

MATERIAL SAFETY DATA SHEET

Dyna Fog ULV Solution

1 PRODUCT IDENTIFICATION

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| Trade Name | DYNA FOG ULV Solution |
| Chemical Family | Pyrethroid pesticides |
| Chemical Name | Blend of Permethrin, Deltamethrin and light paraffin hydrocarbon, white oils and Propylene Glycol and Piperonyl Butoxide. |
| Description of product | A contact insecticide formulated for use in ULV and Fog applicators for the control of tobacco moth in tobacco warehouses and stored product pests found in warehouses and food processing plants. |

2 COMPOSITION / INFORMATION ON INGREDIENTS

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| Hazardous Components | Deltamethrin | 1.0 % |
| | Permethrin | 0.5 % |
| | Piperonyl Butoxide | 6.0 % |
| | Paraffins (C ₁₂ –C ₁₃) | 91.0 % |

3 PHYSICAL AND CHEMICAL CHARACTERISTICS

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| Appearance | Clear liquid slight yellow color. |
| Odor | Paraffinic smell |
| Density @ 20 °C | 0.8249 kg /ℓ |
| Solubility | Miscible with water. |

4 FIRE AND EXPLOSION HAZARD

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| Flash Point | 64 ° C |
| Flammability | Combustible. |
| Auto ignition Temperature | Not available |
| Decomposition Temperature | Not available |
| Acute Hazards | Combustible liquid. Avoid all ignition sources. |
| Special fire fighting procedures | Apply cold water in order to cool containers exposed to danger. Water or foam may cause frothing. Water spray may be used to flush spills away from exposure. Prevent run off |

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| Special protective equipment | from fire control or dilution from entering streams, sewers, or drinking water supply. Do not breathe fumes. For fires in enclosed areas, fire fighters must use self – contained breathing apparatus. |
| Hazardous decomposition products | Hydrogen chloride. |
| Fire extinguishing media | Powder, Carbon dioxide, foam, dry chemical powder. |
| Unsuitable extinguishing media | Water jets. |

5 REACTIVITY DATA

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| Stability: (thermal, light, etc.) | More stable in acid than in alkaline media. |
| Conditions to avoid | Extreme heat. The material is volatile. Prolonged storage at elevated temperatures may interfere with quality. Sensitive to light, also air sensitive. |
| Compatibility | Incompatible with strong oxidizing agents. Decomposes under alkaline conditions. |
| Hazardous decomposition products | Hydrogen chloride will form when heated to decomposition. |

6 WARNINGS

Harmful if swallowed, by contact or inhalation.
Store in a cool place, away from food, eating utensils, feedstuffs and drinking water.
Keep out of reach of children, uninformed persons and animals.
Keep all electrical appliances switched off during application.

7 HEALTH HAZARD DATA: (ACUTE HAZARDS & SYMPTOMS)

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| Potential Health effects and main symptoms: | |
| Inhalation | Vapor may be irritating to mucous membranes and respiratory tract. Inhalation of vapor can result in cough, headache, dizziness and possible nausea. |
| Skin | Contact with skin will results in irritation, redness, burning sensation and itching. Will have a degreasing action on the skin. Repeated or prolonged skin contact may lead to irritant contact dermatitis. |
| Eyes | May be irritant, redness and pain. |
| Ingestion | Liquid may cause nausea, vomiting and diarrhea, dizziness, narcosis and lung damage. |

8 EXPOSURE CONTROLS / PERSONAL PROTECTION

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| Inhalation | Adequate ventilation; Organic Vapor canister. |
| Skin | Good personal hygiene. Wear protective equipment: clothing such as heavy rubber gloves, leather safety boots and impervious cotton or cotton blend overalls. PVC bib /rain suite should be worn when loading /of loading of product. |
| Eyes | PVC Face shields should be worn to protect eyes and face against splashes. |
| Ingestion | Keep away from food and feedstuffs. Do not eat, drink or smoke whilst handling this product. Wash hands and face before eating and drinking. |

9 FIRST AID MEASURES

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| Inhalation | Remove from exposure into fresh air, get medical advice, and administer oxygen if breathing is labored. |
| Skin | Wash contaminated areas immediately with soap and water. Remove contaminated clothing and wash before re –use. |
| Eyes | Flush with copious amounts of water for 15 minutes. Obtain medical advice immediately. |
| Ingestion | Do not induce vomiting: Rinse mouth with water. Have victim drink 240 – 300 ml water. If vomiting occurs, have victim lean forward to reduce risk of aspiration. Obtain medical attention. |

**SEEK MEDICAL ADVICE PROMPTLY AND SHOW THIS MSDS
TO A MEDICAL PRACTITIONER**

10 ACCIDENTAL RELEASE MEASURES

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| Notification procedures | Report spills as required to appropriate authorities. |
| Procedures if material is released or spilled | Absorb on fire retardant treated sawdust, diatomaceous earth, sand, peat sorbs, etc. Shovel up and dispose of at an appropriate waste disposal facility, in accordance with current applicable laws and regulations, and product characteristics at time of disposal. |
| Eye /Face /Body | Protective clothing (overall) and face shield should be worn. |
| Hands | Use leather gloves as they provide heat insulation and do not absorb oil. |
| Methods for cleaning up | Isolate spills area and stop leaks if possible without risk. |
| Small spill and leak | Avoid inhalation of vapors. Collect and seal in properly labeled drums for disposal. |
| Large spill and leak | Contain, prevent run off into drains, and waterways. Absorb with sand, earth or |

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| Environmental Precautions | sawdust. Remove to safe area for disposal. Flush residue with large quantity of water. Use flameproof equipment. |
| Additional Instructions | Prevent entry into waterways, sewers, drains, basements or confined areas. Spillage or uncontrolled discharges into water sources must be alerted to the Department of Water Affairs and other appropriate regulatory bodies. |

11 HANDLING AND STORAGE

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| Handling | Normal hygiene practices. Do not breathe gas, fumes, vapor or spray. Wear suitable respiratory equipment. Avoid contact with skin and eyes. Keep away from incompatibles. |
| Storage | Store in a secure, dry, well –ventilated separate room, building or covered area. Do not store in open or unlabelled containers. Store away from strong oxidizing agents or combustible material. Keep containers closed at all times. Store at ambient temperatures. |
| Containers | 25 l HDPE drums. |

12 DISPOSAL CONSIDERATION

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| Waste disposal | Product should be utilized completely to avoid disposal. If not possible, dispose of to supervised waste incineration plant, in accordance with current applicable laws and regulations. Destroy empty containers by puncturing and flattening. |
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13 TRANSPORTATION DATA

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| Hazardous Description Label | Keep away from foodstuff. Do not transport with food and feedstuffs. Light paraffin, Hydrocarbon blend |
| UN Hazard Class | 6.1 |
| UN Packaging group | III |

Other Information

Reason for Alteration: General update.

The information contained herein is based on the present state of our knowledge. It characterizes the product with regard to the appropriate safety precautions. It does not represent a guarantee of the properness of the product.:

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All information is given in good faith but without guarantee in respect of accuracy & no responsibility is accepted for errors or omissions or the consequences thereof.

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