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PRODUCT: CHLORPYRIFOS 500EC Insecticide	Infosafe No: NU00W ISSUED: Sep 96
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Hazardous according to criteria of Worksafe Australia

UN NO.....:3018 D.G.CLASS:6.1 CAS NO...:
HAZCHEM...:2W SUB. RISK:
SUSDP.....: S6(FED) S6(NSW) S6(VIC) S6(SA) S6(WA) S6(Qld) S6(Tas) S6(NT)
G.T.EPG...:6A1 SPEC.EPG.: PACK. GRP:III
IMDG.....:6219

PRODUCT IDENTIFICATION

CORRECT SHIPPING NAME:

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

OTHER NAMES:

TRADENAMES.:

Chlorpyrifos 500EC Insecticide

MANUF.: MANCODE:

NUFARM 1030

INGREDIENTS:

CHEMICAL ENTITY:	CAS NO:	PROPORTION:
Chlorpyrifos	2921-88-2	500 g/L
Solvesso 150 solvent	64792-94-5	538 g/L
Dobenz HF	26264-06-2	1-10% w/v
Polyethylene oxide surfactants: not classified as hazardous.		
Mixture		1-10% w/v

PHYSICAL DESCRIPTION/PROPERTIES

APPEARANCE:

Straw coloured liquid.

BOILING POINT.....: >150°C

MELTING POINT.....: <0°C

VAPOUR PRESSURE.....: 2.7 mPa (25°C) for chlorpyrifos

VOLATILE COMPONENT.: 50-60%

SPECIFIC GRAVITY...: 1.17-1.18

FLASH POINT.....: 68°C (PMCC - AS2106)

FLAMMABILITY LIMITS: 0.6 - 7.0% v/v for Solvesso 150

REL. VAPOUR DENSITY: >1

pH.....: neutral

OTHER PROPERTIES:

Product emulsifies with water to give a fine emulsion.

USE:

For control of certain insect pests of: cassava, cereals, forage crops, fruit, ginger, grape vines, hops, oil seeds, pastures, pineapples, sugar cane and vegetables.

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MATERIAL SAFETY DATA SHEET

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HEALTH HAZARD INFORMATION

ACUTE EFFECTS

SWALLOWED:

The concentrate is considered toxic if swallowed, when classified according to the Worksafe Criteria.

If product enters the lungs, for instance if vomiting occurs, the solvent present may cause pulmonary pneumonitis.

EYE:

The concentrate will cause moderate irritation and possible injury.

SKIN:

Prolonged or repeated exposure may cause defatting of skin which could lead to secondary dermatitis. The rate of absorption of chlorpyrifos through skin is low, hence the product is only moderately toxic by this route. Chlorpyrifos is not considered a skin sensitising agent.

INHALED:

Inhalation of chlorpyrifos from the concentrate is unlikely to present a problem due to its low vapour pressure. However, the spray can present a toxic problem if inhaled in relatively large quantities. Avoid inhaling spray mists. Inhalation of spray can lead to cholinesterase inhibition, manifesting as dizziness, headaches, nausea, salivation, vomiting, twitching, spasms.

CHRONIC EFFECTS

Regular exposure to excessive amounts of chlorpyrifos spray mist may produce cholinesterase inhibition. Signs of excessive exposure can include headache, twitching, vomiting, dizziness, salivation, nausea, spasms.

There is no evidence of any reproductive effects or carcinogenicity.

OTHER HEALTH HAZARD INFORMATION

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:

If poisoned by skin absorption, remove contaminated clothing and launder before re-use. Wash affected areas thoroughly with soap and water. Give atropine treatment as indicated under swallowed. Get to a doctor or hospital.

INHALED:

Remove to fresh air. Atropine treatment may be necessary if excessive amounts of spray mist inhaled.

FIRST AID FACILITIES:

Obtain a 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:

Toxicity to mammals:

For product of similar composition

Acute oral LD50 (rats): 345mg/kg (male)
(rats): 230mg/kg (female)

Acute percutaneous LD50 (rats): 409mg/kg

For active ingredient:

Acute oral LD50 (rats): 135-163mg/kg
(guinea pigs): 500mg/kg
(rabbits): 1000-2000mg/kg

No teratogenic effects.

Cholinesterase inhibitor.

Acute percutaneous LD50 (rabbit): >2000mg/kg

Toxicity to birds: Acute oral LD50 (chickens) 32mg/kg

Toxicity to fish: Toxic to fish

LC50 (goldfish): 0.18mg/l (24 hours)

(mosquito fish): <1mg/l (24 hours)

LC50 (rainbow trout): 0.003mg/l (96 hours)

Toxicity to bees: Toxic to bees

The Australian Acceptable Intake (ADI) of chlorpyrifos for a human is 0.003 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOEL of 0.03 mg/kg/day (human data), the level determined to

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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 fertilizers. The product is classified as a dangerous good, Class 6, for transport and storage.

TRANSPORT DETAILS

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

UN No. 3018 Class: 6.1
Packaging Group: III Subrisk: -
Hazchem: 2W Group Text EPG: 6A1

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:

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Risk Phrases:

R24/25 Toxic in contact with skin and if swallowed

Safety Phrases:

S28 After contact with skin, wash immediately with plenty of water.
S36/37 Wear suitable protective clothing and gloves
S44 If you feel unwell, contact a doctor or Poisons Information Centre immediately (show the label where possible)

SPILLS AND DISPOSAL:

SPILL:

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.

Lime or soda ash may be used for final clean up.

DISPOSAL:

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



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SPILLS AND DISPOSAL: - (continued)

local authorities or decomposition with lime or soda ash (care must be taken). Breakdown products still have significant toxicity.

For minor contamination of soil: chlorpyrifos has a half life in soil of 60 - 120 days under normal conditions of temperature and moisture.

FIRE/EXPLOSION HAZARD:

Product will burn. Will emit toxic fumes of hydrogen chloride, hydrogen cyanide, nitrous oxides and/or phosgene if involved in fires or exposed to extreme heat. Breathable air apparatus may be required in confined spaces. Extinguishing media: "Alcohol" foam, water fog, dry chemical, carbon dioxide. HAZCHEM : 2W.

Reactivity Data:

May react violently if exposed to strong oxidising materials. Chloripyrifos will decompose if exposed to strong acids or alkalis thus losing efficacy. Incompatibility: Avoid chlorine, inorganic peroxides and acids and alkalis.

OTHER INFORMATION

User Data:

Contact Point:

Normal Hours: Mr. Volker Maier Phone: (03) 9282-1000
 After Hours: Shift Supervisor Phone: 1 800 033 498

End: Infosafe printed Material Safety Data Sheet - 1 October 1999