid release to the environment. Refer to special instructions/safety data sheets
Reference regulation	: Regulation (EC) No 1907/2006

16. OTHER INFORMATION

MSDS first issued	: 18 th June 2002
MSDS data revised	: 07 th January 2015

DISCLAIMER

The above information is intended to give general health and safety guidance on the storage and transport of the substance or product to which it relates. It is not intended to apply to the substance or product for which purposes the substance or product label and any appropriate technical usage literature available should be consulted and any relevant licenses, consents or approvals complied with. The requirement or recommendation of any relevant site or working procedure, system or policy in force or arising from any risk assessment involving the substance or product should take precedence over any of the guidance contained in this safety data sheet where there is a difference in the information given. The information provided in this safety data sheet is accurate at the date of publication and will be updated as and when appropriate. No liability will be accepted for any injury loss or damage resulting from any failure to take account of information or advice contained in this safety data sheet.