

MATERIAL SAFETY DATA SHEET

CYPRA 25 EC

SECTION 1- CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

1.1. PRODUCT NAME : Cypermethrin 25% EC
1.2. TRADE NAME : CYPRA 25 EC
1.3. CHEMICAL NAME : (RS)- α -Cyano - 3 - phenoxy benzyl (1RS) - cis - trans 3 - (2,2 - dichloro- vinyl) - 2,2 dimethyl cyclopropane carboxylate.
1.4. CHEMICAL FAMILY : Insecticide.
1.5. SYNONYMS : -----

SECTION 2- COMPOSITION, INFORMATION OF INGREDIENTS

| COMPONENT | PERCENTAGE | CAS NUMBER | HAZARD DATA |
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| Cypermethrin 25% W/V EC | 250 g active ingredient / lit | 52315-07-8 | Presence of no Specific |

SECTION 3- HAZARDS IDENTIFICATION SUMMARY

EMERGENCY OVERVIEW : Yellow to brown viscous liquid.

- 3.1. May be harmful if swallowed, inhaled or absorbed through skin.
- 3.2. Causes moderate eye irritation. Avoid breathing vapors.
- 3.3. Avoid contact with eyes, skin or clothing.
- 3.4. Keep out of reach of children.

POTENTIAL HEALTH HAZARDS:

SKIN : Prolonged or repeated skin contact may cause irritation and sensitization,
an allergic reaction

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| EYES : | Moderately irritating to the eyes. |
| INHALATION : | Vapor concentrations may be harmful if inhaled. |
| INGESTION : | May be harmful if swallowed. |

SELECTION 4 – FIRST AID MEASURES

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| IF SWALLOWED : | Harmful in contact if swallowed keep locked up and out of reach of children. |
| IF IN EYES: | In case of with eyes, rinse immediately with plenty of water and seek medical advice. |
| IF INHALED: | After removing to fresh air, give symptomatic treatment for respiratory injury. |
| IF ON SKIN: | After contact with skin. Wash immediately with plenty of water and soap. |

SECTION 5- FIRE FIGHTING MEASURES

5.1. FLAMMABLE PROPERTIES:

FLASH POINT : Above 25 °C.

FIRE AND EXPLOSION HAZARD : Slight fire and explosion hazard

5.2. EXTINGUISHING MEDIA: Dry chemical, carbon dioxide, halon, and water spray or standard foam. For larger fires use water spray, fog or standard foam.

5.3. FIRE FIGHTING INSTRUCTIONS: Move containers from fire if possible. Fight Fire from maximum distance. Stay away from storage tank ends. Extinguish only if flow can be stopped. Do not spill material with higher pressure water streams. Dike fire control water for later disposal. Use agents suitable for type of surrounding fire.

5.4. FIRE FIGHTING EQUIPMENT: Self- contained breathing apparatus with full-face piece. Full fire fighting turnout gear.

SECTION 6- ACCIDENTAL RELEASE MEASURES

6.1. SMALL SPILLS:

Do not touch spilled Material. Stop leak if you can any risk spillage. Use water spray to reduce for small spill, take up with sand or other absorbent material.

6.2. LARGE SPILL:

For larger spills dike far ahead of spill for later disposal.

SELECTION 7 – HANDLING AND STORAGE

7.1. NORMAL HANDLING:

Always wear recommended personal protective equipment. Use with adequate ventilation. Avoid contact with skin, eyes and clothing. Do not breathe vapor or mist. Open containers carefully to release possible internal pressure before completely removing closure.

7.2. STORAGE RECOMMENDATIONS:

Store in a cool, dry, well-ventilated area in a non-combustible structure. Keep containers closed and protect containers from physical damage. Keep away from other sources of ignition. Keep away from food, feed and drinking water. Keep from freezing.

SELECTION 8- EXPOSURE CONTROLS, PERSONAL PROTECTION

EXPOSURE LIMITS (8 HOUR TWA): (Refer to Section 3).

ENGINEERING CONTROLS:

Local exhaust ventilation may be necessary to control any air contaminants to within their TLVs during the use of this product. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

PERSONAL PROTECTIVE EQUIPMENT:

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| EYE PROTECTION : | Employee must wear splash proof or dust resistant safety goggles to prevent eye contact with this substance. |
| SKIN PROTECTION : | Employee must wear appropriate (impervious) clothing and equipment to prevent repeated skin contact with this substance. Employees must wear protected gloves to prevent contact with this substance. |
| RESPIRATORY PROTECTION: | Typical protective equipment Cartridge, Respirator with an organic vapors Cartridge, Gas mask with organic vapors canister, Air purifying Respirator with a full-face piece operated in a pressure mode, Self-contained Breathing Apparatus. |
| ADDITIONAL RECOMMENDATIONS: | Safety showers and eyewash stations convenient to work area. Protective clothing, boots, face shield and hat, cleaned daily, if exposure to liquid (splashing etc.) is possible. |

SECTION 9- PHYSICAL AND CHEMICAL PROPERTIES

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| PHYSICAL DESCRIPTION : | Clear light golden yellow liquid free from extraneous impurities |
| MOLECULAR WEIGHT : | 416.30 gm / mol |
| MOLECULAR FORMULA : | C22H19Cl2NO3 |

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| BOILING POINT : | Not Applicable |
| MELTING & FREEZING POINT : | 60 – 80 °C. |
| SPECIFIC GRAVITY : | 0.98 at 30 °C. |
| pH : | 6.8 (pH of 10% Solution). |
| VAPOR PRESSURE : | 5.1 x 10 ⁻⁸ m bar at 70 °C. |
| SOLUBILITY : | In water 0.004 mg/l (pH 7), In Acetone, Chloroform, Cyclohexanone, Xylene 450 mg/l Ethanol 337 mg/l, Hexane 103 mg/l. (All at 20 °C) |
| FLASH POINT : | Not auto-flammable, Non-explosive. (Flash point method and additional flammability data are in section 5) |

SECTION 10- STABILITY AND REACTIVITY

CHEMICAL STABILITY:

Relatively stable in neutral and weakly acidic media. With optimum stability at pH-4. Hydrolysed in alkaline media. Relatively stable to light in field situations. Thermally stable up to 220°C.

CONDITIONS TO AVOID:

INCOMPATIBILITIES:

HAZARDOUS DECOMPOSITION PRODUCTS:

HAZARDOUS POLYMERIZATION:

SECTION 11- TOXICOLOGICAL INFORMATION

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| ACUTE TOXICITY : | Acute oral LD50 RAT 320 mg/kg (oil suspension) Acute Dermal LD50 RAT, Rabbit > 2000 mg/kg Acute Inhalation LC50 RAT 4.04 mg/l Air |
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MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:

Symptoms of may be hypersensitivity, nervous instability, tremors, ataxia urinary inconsistent and convulsions result on ingestion or inhalation; contact eyes causes sever irritation to eye and itching, burning and tingling are some symptoms upon contact with skin.

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| CARCINOGEN STATUS : | Non Carcinogenic. |
| MUTAGENIC DATA : | Salmonella Typhimurium Non Mutagenic. |

SECTION- 12- ECOLOGICAL INFORMATION

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| ENVIRONMENTAL SUMMARY : | Cypermethrin is highly toxic for birds, bees and fishes. |
| FISH TOXICITY : | Rainbow trout were exposed to nominal concentration of 2 or 5 µg cypermethrin /litre |
| AVIAN TOXICITY: | Cypermethrin was administered for 5 consecutive days to Mallard ducks at dosages of 5000 or 10 000 mg/kg diet. No deaths or clinical signs of intoxication were noted during the feeding period, though most ducks had regained or exceeded their initial body weights by the end of the holding period. |
| BEE TOXICITY: | Highly Toxic. |

SECTION- 13 DISPOSAL CONSIDERATIONS

WASTE:

Pesticide wastes are toxic. Dispose of in accordance with applicable Federal, state and local laws and regulations.

CONTAINER:

Refer to product label.

SECTION- 14 DISPOSAL CONSIDERATIONS

PROPER SHIPPING DESCRIPTION : PYRETHROID PESTICIDE, LIQUID, TOXIC FLAMMABLE

CLASS : 6.1 UN

NUMBER : 3351

PG : III

EMERGENCY RESPONSE GUIDEBOOK: Guide No.: _____

For additional information on shipping regulations affecting this material, contact the information number found in section 1.

SECTION- 15 REGULATORY INFORMATION

FIFRA:

All pesticides are governed under the Federal Insecticide, Fungicide and Rodenticide Act. The regulatory information presented only when this product is handled outside of the normal use and application as a pesticide.