

MATERIAL SAFETY DATA SHEET

DELTAMETHRIN 25%EC

1. IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND SUPPLIER

PRODUCT NAME: DELTAMETHRIN 25%EC

Active Ingredient: Lambda-cyhalothrin

Formulation: Emulsifiable concentrate

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2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

WARNING:

- May be fatal if swallowed
- Harmful if inhaled or absorbed through skin
- Causes moderate eye irritation

POTENTIAL HEALTH EFFECTS:

Avoid contact with skin, eyes, or clothing. Avoid breathing spray mist. Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum or using tobacco. Remove contaminated clothing and wash before reuse.

3. COMPOSITION/ INFORMATION ON INGREDIENTS

Active ingredient: 50g/l

Inert ingredient: emulsifier: 60g/l

Xylene up to 1 litre

4. FIRST AID MEASURES

IF SWALLOWED: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

IF IN EYES: Hold eye open and rinse slowly and gently 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 further treatment advice.

IF ON SKIN OR CLOTHING: 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.

IF INHALED: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice. Have the product container or label with you when calling a poison control center or doctor or going for treatment.

NOTE TO PHYSICIAN: Contains petroleum distillates. Vomiting may cause aspiration pneumonia.

5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: Foam, dry chemical, or CO₂

EXPLOSION HAZARDS: During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion

FIRE FIGHTING PROCEDURES: Wear full protective clothing and self-contained breathing apparatus. Evacuate non essential 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.

HAZARDOUS DECOMPOSITION PRODUCTS: Product can decompose at high temperatures forming toxic gases.

6. ACCIDENTAL RELEASE MEASURES

Action to Take for Spills/Leaks: Control the spill at its source. Contain the spill to prevent from spreading or contaminating soil or from entering sewage and drainage systems or any body of water. Clean up spills immediately. Cover entire spill with absorbing material and place into compatible disposal container. Scrub area with hard water detergent. Pick up wash liquid with additional absorbent and place into compatible disposal container. Once all material is cleaned up and placed in a disposal container, seal container and arrange for disposition.

7. HANDLING AND STORAGE

HANDLING: Prevent eating, drinking, tobacco usage and cosmetic application in areas where there is a potential for exposure to the material. Wash hands thoroughly with soap and water after handling this product.

STORAGE: Store in original containers only. Keep container closed when not in use. Do not store near food or feed. In case of spill or leak on floor or paved surfaces, soak up with sand, earth, or synthetic absorbent. Remove to chemical waste area.

APPLICATORS AND OTHER HANDLERS MUST WEAR:

- Long-sleeved shirt and long pants
- Chemical resistant gloves made of any waterproof material
- Shoes plus socks
- Protective eyewear

8. PERSONAL PROTECTION

ENGINEERING CONTROLS: When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

PERSONAL PROTECTIVE EQUIPMENT (PPE): Some materials that are chemical-resistant to this product are listed below. If you want more options, follow

the instructions for category G on an EPA chemical resistance category selection chart.

EYES AND FACE: Splash goggles face shield

RESPIRATORY: A combination particulate/organic vapor respirator may be necessary until effective engineering controls are installed to comply with occupational exposure limits. Use a NIOSH approved respirator with an organic vapor (OV) cartridge or canister with an R,P, or HE pre-filter. Use a self-contained breathing apparatus in cases of emergency spills, when exposure levels are unknown, or under any circumstances where air-purifying respirators may not provide adequate protection.

PROTECTIVE CLOTHING: Applicators and handlers must wear long-sleeved shirt and long pants; chemical resistant gloves; shoes plus socks; protective eyewear

GLOVES: Nitrile protective gloves

SKIN CONTACT: Where contact is likely, wear chemical-resistant (such as nitril or butyl) gloves, coveralls, socks and chemical-resistant footwear. For overhead exposure, wear chemical-resistant headgear. Stringent housekeeping measures are necessary to prevent translocation of the material from contaminated work surfaces to uncontaminated surfaces (railings, doors, etc.).

WORK HYGIENE PRACTICES: Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining personal protective equipment (PPE). If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

9. PHYSICAL & CHEMICAL PROPERTIES

Odor: Aromatic of solvent

Appearance: Lightly yellow transparent liquid

Melting Point: Not Available

Boiling Point: Not Applicable

pH: 6.5-7.5 Solubility: Emulsifiable with water.

Flash point: 45 °C

Corrosiveness: Non-corrosive to metals.

Stability: Stable on exposure to air and sunlight.

10. STABILITY & REACTIVITY

Stability: Stable under normal use and storage conditions.

Hazardous Polymerization: Will not occur.

Conditions to Avoid: None known.

Materials to Avoid: None known.

Hazardous Decomposition Products: May decompose at high temperatures forming toxic gases

11. TOXICOLOGICAL INFORMATION

Acute toxicity:

LD50 oral, rats: 180mg/kg

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LD50 dermal, rabbits: > 2 000 mg/kg
LC50 (4 hours) inhalation, rats: 3.12 mg/l air
Skin Irritation: No skin irritation (rabbit).
Eye Irritation: Risk of serious damage to eyes (rabbit).
Skin sensitization: Non-sensitizer

Reproductive/Developmental Effects

Lambda-Cyhalothrin : Not a developmental or reproductive toxicant.

Chronic/Subchronic Toxicity Studies

Lambda-Cyhalothrin : Reversible paresthesia (abnormal skin sensation).
Reversible clinical signs of neurotoxicity in mammals.

Carcinogenicity

Lambda-Cyhalothrin : No treatment-related tumors in rats or mice.

12. ECOLOGICAL INFORMATION

Very toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

Eco-Acute Toxicity

Lambda-Cyhalothrin

Fish (Rainbow Trout) 96-hour LC50 0.19 ppb

Fish (Bluegill Sunfish) 96-hour LC50 0.21 ppb

Bird (Mallard Duck) LD50 Oral > 3950 mg/kg

Bird (Mallard Duck) 8-day dietary LC50 > 3948

Bee (Contact) LD50 0.038 ug/bee

Invertebrate (Water Flea) 48-hour EC50 0.04 ppb

Bird (Bobwhite Quail) 8-day dietary LC50 > 5300 ppm

Eco-Chronic Toxicity

Lambda-Cyhalothrin

Invertebrate (Water Flea) 21-day LOEC 0.0035 ppb

Bird (Mallard Duck) Reproduction 19-week LOEL > 30 ppm

Fish (Fathead Minnow) 300-day LOEC 0.062 ppb

Environmental Fate

Lambda-Cyhalothrin

The information presented here is for the active ingredient, lambda-cyhalothrin.

Not persistent in soil or water. Immobile in soil. Sinks in water (after 24 h).

SECTION 13 – DISPOSAL INFORMATION

Disposal of residue: Residue may be disposed of as for toxic waste in accordance with local/national regulations.

Disposal of used packaging material: Empty containers to be disposed of in accordance with local/national regulations. DO NOT re-use for any other purpose.

14. TRANSPORT INFORMATION

DOT Classification

Ground Transport - NAFTA

Proper Shipping Name: Pyrethroid Pesticide, Liquid, Toxic (contains
Lambda-Cyhalothrin, 5%)

Hazard Class or Division: Class 6.1

Identification Number: UN 3352

Packing Group: PG III

B/L Freight Classification

Insecticides, NOI, Poison

15. REGULATORY INFORMATION

EPCRA SARA Title III Classification

Section 311/312 Hazard Classes: Acute Health Hazard
Chronic Health Hazard

Section 313 Toxic Chemicals: None

RCRA Hazardous Waste Classification (40 CFR 261)

Not Applicable

16. Other information

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.

Our responsibility for products sold is subject to our standard terms and conditions, a copy of which is sent to our customers and is also available on request.