

MATERIAL SAFETY DATA SHEET

PRODUCT : Deltamethrin 2.5% WP

PRODUCT DESIGNATION : Insecticide

Section 1. Product & Company Identification

Common Name : Deltamethrin 2.5% WP

Grade : Formulation

Active Ingredient : Deltamethrin

Chemical Name of Active Ingredient (IUPAC) : (S)-cyano(3-phenoxyphenyl)methyl (1R,3R)-3-(2,2-dibromoethyl)-2,2-dimethylcyclopropanecarboxylate

Chemical Family of A. I. : Synthetic Pyrethroid

Molecular Formula of A. I. : $C_{22}H_{19}BR_2NO_3$

Molecular Mass of A. I. : 505.20 g/mol

Manufacturer & Supplier : M/s United Chemicals
Head Office: B-371, 1st Floor, Meera Bagh, New Delhi, India
Factory: 15/1, 15/2, 15/3, industrial Area, Vidisha, M.P.

Telephone Number : +91-11-25258770

Section 2. Composition / Information on Ingredients

Identity	% W/W content
Deltamethrin, a.i.	2.5 % w/w
Other ingredients	97.50% w/w
Total	100.00 % w/w

Section 3. Hazards Identification

Appearance and odour: Light Yellowish, Mild aromatic odour.

Warning Statements: Keep out of reach of children

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

Inhalation : Avoid inhalation of spray mist. Toxin may be absorbed on inhalation; Irritating to the nasal membranes and respiratory tract

Eye Contact: Irritating to the eyes on contact. Vapours, fumes or spray mist may cause irritation.

Skin contact: May cause transient burning sensation and itching by skin contact.

Ingestion: Harmful if swallowed, may cause abdominal pain, convulsions, Vomiting, unconsciousness, headache and nausea if ingested.

Environment : Very toxic to aquatic organisms, may cause long- term adverse effects in The aquatic environment.

Section 4. First Aid Measures

Emergency and First Aid Procedure –

If in Eyes: Wash with copious amount of water. Avoid exposing affected eyes to bright light.

If on Skin: Remove contaminated clothing and clean the affected skin area. First, soak up any liquid remaining on the skin with readily disposable material wash the affected area with warm water and alkaline soap.

If Inhaled: If inhaled, remove to fresh air and keep at rest. Obtain medical aid if require.

If Swallowed: If the material was swallowed and signs of toxicity are severe, induce Vomiting. In the event of collapse, apply artificial respiration.

Section 5. Fire Fighting Measures

Hazardous product of Combustion: Thermal decomposition products may emit toxic fumes of hydrogen cyanide and oxides of carbon and nitrogen.

Extinguishing Media: If product is involved in a fire, use water spray, foam, dry powder, carbon dioxide or sand

Special Protective Equipment: Fire-fighters should wear NIOSH approved self contained breathing apparatus and full protective clothing.

Section 6. Accidental Release Measures

Personal Precaution: 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

Environmental Precautions: Keep people and animals away. Prevent entry into drains, sewers and watercourses

Steps to be taken in case of a spill: Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Collect and transfer the product into a properly labelled and tightly closed container. Clean contaminated floors and objects thoroughly, observing environmental regulations.

Section 7. Handling & Storage

Precautions in 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.

Precautions in 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.

Section 8. Exposure Control, Personal Protection

Personal Protection: Wash hands thoroughly after handling. Do not breathe mist or vapours. Use personal protective equipment as required.

Protective Gloves: Wear chemical resistant 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.

Engineering Control: Mechanical ventilation should be used when handling this product in closed spaces

Section 9. Physical and Chemical Properties

Appearance / state : White to cream coloured powder
Colour : White to cream color

Admn. Off. : B-371, 1st Floor, Meera Bagh, Delhi-110063 (India)
Ph. : 25258770, 25258771, 25258772, 42334229

E-mail : utc_chemicals@hotmail.com
info@unitedchemicals.in

Odour	:	Mild aromatic odour
Specific gravity	:	1.2 +/- 0.067 at 20°C
pH	:	4.5 – 7.5
Corrosivity	:	Non-corrosive
Vapour Density	:	0.89 at 20°C
Viscosity	:	1.09 mm ² /s @ 40°C
Flash Point	:	48°C
Solubility in water	:	Soluble
Flammable Limits	:	NA

Section 10. Stability & Reactivity

Chemical Stability: Product is stable at normal condition.

Materials to Avoid: Strong oxidizing & alkaline agents

Incompatibility: Deltamethrin is incompatible with alloys.

Conditions to avoid: Avoid excessive heat and flame.

Section 11. Toxicological Information

Oral LD50: Rat >2000mg/kg

Skin Contact, Dermal LD50: Rat (male / female) >2000mg/kg

Skin Irritation, Rabbit: Non- Irritant

Eye Irritation, Rabbit: Non-Irritant

Skin Sensitization, Guinea Pig: Not-Sensitizer

Section 12. Ecological Information

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.

Section 13. Disposal Consideration

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.

Containers: 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.

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.

Toxic substances under the applicable, ICAO/IATA, IMO, ADG.

IMDG Classification

Shipping name : Pyrethroid pesticide, solid, toxic flammable
Class : 6.1
Packing group : III
UN number : 3349
Marine Pollutant : Yes

Section 15. Regulatory Information

Contains: Deltamethrin

Risk Phrases: - R21, R23 and R27/28

Safety Phrases: - S26, S28, S29, S36/37/39, S45 and S53

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 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 recipient's sole responsibility to ensure the transfer of all relevant information from this MSDS to their own MSDS.

Safety Division : UNITED CHEMICALS, SAFETY DIVISION

