

# MATERIAL SAFETY DATA SHEET



Garrards NZ Pty Ltd	Date Issued: 06/12/07
Unit 4, 27B Cain Road	Reviewed Date: 13/02/08
Penrose, Auckland, NZ	
Ph: (09) 526 5232	Product Code: Chlru4520-micro

## 1. PRODUCT AND COMPANY IDENTIFICATION:

### PRODUCT:

Country Chlorpyrifos 450 Micro-Low

### COMPANY IDENTIFICATION:

Accensi Pty Ltd (Manufacturer)  
Lot 96 Potassium Street  
Narangba, Queensland 4504, Australia  
Ph: (07) 3897 2000

Garrards NZ Pty Ltd (Distributor)  
Unit 4, 27B Cain Road  
Penrose, Auckland, New Zealand  
Ph: (09) 526 5232

**USE:** Termiticide for pre-construction control of Subterranean termites, termiticide and Insecticide for the treatment of post-construction subterranean termite infestations and for the control of domestic pests as per directions for use.

## 2. COMPOSITION / INFORMATION ON INGREDIENTS:

Ingredients	CAS Reg. No.	Conc.
Chlorpyrifos Tech 98%	2921-88-2	450g/L
Aromatic Solvent	64742-94-5	326.5g/L
Other ingredients determined non hazardous		MED

Proportion (% weight per weight): VHIGH >60, HIGH 30-60, MED 10-29, LOW 1-9, VLOW <1

## 3. HAZARDOUS IDENTIFICATIONS:

### HSR 000224

#### Hazard Classification:

3.1D,

Toxic: 6.1C, 6.3B, 6.4A, 6.9A

Ecotoxic: 9.1A, 9.2B, 9.3A, 9.4A

Classified as Hazardous according to criteria of Worksafe Australia.

**POTENTIAL HEALTH EFFECTS:** This section includes possible adverse effects, which could occur if this material is not handled in the recommended manner.

**POISONING SYMPTOMS:** These are typical organophosphate pesticides – nausea, diarrhoea, dripping nose and mouth, excessive salivation, stomach cramps, excessive sweating, trembling, loss of muscle coordination, muscle twitches, weakness,

mental confusion, blurred vision, breathing difficulties, rapid pulse pin-point pupils.  
(Cholinesterase inhibition)

**EYE:** The concentrate will cause moderate irritation and possible injury.

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

**INGESTION:** The concentrate is considered toxic if swallowed, when classified according to Worksafe Criteria.

**INHALATION:** 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 mists. Inhalation of spray can lead to cholinesterase inhibition, manifesting as dizziness, headaches, nausea, salivation, vomiting, twitching or spasms.

**SYSTEMIC** (other target organ): Chlorpyrifos primarily affects the nervous system through inhibition of cholinesterase, an enzyme required for proper nerve functioning. The hydrocarbon liquid may cause narcosis and central nervous system depression following prolonged over-exposure.

**CANCER INFORMATION:** The ingredients are not listed as carcinogenic in Worksafe's document "Exposure Standards for Atmospheric Contaminants in the Occupational Environment" (May 1995).

**TERATOLOGY** (Birth defects): No evidence of in laboratory mammals.

**REPRODUCTIVE EFFECTS:** No evidence of in laboratory mammals.

## 4. FIRST AID:

If poisoning occurs, immediately contact a doctor or Poisons Centre (0800 POISON), and follow the advice given. Show this Material Safety Data Sheet to a doctor.

**EYE:** Rinse immediately with plenty of water for at least 15 minutes, holding eye open and taking care to

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rinse under eyelids as well. If irritation persists seek medical attention.

**SKIN:** Wash off skin immediately with soap and plenty of water. Remove all contaminated clothing and shoes. If poisoning occurs seek immediate medical attention and if more than 15 minutes from medical attention, give one Atropine tablet (0.5mg) every 5 minutes until dryness of mouth occurs.

**INGESTION:** Wash out mouth with water. Do not induce vomiting. Keep patient at rest and seek medical advice.

**INHALATION:** Move affected person to fresh air and keep until recovered. If poisoning occurs seek immediate medical attention and if more than 15 minutes from emergency medical attention, give one Atropine tablet (0.5mg) every 5 minutes until dryness of mouth occurs.

**Always seek medical attention when atropine has been given. (Even if symptoms have subsided)**

**NOTE TO PHYSICIAN:** Chlorpyrifos is a cholinesterase inhibitor. Atropine by ingestion or Atrovent / Ipratropium by airway puff are preferred antidotes. Oximes such as 2 PAM/protopam may be therapeutic if used early, but only if used in conjunction with atropine. Do not give adrenergic amines, aminophylline, succinylcholine, phenothiazines or reserpine alkaloids or oils. Treat pulmonary pneumonitis and bronchopneumonia secondary to pulmonary oedema. This product contains a petroleum based solvent and so the benefits of inducing vomiting must be balanced against the possibility of chemical pneumonitis if inhaled. If lavage is performed, endotracheal or oesophagoscopy control is advised.

## 5. FIRE FIGHTING MEASURES:

**FLASH POINT:** 66°C (Aromatic solvent)

**FLAMMABLE LIMITS:** 0.9 – 6.0 % for the solvent.

**EXTINGUISHING MEDIA:** Carbon dioxide, dry chemical, foam, water fog.

**FIRE AND EXPLOSION HAZARDS:** Vapours from this product are heavier than air and may accumulate in sumps, pits and other low-lying spaces, forming potentially explosive mixtures. They may also flash back considerable distances.

**FIRE-FIGHTING EQUIPMENT:** When fighting fires involving significant quantities of this product, wear safety boots, non-flammable overalls, gloves, hat goggles and self-contained breathing apparatus. All skin should be covered.

## 6. ACCIDENTAL RELEASE MEASURES:

### ACTION TO TAKE FOR SPILLS:

In case of spills it is important to take all steps necessary to:

- Avoid eye and skin contact.
  - Avoid contamination of waterways.
1. Keep all bystanders away.
  2. Wear full-length clothing and PVC gloves.
  3. Reposition any leaking containers so as to minimise further leakage.
  4. Dam and absorb spill with an absorbent material (e.g. sand or soil).
  5. Shovel the absorbed spill into drums and top with hydrated lime.
  6. Disposal of the absorbent material will depend on the extent of the spill.
    - For quantities up to 50L of product bury in a secure land fill site.
    - For quantities greater than 50L seek advice from the manufacturer before attempting disposal. Contain in a secure location until disposal method is established.
  7. Decontaminate spill area with hydrate lime scattered over the spill prior to rinsing off with water.

## 7. HANDLING AND STORAGE:

**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:** Store in a cool dry place away from direct sunlight. Store away from food and food stuffs for animal or human consumption. Store in its original container well sealed.

## 8. EXPOSURE CONTROL / PERSONAL PROTECTION:

### EXPOSURE GUIDELINES:

For chlorpyrifos; 0.2 mg/m<sup>3</sup>, TWA, skin.  
For Aromatic hydrocarbon, the supplier recommends an occupational exposure limit of 100 ppm (TWA) as total hydrocarbon.

**ENGINEERING CONTROLS:** Natural ventilation only except in confined spaces where a local exhaust fan should be provided while handling the concentrate.

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## RECOMMENDATIONS FOR MANUFACTURING, COMMERCIAL BLENDING, AND PACKAGING WORKERS:

Eye washing and shower facilities available.

**EYE / FACE PROTECTION:** Face and eye protection should be worn. For help in selecting suitable equipment consult AS 1336 and AS/NZS 1337.

**SKIN PROTECTION:** Wear chemical resistant PVC or nitrile gloves. Wear cotton overalls and washable cotton hat. Wear boots. For help in selecting suitable gloves consult AS 2161. For help in selecting suitable clothing consult AS 2919. For help in selecting boots consult AS/NZS 2210

**RESPIRATORY PROTECTION:** Avoid inhaling spray mist. For help in selecting suitable equipment consult AS/NZS 1715.

**APPLICATIONS AND ALL OTHER HANDLERS:** After handling this product always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

## 9. PHYSICAL AND CHEMICAL PROPERTIES:

**APPEARANCE:** Pale amber liquid.

**pH:** neutral

**ODOUR:** Solvent odour

**SOLUBILITY IN WATER:** Forms emulsions

**SPECIFIC GRAVITY:** 0.997

**BOILING POINT:** 183°C

**CORROSIVNESS:** Not Corrosive

## 10. STABILITY AND REACTIVITY

**STABILITY:** This product is unlikely to spontaneously decompose.

**INCOMPATIBILITY:** Avoid materials like Strong Acids, strong bases, and strong oxidising agents.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Carbon dioxide, and if combustion is incomplete, carbon monoxide and smoke. Oxides of sulfur. Oxides of phosphorus. Hydrogen chloride gas, chlorides and in some circumstances, phosgene. Water.

**HAZARDOUS POLYMERIZATION:** This product is unlikely to spontaneously polymerise.

## 11. TOXICOLOGICAL INFORMATION:

The Australian Acceptable Daily Intake (ADI) of chlorpyrifos for humans 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, the level determined to show no effect during long term exposure for the most sensitive indicators and the most sensitive species.

## 12. ECOLOGICAL INFORMATION:

### ENVIRONMENTAL DATA:

Chlorpyrifos is moderately persistent in soils. The half-life of chlorpyrifos in soil is usually between 60 to 120 days. Chlorpyrifos may be toxic to some plants, such as lettuce. Residuals remain on plant surfaces for approximately 10 to 14 days. Data indicate that this insecticide and its soil metabolites can accumulate in certain crops.

### ECOTOXICOLOGY:

Toxicity to mammals: (for similar product composition)  
Acute Oral LD<sub>50</sub> (rats): 483mg/kg  
Acute Percutaneous LD<sub>50</sub> (rats): 409mg/kg

For Active Ingredient:

Acute Oral LD<sub>50</sub> (rats): 483mg/kg

Guinea Pigs: 500mg/kg

Rabbits: 1000-2000mg/kg

Acute percutaneous LD<sub>50</sub> (rabbits): >2000mg/kg

Toxicity to birds:

Acute Oral LD<sub>50</sub> chickens 32mg/kg

Dangerous to fish.

Active ingredient is toxic to fish;

LC<sub>50</sub> (96 hrs) Rainbow trout 0.003mg/L.

LC<sub>50</sub> goldfish: 0.18mg/L (24 hrs)

Mosquito fish: <1mg/L (24 hrs)

Marine Pollutant

Dangerous to bees

DO NOT spray any plants in flower while bees are foraging.

DO NOT contaminate dams, waterways or sewers with pesticide or used containers.

DO NOT spray in high winds.

## 13. DISPOSAL CONSIDERATIONS:

**DISPOSAL METHOD:** Dispose of empty, used containers by;

(a) Triple rinsing with water. Add the rinsings to the tank mix or dispose of rinsate in a disposal pit away from desirable plants and roots, and

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watercourses. On-site disposal of undiluted product is unacceptable.

- (b) Breaking, crushing or puncturing the containers to prevent reuse.
- (c) Disposing of in a local authority, bury landfill site that does not burn its refuse. If there is no local authority landfill readily available in your area, bury the containers under at least 50cm of soil at a licensed/approved disposal site. DO NOT burn empty containers or product

## 14. TRANSPORT INFORMATION:

**SHIPPING NAME:** ORGANOPHOSPHOROUS PESTICIDES, LIQUID, TOXIC, N.O.S.

**DANGEROUS GOODS:** 6.1

**P.G:** III

**HAZCHEM:** 3WE

**UN No:** 3018

Class 6 Poisonous Substances shall not be loaded in the same vehicle or packed in the same freight container with Classes 1 (Explosives), 3 (Flammable Liquids where the Flammable Liquid is nitromethane), 5.1 (Oxidising Agents where the Poisonous Substances are Fire Risk Substances), 5.2 (Organic Peroxides where the Poisonous Substances are Fire Risk Substances), 8 (Corrosive Substances where the Poisonous Substances are cyanides and the Corrosive are acids), Foods stuff and food stuff empties. They may however be loaded in the same vehicle or packed in the same freight container with Classes, 2.1 (Flammable Gases), 2.2 (Non-Flammable, Non-Toxic Gases), 2.3 (Poisonous Gases), 3 (Flammable liquids, except where the flammable liquid is nitromethane), 4.1 (Flammable Solids), 4.2 (Spontaneously Combustible Substances), 4.3 (Dangerous When Wet Substances), 5.1 (Oxidising Agents except where the Poisonous Substances are Fire Risk Substances), 5.2 (Organic Peroxides except where the Poisonous Substances are Fire Risk Substances), 7 (Radioactive Substances), 8 (Corrosive Substances except where the Poisonous Substances are cyanides and the Corrosives are acids), 9 (Miscellaneous Dangerous Goods).

## 15. REGULATORY INFORMATION:

**POISON SCHEDULE:** S6

### RISK PHRASES:

- R24/25 Toxic in contact with skin and if swallowed.
- R65 Harmful: may cause lung damage 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)
- S23 Do not breathe vapour.
- S24 Avoid contact with skin.
- S62 if swallowed, do not induce vomiting, seek medical advice immediately and show this container and label.

## 16. OTHER INFORMATION:

All information in this data sheet is provided in good faith and is believed to be correct. Each user should consider the information in this safety data sheet within the context of their particular application as Accensi Pty Ltd cannot anticipate or control conditions under which this product may be used. Accensi Pty Ltd will not be responsible for any damages arising out of the use or reliance upon the information in this safety data sheet. No expressed or implied warranties are given other than those implied mandatory by Commonwealth, State or Territory legislation.

Please read all labels carefully before use.

**Contact: Emergency Services**  
**Ph: 111**  
**Ph: 0800 POISON**  
**(0800 764 766)**

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