



NUFARM LIMITED A.C.N. 004 377 780
103 - 105 Pipe Road, LAVERTON NORTH VIC 3026 AUSTRALIA
Postal Address: PO Box 103, LAVERTON VIC 3028 AUSTRALIA
Telephone: (03) 9282 1000 Fax: (03) 9282 1001

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PRODUCT: DIMETHOATE SYSTEMIC INSECTICIDE	Infosafe No:NU011 ISSUED: Sep 96
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Hazardous according to criteria of Worksafe Australia

UN NO.....:3017 D.G.CLASS:6.1 CAS NO...:
HAZCHEM...:2W SUB. RISK:3
SUSDP.....: S6 (FED) S6 (NSW) S6 (VIC) S6 (SA) S6 (WA) S6 (Qld) S6 (Tas) S6 (NT)
G.T.EPG...:6C1 SPEC.EPG.: PACK. GRP:III
IMDG.....:6220

PRODUCT IDENTIFICATION

CORRECT SHIPPING NAME:

ORGANOPHOSPHORUS PESTICIDES, LIQUID, TOXIC, FLAMMABLE, N.O.S.

OTHER NAMES:

TRADENAMES.:

DIMETHOATE Systemic Insecticide

MANUF.: MANCODE:

NUFARM 1070

INGREDIENTS:

CHEMICAL ENTITY:	CAS NO:	PROPORTION:
Dimethoate	60-51-5	400 g/L
Cyclohexanone	108-94-1	612 g/L
Proprietary surfactant mix; not classified as hazardous.	Mixture	balance

PHYSICAL DESCRIPTION/PROPERTIES

APPEARANCE:

Clear, water-white liquid with characteristic odour.

BOILING POINT.....: 156°C

MELTING POINT.....: <0°C

VAPOUR PRESSURE.....: 0.4kPa @ 20°C for solvent: 1.1 mPa for active ingred.

VOLATILE COMPONENT.: 65%

SPECIFIC GRAVITY...: 1.078

FLASH POINT.....: 42°C (PMCC)

FLAMMABILITY LIMITS: 1.3 - 9.4% for cyclohexanone

REL. VAPOUR DENSITY: 3.4

OTHER PROPERTIES:

Concentrate forms an emulsion with water.

USE:

Systemic insecticide for the control of aphids, thrips, jassids, lucerne flies, red legged earth mite, Queensland fruit fly, leaf hoppers and wingless grasshoppers in certain crops as listed in the table attached to the label. Read "Directions for Use" on the label.

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MATERIAL SAFETY DATA SHEET

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HEALTH HAZARD INFORMATION

ACUTE EFFECTS

SWALLOWED:

The concentrate is considered harmful if swallowed, when classified according to the Worksafe Criteria. Will induce cholinesterase inhibition if swallowed in sufficient quantity.

EYE:

Will produce mild irritation with the possibility of some injury.

SKIN:

The product may cause skin and eye irritation. The active ingredient is readily absorbed through the skin and eyes. Prolonged or repeated exposure may cause defatting of skin which could lead to secondary dermatitis from the action of the solvent and surface active agents. Dimethoate is not considered a skin sensitiser.

INHALED:

Inhalation of solvent may cause headache, nausea, intoxication. Inhalation of spray mists may cause effects due to dimethoate, such as cholinesterase inhibition.

CHRONIC EFFECTS

Chronic Over Exposure: If exposure has been excessive over long periods some effects on the liver and blood may be evident. Dimethoate is unlikely to accumulate in tissues, and is degraded and eliminated from the body within a few days.

OTHER HEALTH HAZARD INFORMATION

CHOLINESTERASE INHIBITOR

Acute Over Exposure: Headache, dizziness, nausea, salivation, vomiting, diarrhea, slowing of heart beat, twitching spasms.

FIRST AID

SWALLOWED:

If poisoning occurs, contact a doctor or Poisons Information Centre. Do not give fluids or induce vomiting to a person who is unconscious or having convulsions. If swallowed give one atropine tablet every 5 minutes until dryness of the mouth occurs. Get to a doctor or hospital quickly.

EYE:

Irrigate for 15 minutes with copious quantities of water with eyelids held open. Seek medical advice.

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SKIN:

Never give fluids by mouth to a person who is unconscious or having convulsions. Remove contaminated clothing and launder before re-use. Wash affected area thoroughly with soap and water. If poisoned by skin absorption give one atropine tablet every 5 minutes until dryness of the mouth occurs. Seek medical advice. Get to a doctor or hospital promptly.

INHALED:

Remove to fresh air until recovered. If poisoned by absorption through the lungs give one atropine tablet every 5 minutes until dryness of the mouth occurs. Get to a doctor or hospital promptly.

FIRST AID FACILITIES:

Obtain a supply of Ipecac syrup APF and, if permitted, an emergency supply of Atropine tablets (0.6mgm).

ADVICE TO DOCTOR:

A cholinesterase inhibitor. Atropine treatment may be necessary along with 1g IV Pralidoxime for profound weakness or muscle twitching - curare therapy is contraindicated. Do NOT give adrenergic amines, aminophylline, succinylcholine, phenothiazines, or reserpine alkaloids or oils. Treat pulmonary pneumonitis and bronchopneumonia secondary to pulmonary oedema.

TOXICITY DATA:

For 50% solution of dimethoate in cyclohexanone:

Acute oral LD50 (rat): 400 - 500mg/kg

Acute dermal LD50 (rat): > 2000 mg/kg

Acute Inhalation LC50 (rat): Approximately 3mg/L/4hr

For technical grade Dimethoate:

Aquatic Toxicity:

LC50; 96hr (rainbow trout): 6.2 ppm

EC50; 48hr (daphids): 2.5 ppm

Toxic to bees

Toxicity to birds: Moderately toxic to birds

Acute oral LD50 (mallard duck): 41.7 mg/kg.

The Australian Acceptable Intake (ADI) of dimethoate for a human is 0.02 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOEL of 0.2 mg/kg/day, the level determined to show no effects during long term exposure for humans. (Ref: Comm. Dept. of Human Services and Health, "ADI List", AGPS, May 1994).

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PRECAUTIONS FOR USE

EXPOSURE STANDARDS:

For cyclohexanone: 25 ppm, TWA, Skin.

An exposure standard has not been established for dimethoate.

ENGINEERING CONTROLS:

Natural ventilation only required when handling the concentrate. A local exhaust should be used in confined areas to keep the level of solvent within acceptable limits.

PERSONAL PROTECTION:

Product is poisonous if absorbed by skin contact, inhaled or swallowed. Repeated minor exposure may have a cumulative poisoning effect. DO NOT inhale spray mist. When opening container and preparing spray wear cotton overalls buttoned to the neck and wrist, washable hat, elbow-length PVC gloves, face shield and impervious footwear. When using prepared spray wear cotton overalls buttoned to the neck and wrist and washable hat, elbow-length PVC gloves, impervious footwear and an approved half-face respirator with combined dust and gas cartridge (canister). If product on skin immediately wash area with soap and 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 and footwear.

FLAMMABILITY:

Flammable liquid. Vapour of solvent may form flammable mixtures with air. Keep ignition sources away when handling the concentrate.

ENVIRONMENT:

Marine Pollutant.
Dangerous to bees.
DO NOT spray any plants in flower while bees are foraging.
DO NOT contaminate streams, rivers, waterways or drains with the chemical or spray or used containers. Dispose of excess spray solution and empty containers in a responsible manner.
NO NOT spray in high winds.
Do not use this container for any other purpose.
Dimethoate is relatively stable in water over a pH range of 2-7, but hydrolyses fairly rapidly under alkaline conditions, e.g. at pH 9 there is a 50% loss in 12 days.

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SAFE HANDLING INFORMATION

STORAGE AND TRANSPORT:

STORAGE:

Store in the closed, original container in a well-ventilated area away from children, animals, food, feedstuffs, seed and fertiliser. Classified as a dangerous good for transport by road, rail, sea or air

TRANSPORT DETAILS:

ORGANOPHOSPHORUS PESTICIDES, LIQUID, TOXIC, FLAMMABLE N.O.S.

UN No. 3017 Class 6.1
Packaging Group: III Subrisk: 3
Hazchem: 2W Group Text EPG: 6C1

Packaging and Labelling:

POISON
NOT TO BE TAKEN
KEEP OUT OF REACH OF CHILDREN
READ SAFETY DIRECTIONS BEFORE OPENING

The product has been assessed according to the Worksafe criteria for classifying hazardous substances and is classified as hazardous:

Xn

Risk Phrases:

R10 Flammable
R20/21/22 Harmful by inhalation, in contact with skin and if swallowed.

Safety Phrases:

S25 Avoid contact with eyes
S36/37 Wear suitable protective clothing and gloves.

SPILLS AND DISPOSAL:

SPILLS:

Contain spill and absorb with sand or proprietary absorbent (vermiculite). Prevent from entering drains, waterways or sewers. Collect in sealed open top containers for disposal. Treatment with alkaline materials such as dilute lime will decompose the dimethoate. At pH 9, 50% of dimethoate will decompose in 12 days at average temperatures.

DOSPOSAL:

Triple rinse containers, add rinsate to the spray tank, then offer container for recycling/reconditioning, or puncture top, sides and bottom and dispose of in landfill in accordance with local regulations. On-site disposal of concentrate is not acceptable. Waste disposal by industrial incineration or burial at a site approved by local authorities.

