

# 4FARMERS MCPA 500 SELECTIVE HERBICIDE

Chemwatch Independent Material Safety Data Sheet

Issue Date: 16-Jul-2009

C9317EC

CHEMWATCH 3722943

Version No:2.0

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## Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

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### PRODUCT NAME

4FARMERS MCPA 500 SELECTIVE HERBICIDE

### PRODUCT USE

Agricultural herbicide for control of annual broadleaf weeds.

### SUPPLIER

Company: 4Farmers

Address:

1/70 McDowell Street

Welshpool, 6106

AUS

Telephone: +61 8 9356 3445

Fax: +61 8 9356 3447

Email: admin@4farmers.com.au

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## Section 2 - HAZARDS IDENTIFICATION

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### STATEMENT OF HAZARDOUS NATURE

**HAZARDOUS SUBSTANCE. NON-DANGEROUS GOODS. According to the Criteria of NOHSC, and the ADG Code.**



### POISONS SCHEDULE

S6

#### RISK

- Harmful by inhalation in contact with skin and if swallowed.
- Causes burns.
- Limited evidence of a carcinogenic effect.
- Risk of serious damage to eyes.
- Vapours may cause drowsiness and dizziness.
- Cumulative effects may result following exposure\*.

\* (limited evidence).

#### SAFETY

- Keep locked up.
- Do not breathe gas/fumes/vapour/spray.
- Avoid contact with eyes.
- Wear suitable protective clothing.
- Use only in well ventilated areas.
- Keep container in a well ventilated place.
- To clean the floor and all objects contaminated by this material use water.
- Keep container tightly closed.
- Take off immediately all contaminated clothing.
- In case of accident or if you feel unwell IMMEDIATELY

contact Doctor or Poisons Information Centre (show label if possible).

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### **Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS**

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NAME	CAS RN	%
MCPA	94-74-6	50
dimethylamine	124-40-3	11.5
other non- hazardous ingredients		balance
water	7732-18-5	balance

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### **Section 4 - FIRST AID MEASURES**

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#### **SWALLOWED**

- - IF SWALLOWED, REFER FOR MEDICAL ATTENTION, WHERE POSSIBLE, WITHOUT DELAY.
- For advice, contact a Poisons Information Centre or a doctor.

#### **EYE**

- If this product comes in contact with the eyes:
  - Wash out immediately with fresh running water.
  - Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.

#### **SKIN**

- If skin contact occurs:
  - Immediately remove all contaminated clothing, including footwear.
  - Flush skin and hair with running water (and soap if available).

#### **INHALED**

- - If fumes or combustion products are inhaled remove from contaminated area.
- Lay patient down. Keep warm and rested.

#### **NOTES TO PHYSICIAN**

- Treat symptomatically.

Following exposures to chlorophenoxy compounds:

- Acute toxic reactions are rare. The by-product of production, dioxin, may be implicated in subacute features such as hepatic enlargement, chloracne, neuromuscular symptoms and deranged porphyrin metabolism.
- Large intentional overdoses result in coma, metabolic acidosis, myalgias, muscle weakness, elevated serum creatine kinase, myoglobinuria, irritation of the skin, eyes, respiratory tract and gut and mild renal and hepatic dysfunction.

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### **Section 5 - FIRE FIGHTING MEASURES**

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#### **EXTINGUISHING MEDIA**

- - There is no restriction on the type of extinguisher which may be used.
- Use extinguishing media suitable for surrounding area.

#### **FIRE FIGHTING**

- - Alert Fire Brigade and tell them location and nature of hazard.
- Wear breathing apparatus plus protective gloves for fire only.

#### **FIRE/EXPLOSION HAZARD**

+43cv+43cy+43cx+43cz+43ds11#436a

### **FIRE INCOMPATIBILITY**

- - Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result.

**HAZCHEM: None**

### **PERSONAL PROTECTION**

Glasses:

Chemical goggles.

Gloves:

PVC chemical resistant type.

Respirator:

Type AKNO Filter of sufficient capacity

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## **Section 6 - ACCIDENTAL RELEASE MEASURES**

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### **MINOR SPILLS**

- - Clean up waste regularly and abnormal spills immediately.
- Avoid breathing dust and contact with skin and eyes.

### **MAJOR SPILLS**

- Moderate hazard.
- Clear area of personnel and move upwind.
- Alert Fire Brigade and tell them location and nature of hazard.

**Personal Protective Equipment advice is contained in Section 8 of the MSDS.**

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## **Section 7 - HANDLING AND STORAGE**

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### **PROCEDURE FOR HANDLING**

- - Avoid all personal contact, including inhalation.
- Wear protective clothing when risk of exposure occurs.

### **SUITABLE CONTAINER**

- - Polyethylene or polypropylene container.
- Packing as recommended by manufacturer.

### **STORAGE INCOMPATIBILITY**

- Dimethylamine:
  - reacts violently with acids, p-chloroacetophenone, strong oxidisers
  - causes the violent polymerisation of acrylaldehyde.
  - Avoid strong acids, acid chlorides and acid anhydrides..
  - Avoid contact with copper, aluminium and their alloys.
  - Avoid reaction with oxidising agents.

### **STORAGE REQUIREMENTS**

- - Store in original containers.
- Keep containers securely sealed.

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## **Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION**

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### **EXPOSURE CONTROLS**

Source	Material	TWA ppm	TWA mg/m <sup>3</sup>	STEL ppm	STEL mg/m <sup>3</sup>
Australia Exposure	dimethylamine (Dimethylamine)	2	3.8	6	11

## Standards

The following materials had no OELs on our records

- MCPA: CAS:94-74-6
- water: CAS:7732-18-5

## PERSONAL PROTECTION

### RESPIRATOR

Type AKNO Filter of sufficient capacity

### EYE

- - Safety glasses with side shields
- Chemical goggles.

### HANDS/FEET

- - Wear chemical protective gloves, eg. PVC.
  - Wear safety footwear or safety gumboots, eg. Rubber.
- Suitability and durability of glove type is dependent on usage. Factors such as:
- frequency and duration of contact,
  - chemical resistance of glove material,

### OTHER

- - Overalls.
- P.V.C. apron.

## ENGINEERING CONTROLS

- Local exhaust ventilation usually required. If risk of overexposure exists, wear approved respirator.

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## Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

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### APPEARANCE

Clear, pale brown liquid with ammonia odour; mixes with water.

### PHYSICAL PROPERTIES

Liquid.

Mixes with water.

Molecular Weight: Not Applicable  
Melting Range (°C): <0  
Solubility in water (g/L): Miscible  
pH (1% solution): Not Available  
Volatile Component (%vol): Not Available  
Relative Vapour Density (air=1): Not Available  
Lower Explosive Limit (%): Not Applicable  
Autoignition Temp (°C): Not Applicable  
State: Liquid

Boiling Range (°C): Not Available  
Specific Gravity (water=1): 1.13  
pH (as supplied): 8  
Vapour Pressure (kPa): Not Available  
Evaporation Rate: Not Available  
Flash Point (°C): Not Applicable  
Upper Explosive Limit (%): Not Applicable  
Decomposition Temp (°C): Not Available  
Viscosity: Not Available

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## Section 10 - CHEMICAL STABILITY AND REACTIVITY INFORMATION

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### CONDITIONS CONTRIBUTING TO INSTABILITY

- - Presence of incompatible materials.
  - Product is considered stable.
- For incompatible materials - refer to Section 7 - Handling and Storage.

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## **Section 11 - TOXICOLOGICAL INFORMATION**

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### **POTENTIAL HEALTH EFFECTS**

#### **ACUTE HEALTH EFFECTS**

- Causes burns.
- Risk of serious damage to eyes.
- Harmful by inhalation, in contact with skin and if swallowed.
- Vapours may cause dizziness or suffocation.
- Vapours may cause drowsiness and dizziness.

#### **CHRONIC HEALTH EFFECTS**

- Limited evidence of a carcinogenic effect.
- Cumulative effects may result following exposure\*.
- \* (limited evidence).

### **TOXICITY AND IRRITATION**

- unless otherwise specified data extracted from RTECS - Register of Toxic Effects of Chemical Substances.

#### **TOXICITY**

None (Mouse) LD50: 550 mg/kg

#### **IRRITATION**

- For chlorophenoxy pesticides:.

**WARNING:** This substance has been classified by the IARC as Group 2B: Possibly Carcinogenic to Humans.

Side-reactions during manufacture of the parent compound may result in the production of trace amounts of polyhalogenated aromatic hydrocarbon(s). Halogenated phenols, and especially their alkali salts, can condense above 300 deg.

Polyhalogenated aromatic hydrocarbons (PHAHs) comprise two major groups. The first group represented by the halogenated derivatives of dibenzodioxins (the chlorinated form is PCDD), dibenzofurans (PCDF) and biphenyls (PCB) exert their toxic effect (as hepatotoxicants, reproductive toxicants, immunotoxicants and procarcinogens) by interaction with a cytosolic protein known as the Ah receptor.

The material may cause skin irritation after prolonged or repeated exposure and may produce a contact dermatitis (nonallergic). This form of dermatitis is often characterised by skin redness (erythema) and swelling epidermis.

Animal Metabolism – MCPA is rapidly absorbed and eliminated from mammalian systems.

Rats eliminated nearly all of a single oral dose within 24 hours, mostly in urine with little or no metabolism.

None (Rat) LD50: 900-1160 mg/kg

#### **MCPA:**

- unless otherwise specified data extracted from RTECS - Register of Toxic Effects of Chemical Substances.

#### **TOXICITY**

Oral (man) LDLo: 814 mg/kg  
Oral (rat) LD50: 700 mg/kg  
Dermal (rat) LD50: >1000 mg/kg

#### **IRRITATION**

Nil Reported

- For chlorophenoxy pesticides:.

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Animal Metabolism – MCPA is rapidly absorbed and eliminated from mammalian systems.

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WARNING : IARC - Human limited evidence.

Mutation - DNA inhibition mouse

for chlorphenoxy pesticides:

ADI: 0.01 mg/kg/day

NOEL: 1.1 mg/kg/day

**DIMETHYLAMINE:**

■ unless otherwise specified data extracted from RTECS - Register of Toxic Effects of Chemical Substances.

**TOXICITY**

Oral (rat) LD50: 698 mg/kg

Inhalation (rat) LC50: 4540 ppm/6h

Oral (mouse) LD50: 316 mg/kg

Inhalation (mouse) LD50: 4725 ppm/2h

Intraperitoneal (mouse) LD50: 736 mg/kg

Oral (rabbit) LD50: 240 mg/kg

**IRRITATION**

Eye (rabbit): 50 mg/5m

■ Asthma-like symptoms may continue for months or even years after exposure to the material ceases. This may be due to a non-allergenic condition known as reactive airways dysfunction syndrome (RADS) which can occur following exposure to high levels of highly irritating compound.

Excitement, muscle weakness, stomach ulceration, effects on olfaction and eyes, dyspnea, alterations in classic conditioning, changes in liver weight, decreases in cellular immune response, changes in phosphatase activity and hepatic microsomal mixed oxidases, changes in serum composition, changes in urine composition recorded.

**CARCINOGEN**

Chlorophenoxy herbicides	International Agency for Research on Cancer (IARC) Carcinogens	Group	2B
Nitrate or nitrite (ingested) under conditions that result in endogenous nitrosation	International Agency for Research on Cancer (IARC) Carcinogens	Group	2A

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**Section 12 - ECOLOGICAL INFORMATION**

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No data

**Ecotoxicity**

Ingredient	Persistence: Water/Soil	Persistence: Air	Bioaccumulation	Mobility
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4Farmers MCPA	
500 Selective	No data
Herbicide	
MCPA	No data
dimethylamine	No data
water	No data

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## Section 13 - DISPOSAL CONSIDERATIONS

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- - Containers may still present a chemical hazard/ danger when empty.
  - Return to supplier for reuse/ recycling if possible.
- Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their area.
- DO NOT allow wash water from cleaning or process equipment to enter drains.
  - It may be necessary to collect all wash water for treatment before disposal.
  - Recycle wherever possible.
  - Consult manufacturer for recycling options or consult local or regional waste management authority for disposal if no suitable treatment or disposal facility can be identified.

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## Section 14 - TRANSPORTATION INFORMATION

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HAZCHEM: None (ADG7)

NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS: ADG7, UN, IATA, IMDG

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## Section 15 - REGULATORY INFORMATION

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**POISONS SCHEDULE: S6**

### REGULATIONS

Regulations for ingredients

**MCPA (CAS: 94-74-6) is found on the following regulatory lists;**

"Australia Hazardous Substances","Australia Inventory of Chemical Substances (AICS)","Australia New Zealand Food Standards Code - Maximum Residue Limits (Australia only) - Schedule 3 - Chemical Groups","OECD Representative List of High Production Volume (HPV) Chemicals","WHO Guidelines for Drinking-water Quality - Guideline values for chemicals that are of health significance in drinking-water"

**dimethylamine (CAS: 124-40-3) is found on the following regulatory lists;**

"Australia Exposure Standards","Australia Hazardous Substances","Australia Inventory of Chemical Substances (AICS)","IMO IBC Code Chapter 17: Summary of minimum requirements","IMO MARPOL 73/78 (Annex II) - List of Noxious Liquid Substances Carried in Bulk","International Council of Chemical Associations (ICCA) - High Production Volume List","OECD Representative List of High Production Volume (HPV) Chemicals","The Australia Group Export Control List: Chemical Weapons Precursors"

**water (CAS: 7732-18-5) is found on the following regulatory lists;**

"Australia Inventory of Chemical Substances (AICS)","IMO IBC Code Chapter 18: List of products to which the Code does not apply","OECD Representative List of High Production Volume (HPV) Chemicals"

**No data for 4Farmers MCPA 500 Selective Herbicide (CW: 3722943)**

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## Section 16 - OTHER INFORMATION

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- Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

A list of reference resources used to assist the committee may be found at:  
[www.chemwatch.net/references](http://www.chemwatch.net/references).

- The (M)SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings.

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This is the end of the MSDS.