

MATERIAL SAFETY DATA SHEET**BRAND NAME: DELROS 0.5 DP****GENERIC NAME: DELTAMETHRIN 0.5% DP**

1. IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY

Identification of the substance	:	DELROS 0.5 DP (Deltamethrin 0.5% DP)
Use of the substance	:	Insecticide
Manufacturer/supplier	:	Tagros Chemicals India Private Limited
Address	:	Tagros Chemicals India Private Limited Tagros House, 4 th Floor, No. 4 (Old. 10), Club House Road, Anna Salai, Chennai 600002, Tamilnadu, INDIA
Emergency telephone number	:	+91-44-42007400
Fax number	:	+91-44-28587873
E-mail	:	info@tagros.com

2. HAZARDS IDENTIFICATION

POTENTIAL HEALTH EFFECTS: EMERGENCY OVERVIEW

Eyes	:	May cause slight eye irritation. Avoid contact with eyes.
Skin	:	Slightly irritating. Avoid contact with skin.
Ingestion	:	Harmful if swallowed.
Inhalation	:	Harmful by inhalation. Avoid inhalation of dust.
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
Deltamethrin, (<i>S</i>)- α -cyano-3-phenoxybenzyl (1 <i>R</i> ,3 <i>R</i>)-3-(2,2-dibromovinyl)-2,2- dimethyl-cyclo-propane carboxylate	52918-63-5	258-256-6	T; R23/25 N; R50-53	0.50
Others	---	---	----	99.50

4. FIRST AID MEASURES

Contact with eyes	: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present. Get medical attention if irritation develops and persists.
Contact with skin	: Remove contaminated clothing and clean the affected skin area immediately with soap and plenty of water. Symptoms can be partially alleviated by the application of a vitamin E or moisturising cream. When symptoms persist or in all cases of doubt seek medical advice.
Ingestion	: In the event of collapse, apply artificial respiration. Keep in mind that if mouth-to-mouth resuscitation is used, vomit may contain toxic amounts of Deltamethrin. Keep the person calm and comfortable and obtain medical assistance as soon as possible.
Inhalation	: Move the patient to fresh air and keep warm and at rest. If symptoms persist, call a physician.

5. FIRE FIGHTING MEASURES

Flash point	: Not flammable
Extinguishing media	: If product is involved in a fire, use water spray, foam, dry powder, carbon dioxide or sand.
Special exposure hazards	: In case of fire, hydrogen bromide, hydrogen cyanide and oxides of nitrogen and carbon may be produced.
Protective equipment for fire-fighting	: In the event of fire do not breathe fumes. Wear self contained breathing apparatus and protective suit for fire fighting, NIOSH approved

(or equivalent).

Fire fighting guidance

- : Keep out of smoke. Fight fire from upwind position. Cool closed containers exposed to fire with water spray. Do not allow run-off from fire fighting to enter drains or water courses.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

- : Ensure suitable personal protection during removal of spillages. This means wearing eye protection, chemically resistant gloves, boots and overalls.

Environmental precautions

- : Keep people and animals away. Prevent spills entry into drains, sewers and watercourses.

Methods for cleaning up

- : Sweep up into approved waste disposal container.

7. HANDLING AND STORAGE

Handling

- : Avoid contact with eyes, skin and clothing. Avoid inhalation of dust.

Storage

- : Store in original containers. Store in areas that are cool, dry and well ventilated. Store away from seeds, fertilizers and animal feed stuff. Store in a place accessible by authorized persons only. Keep out of reach of children.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure limit value

- : Not available

Engineering controls

- : Use exhaust ventilation. Control process conditions to avoid contact.

Respiratory protection

- : Do not inhale dust. Wear an approved respirator to prevent inhalation.

Hand protection

- : Wear chemical resistant nitrile or PVC gloves. Dispose of when contaminated inside, when perforated. Wash hands always before eating, drinking, smoking or using the toilet.

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 off as hazardous waste. Avoid release to the environment.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state : Powder

Color : White

Odour : Very faint to chalk like odour

Molecular Weight : 505.2 (Deltamethrin)

Density : 1.5 g/cc(compact)

Wettability : Not applicable

Solubility in water : Insoluble

Persistent foam : Not applicable

10. STABILITY AND REACTIVITY

Stability : Stable under normal condition.

Conditions to avoid : Avoid extremes temperature and direct sunlight.

Materials to avoid : Avoid strong acids.

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Rat LD₅₀ oral : >5000 mg/kg bw

Rat LD₅₀ dermal : >5000 mg/kg bw

Rat LC₅₀ inhalation : >2.61 mg/l (4 hrs)

Skin irritation : Slight-irritant

Eye irritation : Slight-irritant

Skin sensitization	:	Non-sensitiser
Long term studies		
Carcinogenicity	:	Deltamethrin is not carcinogenic.
Mutagenicity	:	Deltamethrin is not mutagenic.
Reproductive toxicity	:	Deltamethrin is not reprotoxic.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Fish, <i>Poecilia reticulata</i>	:	LC ₅₀ (96 h): 1.74 µg/l (Deltamethrin)
<i>Daphnia magna</i>	:	EC ₅₀ (24 h) 4.15 µg/l (Deltamethrin)
Algae, <i>Chlorella vulgaris</i>	:	EC ₅₀ : 22.77 µg/ml (Deltamethrin)
Bees, <i>Apis indica</i>	:	LD ₅₀ : 0.52 ppm (Deltamethrin)
Earthworms, <i>Lampito mauritii</i>		LD ₅₀ :> 1000 mg/kg dry soil weight (Deltamethrin)
Birds, Japanese Quails		LD ₅₀ : > 5000 ppm (Deltamethrin)
Mobility	:	Deltamethrin is classified as a low-mobility to immobile compound in soils.
Persistence and degradability	:	Deltamethrin is not persistent in the environment. It is degraded by soil microorganisms and does not leave residues in the environment.

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	:	Triple rinse container before disposal. Dispose of empty container in a sanitary landfill or by incineration, or approved method by local authority.

14. TRANSPORT INFORMATION

UN number	:	3349
UN class	:	6.1

UN packaging group	: III
Proper Shipping Name	: PYRETHROID PESTICIDE, SOLID, TOXIC
Additional information	: Deltamethrin designated as marine pollutant

15. REGULATORY INFORMATION

EU Regulation (Deltamethrin) Classification	: Xn: Harmful N: Dangerous for the environment
Risk Phrases (Deltamethrin)	: R23/25: Toxic by inhalation and if swallowed. R50: Very toxic to aquatic organisms. R53: May cause long-term adverse effects in the aquatic environment.
Safety Phrases	: S22: Do not breathe dust. S28: After contact with skin, wash immediately with plenty of soap and water. S36/37/39: Wear suitable protective clothing, gloves and eye/face protection. S38: In case of insufficient ventilation wear suitable respiratory equipment. S60: This material and its container must be disposed of as hazardous waste.

16. OTHER INFORMATION

MSDS first issued	: 26 th April 2005
MSDS data revised	: 6 th April 2023

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.