



# DAVID GRAY & CO PTY LIMITED

A.C.N. 008 671 127

2 Rawlinson Street O'Connor PO Box 2084 Palmyra DC

Western Australia 6961

Ph (08) 9337 4933 Fax (08) 9337 8316

Emergency Telephone Number (08) 9337 4933 (During Office Hours)

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Page 1 of 5

## MATERIAL SAFETY DATA SHEET

### IDENTIFICATION

HAZARDOUS ACCORDING TO CRITERIA OF WORKSAFE AUSTRALIA

**PRODUCT NAME:** Grubkiller Insecticide

**OTHER NAME:** None allocated

**MANUFACTURERS CODE:** 07141 – 500mL

**PROPER SHIPPING NAME (ADG Code):** Organophosphorus Pesticides, Liquid, Toxic (Chlorpyrifos)

**UN NUMBER:** 3018

**DANGEROUS GOODS CLASS:** 6.1

**SUBSIDIARY-RISK:** None allocated

**PACKAGING GROUP:** III

**HAZCHEM CODE:** 2W

**POISONS SCHEDULE:** 6

**USE:** For control of African Black Beetle, Lawn Armyworm, Lawn Grub and Funnel Ants in lawns as per the directions for use.

### PHYSICAL DESCRIPTION / PROPERTIES

**APPEARANCE:** Light brown liquid, slight mercaptan odour.

**MELTING POINT:** < -20 °C

**BOILING POINT:** approx 178°C (solvent)

**VAPOUR PRESSURE:** 0.074kPa at 20°C (solvent)

**DENSITY:** 0.99 at 20°C

**FLASH POINT:** >62°C

**FLAMMABILITY LIMITS:** None allocated

**SOLUBILITY IN WATER:** Produces an emulsion

**CORROSIVENESS:** Corrosive to copper and brass

**OTHER PROPERTIES:** None allocated

### INGREDIENTS

CHEMICAL NAME	CAS.NO.	PROPORTION
Chlorpyrifos	2921-88-2	240g/L
Aromatic Hydrocarbon Solvent	64742-94-5	672g/L
Other ingredients determined to be non-hazardous	-	To 100%

## HEALTH HAZARD INFORMATION

### HEALTH EFFECTS

#### HAZARD CLASSIFICATION (In accordance with criteria of Worksafe Australia):

Xn – Harmful

#### RISK PHRASES:

R24/25 – Toxic in contact with skin and if swallowed

R38 – Irritating to skin

#### SAFETY PHRASES:

S28 – After contact with skin, wash immediately with plenty of soap and water.

S36/37 – Wear suitable protective clothing and gloves.

S44 – If you feel unwell, contact a doctor or Poisons Information Centre immediately

#### GENERAL:

Excessive exposure may produce Organophosphorus type cholinesterase inhibition. Symptoms of poisoning include headache, dizziness, in co-ordination, muscle twitching, tremors, nausea, abdominal cramps, diarrhoea, sweating, pinpoint pupils, blurred vision, salivation, tearing, chest tightness, excessive urination, convulsions, coma and even death.

#### ACUTE

##### SWALLOWED:

The acute oral toxicity is moderate. Oral LD50 (rat) 165mg/kg (chlorpyrifos).

For product Oral LD50 (rat) 660mg/kg

##### EYE:

Moderate eye irritant

##### SKIN:

The acute dermal toxicity is low, however repeated exposure may result in absorption of harmful amount.

Repeated skin contact may cause allergic reactions. Dermal LD50 (rabbit) 2000mg/kg (chlorpyrifos).

For product LD50>8000mg/kg

##### INHALED:

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

Inhalation LD50 (rat) = 2600 – 3600 mg/m<sup>3</sup> (4hours) (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.

Avoid prolonged or repeated skin contact.

## FIRST AID

### GENERAL:

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

### SWALLOWED:

Seek medical attention immediately. Induce vomiting preferably using Ipecac Syrup APF. If more than 15 minutes from medical assistance, give one atropine tablet every 5 minutes until dryness of mouth occurs then seek medical attention immediately. **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 if symptoms occur.

### SKIN:

Immediately remove contaminated clothing and wash skin thoroughly with soap and water for at least minutes. If symptoms of poisoning occur, seek medical attention immediately.

### INHALED:

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

### FIRST AID FACILITIES:

Soap, water, Ipecac Syrup APF

## ADVICE TO DOCTOR:

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

## PRECAUTIONS FOR USE

### EXPOSURE STANDARDS:

Worksafe Occupational Exposure Standard (TWA – Time Weighted Average)

Chlorpyrifos 0.2mg/m<sup>3</sup>

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 (external use only)

### PERSONAL PROTECTION:

When handling the product use gloves. Eye protection is also recommended. Remove contaminated clothing immediately and wash thoroughly. Wash hands, face and arms immediately after use and before eating and drinking.

### FLAMMABILITY:

Not flammable. Concentrate is combustible.

## SAFE HANDLING INFORMATION

### STORAGE

Store product in original container only in a locked, well ventilated area, out of direct sunlight and out of the reach of children. Keep away from foodstuffs.

### TRANSPORT

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

<b>CORRECT SHIPPING NAME:</b>	Organophosphorus Pesticides, Liquid, Toxic (Chlorpyrifos)
<b>UN NUMBER:</b>	3018
<b>DANGEROUS GOODS CLASS:</b>	6.1
<b>SUB-CLASS:</b>	None allocated
<b>PACKAGING GROUP:</b>	III

### SPILLAGE

Wear appropriate clothing while cleaning up spill (see Personal Protection). Prevent entry into drainage systems, waterways, rivers etc. Sweep up the material. 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. Triple rinse containers with water and add rinsings to tank mix. Destroy empty containers by breaking, crushing or puncturing them. Dispose of the empty containers at a local authority landfill. Do not burn empty containers or product. Do not allow chemical containers, spray or washings to contaminate drains, sewers, streams, ponds or any waterway.

### FIRE/EXPLOSION HAZARD

Product not flammable or explosive. Product is combustible.

### HAZARDOUS DECOMPOSITION PRODUCTS:

Decomposition of chlorpyrifos may be hazardous under fire conditions toxic-irritating gases may be formed such as hydrogen chloride, ethyl sulfide, diethyl sulfide and nitrogen oxides at temperatures above 160°C. Avoid heating above 50°C.

### FIRE FIGHTING EQUIPMENT:

Foam, carbon dioxide (CO<sub>2</sub>), 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. Bio chemical degradation is highly accelerated in alkaline soils.

## CONTACT POINT

**TITLE:** Production Chemist

**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.

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