



DAVID GRAY & CO PTY LIMITED

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MATERIAL SAFETY DATA SHEET

IDENTIFICATION

HAZARDOUS ACCORDING TO CRITERIA OF WORKSAFE AUSTRALIA

PRODUCT NAME:	Preconstruction Termiticide
OTHER NAME:	Chlorpyrifos-O,O-diethyl-O-3,5,6,trichloro-2-pyridyl phosphorothioate
MANUFACTURERS CODE:	(23892) 5L, (23707) 20L
CORRECT SHIPPING NAME (ADG):	Organophosphorus Pesticides, Liquid, Toxic, NOS.
UN NUMBER:	3018
DANGEROUS GOODS CLASS:	6.1 - Toxic
SUBSIDIARY-RISK:	Not Applicable
PACKAGING GROUP:	III
HAZCHEM CODE:	3WE
POISONS SCHEDULE:	6
USE:	For the pre-construction control of subterranean termites as per the directions for use.

PHYSICAL DESCRIPTION / PROPERTIES

APPEARANCE:	Clear yellow liquid, slight mercaptan odour.
MELTING POINT:	< -20 deg C
BOILING POINT:	Hydrocarbon solvent 178 – 209 deg C
VAPOUR PRESSURE:	0.074 kPa solvent, 2.5×10^{-6} kPa chlorpyrifos
SPECIFIC GRAVITY:	1.105
FLASH POINT:	>66 deg C (PMCC)
FLAMMABILITY LIMITS:	Solvent - Lower 0.9%, Upper 6.0% (v/v in air)
SOLUBILITY IN WATER:	emulsifiable
CORROSIVENESS:	Corrosive to copper and brass
REACTIVITY:	Do not expose to oxidising agents, acids, alkalis, dyes

INGREDIENTS

CHEMICAL NAME	CAS.NO.	PROPORTION
Chlorpyrifos	1344-81-6	280g/L
Aromatic Hydrocarbon	64742-94-5	550g/L
Other ingredients determined not to be hazardous	-	To 100%

HEALTH HAZARD INFORMATION

HEALTH EFFECTS

HAZARD CLASSIFICATION (In accordance with criteria of Worksafe Australia): T-Toxic

RISK PHRASES: R24/25 Toxic in contact with skin and if swallowed.

SAFETY PHRASES: S24/25 – After contact with skin and eyes.
S46 – If swallowed, contact a doctor or Poisons Information Centre immediately.
National Poisons Information Centre 131 126

GENERAL:

No adverse health effects are expected when the product is used in accordance with label directions. If mishandled (excessive exposure) may cause organophosphorus cholinesterase inhibition. Poisoning symptoms include headaches, dizziness, nausea, diarrhoea, incoordination, muscle twitching, tremors, abdominal cramps, tightness in chest, sweating, blurred vision, salivation, excessive urination and convulsions.

ACUTE

SWALLOWED:

The acute oral toxicity is High. Oral LD50 (rat) 135mg/kg (Chlorpyrifos).

For product Oral LD50 (rat) 280mg/kg

EYE:

Moderate eye irritant.

SKIN:

The acute dermal toxicity is low, however repeated exposure may result in absorption of harmful amounts. Repeated skin contact may cause allergic reactions. Dermal LD50 (rat) 2000mg/kg (Chlorpyrifos).

For product LD50 4167mg/kg.

INHALED:

The acute inhalation toxicity is moderate. Excessive exposure to vapour may be harmful. Prolonged exposure to the vapour may cause eye and respiratory irritation, dizziness and headaches.

Inhalation LD50 (rat) = >0.2 mg/m³ (4 hours) (Chlorpyrifos).

CHRONIC:

Chlorpyrifos does not cause generic change or accumulate in the body. Long term carcinogenicity studies of the active ingredient, chlorpyrifos, on rats and mice showed no increase in tumours.

FIRST AID

GENERAL:

In every case of suspected poisoning contact a doctor or a Poisons Information Centre immediately.

SWALLOWED:

Seek medical attention immediately. Do not induce vomiting. It is recommended to give a slurry of activated charcoal to absorb the product swallowed.

NOTE: Do not give fluids, tablets or induce vomiting if patient is unconscious or convulsing.

EYE:

Hold eyelids open and flush eyes with water for at least fifteen minutes. Seek medical attention.

SKIN:

Immediately remove contaminated clothing and wash skin thoroughly with soap and water for at least fifteen minutes. If symptoms of poisoning occur give atropine tablets as above and seek medical attention immediately.

INHALED:

Immediately remove patient to fresh air. If difficulty in breathing is experienced, give oxygen and artificial respiration if necessary.

FIRST AID FACILITIES:

Soap, water, Activated Charcoal, Atropine tablets.

ADVICE TO DOCTOR:

Chlorpyrifos is a cholinesterase inhibitor. Preferred antidote: atropine by injection or atrovent/ipratropium by airway puff. David Grays Pre-Construction Termiticide contains petroleum type solvents and the benefits of induced vomiting must be weighed against the possibility of chemical pneumonitis.

PRECAUTIONS FOR USE

EXPOSURE STANDARDS:

Worksafe Occupational Exposure Standard (TWA – Time Weighted Average)

Chlorpyrifos - 0.2mg/m³

Time Weighted Average (TWA) means the average airborne concentration of a particular substance when calculated over a normal eight-hour working day, for a five day working week.

ENGINEERING CONTROLS:

Use only in a well ventilated area.

PERSONAL PROTECTION:

When handling the product, preparing and using spray wear:

- chemical resistant overalls with hood, buttoned to the neck.
- elbow length PVC neoprene or nitrile gloves.
- goggles.
- half faced respirator with combined dust/toxic vapour cartridge. Remove contaminated clothing immediately and wash thoroughly. Wash hands, face and arms immediately after use and before eating and drinking.

FLAMMABILITY:

Not flammable under normal conditions of use. Will burn if involved in a fire or heated above the flash point.

SAFE HANDLING INFORMATION**STORAGE**

Store product in original container only in a locked, well-ventilated area out of direct sunlight.

TRANSPORT

Product is classified as a dangerous good in accordance with the Australian Code for the Transport of Dangerous Goods by Road and Rail.

CORRECT SHIPPING NAME: Organophosphorus Pesticides, Liquid, Toxic, NOS.

UN NUMBER: 3018

DANGEROUS GOODS CLASS: 6 Toxic

SUB-CLASS: Not applicable

PACKAGING GROUP: III

SPILLAGE

Wear appropriate clothing while cleaning up spill (see Personal Protection). Apply absorbent material such as sand, earth or attapulgate to contain the spill. Sweep up the material when absorption is complete. If product spilt indoors, wash contaminated surfaces with mild bleach solution (sodium hypochlorite).

DISPOSAL

Disposal of contaminated material must be done in accordance with State and/or Local regulations. Dispose of empty containers by wrapping in paper, placing in plastic bag and putting in garbage. Do not allow chemical containers, spray or washings to contaminate drains, sewers, streams, ponds or any waterway.

FIRE/EXPLOSION HAZARD

Concentrate will support combustion. A combination of the solvent vapour in air may form an explosive mixture, Chlorpyrifos decomposes at temperatures > 130 degrees C. Rapid decomposition occurs above 160 degrees C. Toxic and irritating gases may be formed if involved in a fire.

Hazchem: 3WE

Full personal protection is required.

FIRE/EXPLOSION HAZARD

Hazchem: 3WE

HAZARDOUS DECOMPOSITION PRODUCTS:

Hydrogen chloride, nitric oxides, oxides of phosphorus, ethyl sulphide and diethyl sulphide.

FIRE FIGHTING EQUIPMENT:

Foam, carbon dioxide (CO₂), or dry chemical extinguishers may be used. Run-off must be contained.

OTHER INFORMATION

ECOTOXICITY DATA:

Chlorpyrifos is highly toxic to birds, fish and bees and moderately toxic to pets and livestock. It has low toxicity to earthworms.

Chlorpyrifos does not bioaccumulate in animal systems.

ENVIRONMENTAL FATE:

In soil Chlorpyrifos is readily degraded by hydrolysis and microbial action. The half life of chlorpyrifos may range between sixty and one hundred and twenty days, depending on climatic conditions and soil types.

Biochemical degradation is highly accelerated in alkaline soils.

CONTACT POINT

TITLE: Technical Department

TELEPHONE NUMBER: (08) 9337 4933

AUTHORISED:

DATE:

NOTICE:

This Material Safety Data Sheet has been developed according to the Worksafe Australia/NOHSC Codes of Practice.

The information contained herein is given in good faith however and is considered to be accurate at the specified issue date. No warranty expressed or implied is made to the accuracy or completeness of the data and information contained herein.

No person, other than an authorised representative of David Gray & Company Pty Ltd, has the authority to make any alterations to this MSDS.

Contact David Gray & Co Pty Limited for further product information on (08) 9337 4933 during normal business hours.