

MATERIAL SAFETY DATA SHEET**CONQUEST ARROW 100 EC INSECTICIDE/ MITICIDE**

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Section 1 – IDENTIFICATION

Product Name: Conquest Arrow 100 EC insecticide/ Miticide
Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S (contains bifenthrin)
UN Number: 3082 (Marine Pollutant)
ADG Classification: Class 9 (Environmentally Hazardous Substance, Liquid, N.O.S.)
Active Ingredient: Bifenthrin
Product Type: Emulsifiable Concentrate

Section 2 – HAZARDS IDENTIFICATION

NOHSC Classification: Hazardous
Hazchem Code: 2XE
Poison Schedule: 6
Risk Phrases: R22 – Harmful if swallowed
R36 – Irritating to eyes
R65 – May cause lung damage if swallowed
Safety Phrases: S2 Keep out of reach of children
S13 Keep away from food, drink and animal feeding stuff.
S20 In case of accident or if you feel unwell, contact a doctor or Poisons Information Centre.
S24 Avoid contact with skin
S36/37/39 Wear suitable protective clothing, gloves and eye/ face protection.
S62 If swallowed, do not induce vomiting; seek medical advice immediately and show the container or label.

Section 3 – COMPOSITION

| Chemical Entity | CAS No. | Proportion |
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| Bifenthrin | 82657-04-3 | 100 g/L |
| Solvent Naphtha (Petroleum) | 64742-95-6 | 750-800g/L |
| Surfactants (proprietary) | | 0-10% |

Section 4 – PHYSICAL AND CHEMICAL PROPERTIES

Physical Description & colour: Pale brown clear liquid.
Odour: Aromatic hydrocarbon odour
Boiling Point: N/A
Freezing/Melting Point: N/A; Liquid at normal temperature
Volatile Components: N/A. Expected to be low at 100°C.
Vapour Pressure: N/A
Specific Gravity: 0.93 at 20°C
Flash Point: >68°C
Water Solubility: Emulsifiable.

Section 5 – FIRST AID MEASURES

General Instruction: Consult 'The Poisons Information Centre' (Australia Phone: 13 11 26) or a Doctor in every case of suspected chemical poisoning. Never give fluids or induce vomiting if a patient is unconscious or convulsing regardless of cause of injury. If breathing difficulties occur seek medical attention immediately.

Inhalation: Move person to fresh air. If effects occur call a Doctor or seek medical advice..

Skin Contact: Take off contaminated clothing. Wash skin thoroughly with soap and water. Seek medical advice if irritation or an allergic reaction occurs.

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| Eye Contact: | Quickly and gently blot or brush product away. Flush the contaminated eye(s) with lukewarm, gently flowing water until the product is removed or until irritation has ceased, while holding the eyelid(s) open. Remove contact lenses. Obtain medical advice if irritation becomes painful or lasts more than a few minutes. |
| Ingestion: | If swallowed, call the Poisons Information Centre or a Doctor. Do not induce vomiting unless told to do so by the Poisons Information Centre or a Doctor. Make every effort to prevent vomit from entering the lungs by careful placement of the patient. Do not give any thing by mouth to a semi-conscious or unconscious person. |

Section 6 – FIRE FIGHTING MEASURE

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| Combustibility: | C1 |
| Polymerisation: | Not known to occur |
| Hazardous Combustion Product: | During a fire, smoke may contain the original material in addition to combustion products of varying composition that may be toxic and/ or irritating. Take appropriate protective measures. |
| Special Fire Fighting Procedures: | Evacuate personnel to a safe area. If the product is on fire wear positive-pressure self-contained breathing apparatus and full protective clothing. Do not allow water from fire-fighting to enter water supplies or drainage systems. |
| Extinguishing Media: | Preferred extinguishing media are carbon dioxide, dry chemical, foam, water fog. |
| Fire Fighting: | If a significant quantity of this product is involved in a fire, call the fire brigade. The product may generate carbon dioxide when on fire, and if combustion is incomplete, carbon monoxide. |
| Flash point: | >68°C (Pensky Martin closed cup) |

Section 7 – ACCIDENTAL RELEASE MEASURES

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| General Instructions: | Wear appropriate protective equipment. Clear area of all unprotected personnel. Prevent entry of chemical or used/damaged containers into sewers, drains, streams or waterways. If necessary, inform the police and the relevant State Authority. |
| Small Spill: | For clean up of a spill from a single shipping pack soak up with sand or other non-combustible absorbent material and place into containers for disposal. If applicable, wash the area with detergent and water. |
| Large Spill: | In the event of a major spill, eliminate all sources of sparks or open flame and prevent spillage from entering drains or water courses. Wear protective clothing as overalls, goggles and gloves. Stop leak if safe to do so, and contain spill. Absorb onto sand, vermiculite or other suitable absorbent material. If spill is too large or if absorbent material is not available, try to create a dike to stop material spreading or going into drains or waterways. Sweep up and shovel or collect recoverable product into labelled containers for recycling or salvage, and dispose of promptly. After spills, wash area preventing runoff from entering drains. If a significant quantity of material enters drains, advise emergency services. Ensure legality of disposal by consulting regulations prior to disposal. Thoroughly launder protective clothing before storage or re-use. Advise laundry of nature of contamination when sending contaminated clothing to laundry. |

Section 8 – HANDLING AND STORAGE

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| Handling: | Keep exposure to this product to a minimum, and minimise the quantities kept in work areas. After work, remove protective clothing, and wash hands before eating, smoking, drinking or using the toilet. Clean up spilled material immediately, and wash clothes, equipment and work area after use. Avoid breathing spray mist or vapours. Avoid splashes of material to the eye and skin. |
| Storage: | Store in the closed original container in a dry, cool, well-ventilated area out of direct sunlight. Do not store with food, feedstuff, fertilisers and seeds. This product is a scheduled poison. Observe all relevant regulations. |

Section 9 – EXPOSURE CONTROL AND PERSONAL PROTECTION

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| General Instructions: | The following Australian Standards will provide general advice regarding safety clothing and equipment: Respiratory equipment: AS/NZS 1715 , Protective Gloves: AS 2161 , Industrial Clothing: AS2919 , Industrial Eye Protection: AS1336 and AS/NZS 1337 , Occupational Protective Footwear: AS/NZS2210 . |
| Exposure limits: | Exposure limits have not been established by NOHSC for active ingredient. |
| Ventilation: | Use only with adequate ventilation. Provide general and/ or local exhaust ventilation to control airborne levels below the exposure guidelines. Make sure that the work environment remains clean and that vapours and mists are minimised. |
| Eye Protection: | Eye protection such as protective glasses or goggles are required when this product is being used. |
| Skin Protection: | Use protective clothing. Remove contaminated clothing immediately, wash skin area with soap and water, and launder clothing before reuse. |

Section 10 – STABILITY AND REACTIVITY

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| Chemical Reactivity: | This product is stable under normal storage condition and unlikely to react or decompose under normal storage conditions. |
| Conditions to Avoid: | Avoid high temperatures (at or near flash point), open flame, sparks and direct sunlight. Store in the closed original container in a dry, cool, well-ventilated area out of direct sunlight. |
| Incompatibilities: | Strong acids, strong bases, strong oxidising agents. |
| Fire Decomposition: | During a fire, smoke may contain the original material in addition to combustion products of varying composition that may be toxic and/ or irritating. Take appropriate protective measures. It may emit oxides of carbon, nitrogen and possibly toxic fumes of hydrogen chloride and phosgene. |
| Polymerisation: | This product is unlikely to undergo polymerisation processes. |

Section 11 – TOXICOLOGICAL INFORMATION

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| Inhalation: | May cause irritation to mucous membranes and respiratory tract. Breathing in high concentration can produce central nervous system depression, which can lead to loss of concentration, impaired judgement and if exposure is prolonged, unconsciousness. |
| Ingestion: | The concentrate is harmful if swallowed. Ingestion in relatively large amounts can result in headache, nausea, lethargy, motor weakness and incoordination. If aspirated into the lung, e.g. from vomiting, the presence of the solvent may result in chemical pneumonitis or other lung damage. |
| Skin: | Prolonged contact with the concentrate may cause skin sensitisation. The effects are transient and generally disappear in one to two days. Topical application of vitamin E cream is effective in reducing discomfort. The occurrence of facial sensation is an indication of exposure. Under these circumstances work practices should be reviewed. The prolonged contact with the concentrate can cause defatting of the skin and may result in dermatitis. |
| Eye: | The concentrate may cause irritation to the eyes. Prolonged contact with the concentrate may cause damage to the eye. |
| Acute Toxicity: | Oral: LD50 (rat) 54 mg/kg for bifenthrin. |

Section 12 – ECOLOGICAL INFORMATION

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| General Information: | The product is marine pollutant for sea transport. |
| Effects on birds: | Moderately toxic to birds. LD50 for bobwhite quail is 1800 mg/kg. |
| Effects on aquatic organisms: | Highly toxic to fish. LC50 (96 hrs) for rainbow trout is 0.00015 mg/L |
| Effects on other organisms: | The compound is toxic to bees. |

Section 13 – REGULATORY INFORMATION

APVMA Approval:

Conquest Arrow 100 EC Insecticide/ Miticide is a registered Insecticide and miticide under the Agricultural and Veterinary Chemicals Code Act 1994. APVMA Approval Number: 56826.

Section 14 – TRANSPORT INFORMATION

ADG Code: Class 9 (Environmentally Hazardous Substance, Liquid, N.O.S.)

UN Number (Sea Transport): 3082

IMO Proper Shipping: ENVIRONMENTALLY HAZARDOUS LIQUID, N.O.S (contains bifenthrin) Class 9, Packing Group III.

Section 15 – OTHER INFORMATION

General Information: This MSDS contains only safety-related information. For other data see product literature.

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| Acronyms: | ADG Code | Australian Code for the Transport of Dangerous Goods by Road and Rail |
| | AICS | Australian Inventory of Chemical Substances |
| Hazchem Number | CAS number | Chemical Abstracts Service Registry Number |
| | | Emergency action code of numbers and letters that provide information to emergency services especially firefighters |
| | IARC | International Agency for Research on Cancer |
| | NOHSC | National Occupational Health and Safety Commission |
| | NTP | National Toxicology Program (USA) |
| | R-Phrase | Risk Phrase |
| | SUSDP | Standard for the Uniform Scheduling of Drugs & Poisons |

Comments: THIS MSDS SUMMARISES 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 MUST REVIEW THIS MSDS IN THE CONTEXT OF HOW THE PRODUCT WILL BE HANDLED AND USED IN THE WORKPLACE. IF CLARIFICATION OR FURTHER INFORMATION IS NEEDED TO ENSURE THAT AN APPROPRIATE RISK ASSESSMENT CAN BE MADE, THE USER SHOULD CONTACT THIS COMPANY SO WE CAN ATTEMPT TO OBTAIN ADDITIONAL INFORMATION FROM OUR SUPPLIERS 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.

Please read all labels carefully before using product. This MSDS is prepared in accord with the NOHSC document "National Code of Practice for the Preparation of Material Safety Data Sheets" 2nd Edition [NOHSC:2011(2003)]