



**HERANBA**  
**INDUSTRIES LIMITED**  
A Govt. Recognised Export House

H.O. : 101 / 102, Kanchanganga, Factory Lane, Borivli (West), Mumbai - 400 092, INDIA.

Tel. : 91-22-2898 2133 / 44, 2898 7912 / 14, 2898 4439 / Fax : 91-22-2899 3948 Website : [www.heranba.com](http://www.heranba.com)

Marketing Office : 201/202, Dwarkesh, Above Tribhuvandas Bhimji Jhaveri, L. T. Road, Borivli (W), Mumbai - 400 092. INDIA.

Tel. : 91-22-2833 8443 / 44 / Fax : 91-22-2833 8445 / e-mail : [heranba@vsnl.com](mailto:heranba@vsnl.com)

## **MATERIAL SAFETY DATA SHEET**

### **1. IDENTIFICATION OF THE SUBSTANCE:**

**Product name:** DELTAMETHRIN 1.25% ULV

**Chemical group** Synthetic pyrethroid

**Use:** Insecticide.

**Formulation** Ultra Low Volume

**Supplier:** Heranba Industries Limited

**Address:** 101/102, Kanchanganga, Factory Lane, Borivli (W), Mumbai - 400 092,  
INDIA. +91-22-898 0860, 28338444, 55774055

**Website** [www.heranba.com](http://www.heranba.com)

### **2. HAZARDS IDENTIFICATION**

#### **EMERGENCY OVERVIEW**

Contact with skin or eyes may be very painful. Dangerous to fish and bees.

#### **Risk phrases**

R36 - Irritating to eyes.

R65 - Harmful: May cause lung damage if swallowed.

### **3. COMPOSITION/ INFORMATION ON INGREDIENTS:**

| <b>Ingredients</b> | <b>CAS Number</b> | <b>Concentration (% w/w)</b> |
|--------------------|-------------------|------------------------------|
| Deltamethrin       | [52918-63-5]      | 1.25                         |
| Other ingredients  |                   | Q.S                          |

### **4. FIRST AID MEASURES:**

If poisoning occurs, immediately contact a doctor or Poisons Information Centre, and Follow the advice given. Show this Material Safety Data Sheet to the doctor.

**Inhalation** If inhaled, remove to fresh air and keep at rest. Loosen clothes. Obtain medical advice. If breathing stops or shows signs of failing, start artificial respiration.

**Skin contact** Carefully remove contaminated clothing and footwear. Wash affected areas with soap and water. Apply Vitamin E cream or local anesthetic creams to reduce pain. Seek medical advice if required. Launder contaminated clothing before re-use.

**Eye contact** Rinse eyes immediately with clean water for at least 15 minutes and obtain urgent medical aid.

**Ingestion** Wash out mouth with water. DO NOT induce vomiting. Give a glass of water. Do not give anything by mouth if the patient is semi-conscious or unconscious. Keep patient at rest and seek medical advice as above. Do not apply mouth to mouth resuscitation if the material has been ingested.

**First Aid Facilities** Ensure eyewash and safety shower facilities are available in the workplace.

Must NOT be confused with organophosphorus (anticholinesterase) compounds.

### **5. FIRE FIGHTING MEASURES:**

#### **Hazards from combustion products:**

Heating/combustion will generate oxides of carbon and nitrogen, bromine compounds and other irritant and toxic fumes.



H.O. : 101 / 102, Kanchanganga, Factory Lane, Borivli (West), Mumbai - 400 092, INDIA.

Tel. : 91-22-2898 2133 / 44, 2898 7912 / 14, 2898 4439 / Fax : 91-22-2899 3948 Website : [www.heranba.com](http://www.heranba.com)

Marketing Office : 201/202, Dwarkesh, Above Tribhuvandas Bhimji Jhaveri, L. T. Road, Borivli (W), Mumbai - 400 092. INDIA.

Tel. : 91-22-2833 8443 / 44 / Fax : 91-22-2833 8445 / e-mail : [heranba@vsnl.com](mailto:heranba@vsnl.com)

#### **Precautions for fire fighters:**

Firefighters should wear full protective gear, including self-contained breathing apparatus. Keep unnecessary people away. If it can be done safely, remove intact containers from the fire. Otherwise, use water spray to cool them. Avoid spraying directly into containers due to danger of boilover. Bund area with sand or earth to prevent contamination of drains or waterways. Dispose of fire control water or other extinguishing agent and spillage safely later. Do not release contaminated water into the environment.

#### **6. ACCIDENTAL RELEASE MEASURES:**

Avoid contact with the spilled material or contaminated surfaces. Extinguish or remove all possible sources of ignition. When dealing with spills, do not eat, drink or smoke and wear protective clothing and equipment as described in Section 8.

**PERSONAL PROTECTION:** Keep people and animals away. Prevent spilled material from entering drains or watercourses. Contain spill and absorb with earth, sand, clay, or other absorbent material. Collect and store in properly labeled, sealed drums for safe disposal. Deal with all spillages immediately. If contamination of drains, streams, watercourses, etc. is unavoidable, warn the local water authority.

#### **7. HANDLING AND STORAGE:**

**Handling** Keep out of reach of children. Will irritate the eyes and skin. Avoid contact with eyes and skin. Do not inhale vapour. If product in eyes, wash it out immediately with water. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. After each day's use, wash gloves, face shield and contaminated clothing.

**Storage** Store in the closed, original container in a cool, secure, well-ventilated area. Do not store for prolonged periods in direct sunlight. Keep away from all ignition sources.

**Flammability** Flashpoint: between 61° C and 150° C.

#### **8. EXPOSURE CONTROLS:**

**Engineering controls** Control process conditions to avoid contact. Use in a well-ventilated area only.

#### **9. PERSONAL PROTECTION:**

It is important to protect eyes and face. Wear face shield. Wear cotton overalls buttoned to the neck and wrist and a washable hat, Wear elbow-length PVC gloves. If working in a poorly ventilated area or if occupational exposure levels are likely to be exceeded, wear an approved respirator suitable for organic vapours.

#### **10. PHYSICAL AND CHEMICAL PROPERTIES:**

**Appearance:** Clear colourless liquid

**Odour:** Aromatic hydrocarbon

**Solubility:** Insoluble in water

**Specific Gravity:** 0.854 (20°C)

**Partition coefficient (octanol/water):** Deltamethrin: Kow log P = 4.6 (25°C)



**HERANBA**  
**INDUSTRIES LIMITED**  
A Govt. Recognised Export House

H.O. : 101 / 102, Kanchanganga, Factory Lane, Borivli (West), Mumbai - 400 092, INDIA.

Tel. : 91-22-2898 2133 / 44, 2898 7912 / 14, 2898 4439 / Fax : 91-22-2899 3948 Website : [www.heranba.com](http://www.heranba.com)

Marketing Office : 201/202, Dwarkesh, Above Tribhuvandas Bhimji Jhaveri, L. T. Road, Borivli (W), Mumbai - 400 092. INDIA.

Tel. : 91-22-2833 8443 / 44 / Fax : 91-22-2833 8445 / e-mail : [heranba@vsnl.com](mailto:heranba@vsnl.com)

## **11. STABILITY AND REACTIVITY:**

**Chemical stability:** Stable under normal conditions of use.

**Hazardous polymerization:** Will not polymerise.

**Conditions to avoid:** Avoid sources of ignition and extreme heat.

**Incompatible materials:** Avoid oxidising agents, strong acids and alkalis.

**Hazardous decomposition products:** Heating/combustion will generate oxides of carbon and nitrogen, and bromine compounds.

## **12. TOXICOLOGICAL INFORMATION:**

### **POTENTIAL HEALTH EFFECTS**

**Inhalation:** Inhalation of product vapour may cause transient irritation of mucous membranes (nose, throat and respiratory tract), may cause headaches, drowsiness, dizziness, could be anesthetic, and may have other central nervous system effects lasting for up to 24 hours.

**Skin contact:** Irritating. Contact with the skin, especially the face, may result in initial stinging, burning or tingling sensations (fingertips, nose), followed by numbness or pain which may persist for up to 24 hours. (Although skin irritation tests in animals show deltamethrin to be non-irritating, experience has shown it to cause these symptoms on human skin.) Repeated exposure may cause skin dryness or cracking.

**Eye contact:** May be severely irritating to the eyes.

**Ingestion** Symptoms include burning sensations and numbness in the mouth and throat, headache, dizziness, drowsiness, diarrhoea, nausea, vomiting, listlessness, stomach pain, muscular twitching of arms or legs, unconsciousness, convulsions, and coma (very high doses). Small amounts of liquid aspirated into the respiratory system during ingestion or from vomiting may cause bronchopneumonia or pulmonary oedema.

### **Acute:**

**Oral toxicity** LD<sub>50</sub> rat: >5000 mg/kg

**Dermal toxicity** LD<sub>50</sub> rabbit: > 2000 mg/kg

**Inhalation toxicity** LC<sub>50</sub> rat: > 11.3 mg/L (6 h)

**Skin irritation** Slightly irritating (rabbit)

**Eye irritation** Irritating (rabbit)

**Sensitisation** Non-sensitising (guinea pig)

**Chronic:** Deltamethrin is not mutagenic, carcinogenic or teratogenic. Frequent or prolonged contact with the solvent in this product may dry the skin, leading to discomfort & dermatitis.

## **13. ECOLOGICAL INFORMATION:**

Deltamethrin is highly toxic to fish, aquatic organisms and bees in laboratory studies, but considered less toxic under natural conditions. DO NOT contaminate streams, rivers or waterways with Deltamethrin ULV or the used containers.

**Ecotoxicity** Deltamethrin a.i.:

Fish toxicity: LC<sub>50</sub> (96 h) 0.001 - 0.01 mg/L

Bird toxicity: Acute oral LD<sub>50</sub> for duck > 5000 mg/kg

Acute oral LD<sub>50</sub> for quail > 10,000 mg/kg



**HERANBA**  
**INDUSTRIES LIMITED**  
A Govt. Recognised\*Export House

H.O. : 101 / 102, Kanchanganga, Factory Lane, Borivli (West), Mumbai - 400 092, INDIA.

Tel. : 91-22-2898 2133 / 44, 2898 7912 / 14, 2898 4439 / Fax : 91-22-2899 3948 Website : [www.heranba.com](http://www.heranba.com)

Marketing Office : 201/202, Dwarkesh, Above Tribhuvandas Bhimji Jhaveri, L. T. Road, Borivli (W), Mumbai - 400 092. INDIA.

Tel. : 91-22-2833 8443 / 44 / Fax : 91-22-2833 8445 / e-mail : [heranba@vsnl.com](mailto:heranba@vsnl.com)

---

**Environmental fate, persistence and degradability:**

Deltamethrin is not persistent in the environment. It is destroyed by soil micro-organisms and does not leave residues in the environment or build up in the food chain.

**14. DISPOSAL CONSIDERATIONS:**

Thoroughly drain containers before disposal, and add drainings to the application equipment. When returnable container is empty or contents no longer required return it to the point of purchase. Do not contaminate the container with water or other materials. Do not dispose of undiluted chemicals on-site. If recycling, replace cap and return containers to recycler or designated collection point. If not recycling, break, crush or puncture and bury empty containers in a local authority landfill. If no landfill is available, bury the containers below 500 mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty containers and product should not be burnt. Dispose of waste product through a reputable waste contractor.

**15. TRANSPORT INFORMATION:**

|                |                                     |
|----------------|-------------------------------------|
| Shipping Name: | PYRETHROID PESTICIDE, LIQUID, TOXIC |
| Hazard class : | 6.1                                 |
| UN Number :    | 3352                                |
| Packing Group: | III                                 |

**16. DISCLAIMER:**

This MSDS summarizes our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user should read this MSDS and consider the information in the context of how the product will be handled and used in the workplace including in conjunction with other products. If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact this company.