

# 4FARMERS HALOXYFOP 520 SELECTIVE HERBICIDE

Chemwatch Independent Material Safety Data Sheet

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## Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

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### PRODUCT NAME

4FARMERS HALOXYFOP 520 SELECTIVE HERBICIDE

### PRODUCT USE

■ The aryloxy phenoxy herbicides are selective post-emergence herbicides used against a range of perennial and annual grass weeds in a variety of crops. Members of this class interfered with normal lipid metabolism in sensitive plant and animal species. The use of a quantity of material in an unventilated or confined space may result in increased exposure and an irritating atmosphere developing.

Before starting consider control of exposure by mechanical ventilation.  
Agricultural herbicide for the use described in the label.

### 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.**

COMBUSTIBLE LIQUID, regulated under AS1940 for Bulk Storage purposes only.



### POISONS SCHEDULE

S6

#### RISK

- Harmful by inhalation and if swallowed.
- Irritating to eyes and skin.
- Very toxic to aquatic organisms may cause long-term adverse effects in the aquatic environment.
- Vapours may cause drowsiness and dizziness.

#### SAFETY

- Do not breathe gas/fumes/vapour/spray.
- Avoid contact with eyes.
- Wear suitable protective clothing.
- Use only in well ventilated areas.

- Potentially explosive peroxides may form on standing.\*.
- Cumulative effects may result following exposure\*.
- May produce discomfort of the respiratory system\*.

\* (limited evidence).

- Keep container in a well ventilated place.
- To clean the floor and all objects contaminated by this material use water.
- Keep container tightly closed.
- This material and its container must be disposed of in a safe way.
- Keep away from food drink and animal feeding stuffs.
- In case of contact with eyes rinse with plenty of water and contact Doctor or Poisons Information Centre.
- If swallowed IMMEDIATELY contact Doctor or Poisons Information Centre. (show this container or label).
- Use appropriate container to avoid environmental contamination.
- Avoid release to the environment. Refer to special instructions/Safety data sheets.

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

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NAME	CAS RN	%
haloxyfop- methyl	69806-40-2	<80
diethylene glycol monoethyl ether	111-90-0	30-60
other non hazardous ingredients		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**

- for poisons (where specific treatment regime is absent):

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#### **BASIC TREATMENT**

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- Establish a patent airway with suction where necessary.

- Watch for signs of respiratory insufficiency and assist ventilation as necessary.  
Treat symptomatically.

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

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### **EXTINGUISHING MEDIA**

- - Water spray or fog.
- Foam.

### **FIRE FIGHTING**

- - Alert Fire Brigade and tell them location and nature of hazard.
- Wear full body protective clothing with breathing apparatus.

### **FIRE/EXPLOSION HAZARD**

- - Combustible.
- Slight fire hazard when exposed to heat or flame.  
Combustion products include: carbon dioxide (CO<sub>2</sub>), hydrogen chloride, phosgene, hydrogen fluoride, nitrogen oxides (NO<sub>x</sub>), other pyrolysis products typical of burning organic material.  
Contains low boiling substance: Closed containers may rupture due to pressure buildup under fire conditions.  
May emit poisonous fumes.  
May emit corrosive fumes.

### **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:  
Safety Glasses.  
Chemical goggles.  
Gloves:  
PVC chemical resistant type.  
Respirator:  
Type ANO Filter of sufficient capacity

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

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### **MINOR SPILLS**

- - Remove all ignition sources.
- Clean up all spills immediately.

### **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**

- Contains low boiling substance:  
Storage in sealed containers may result in pressure buildup causing violent rupture of containers not rated appropriately.

- Check for bulging containers.
- Vent periodically.

The tendency of many ethers to form explosive peroxides is well documented. Ethers lacking non-methyl hydrogen atoms adjacent to the ether link are thought to be relatively safe

- DO NOT concentrate by evaporation, or evaporate extracts to dryness, as residues may contain explosive peroxides with DETONATION potential.

- Any static discharge is also a source of hazard.

The substance accumulates peroxides which may become hazardous only if it evaporates or is distilled or otherwise treated to concentrate the peroxides. The substance may concentrate around the container opening for example.

- Avoid all personal contact, including inhalation.
- Wear protective clothing when risk of exposure occurs.
- DO NOT allow clothing wet with material to stay in contact with skin.

#### **SUITABLE CONTAINER**

- - DO NOT use aluminium or galvanised containers.
- Metal can or drum
- Packaging as recommended by manufacturer.

#### **STORAGE INCOMPATIBILITY**

- Diethylene glycol monoethyl ether
- may produce unstable peroxides on prolonged storage
- reacts violently with strong oxidisers.
- Glycol ethers may form peroxides under certain conditions.
- In the presence of strong bases or the salts of strong bases, at elevated temperatures, the potential exists for runaway reactions.
- 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**

- haloxyfop-methyl: CAS:69806-40-2 CAS:72619-32-0
- diethylene glycol monoethyl ether: CAS:111-90-0

#### **PERSONAL PROTECTION**

##### **RESPIRATOR**

Type ANO 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, brown liquid with characteristic solvent odour; emulsifies with water.

### **PHYSICAL PROPERTIES**

Liquid.

Mixes with water.

Molecular Weight: Not Applicable

Melting Range (°C): Not Available

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 Available

Autoignition Temp (°C): Not Available

State: Liquid

Boiling Range (°C): 182-202°C (for solvent present)

Specific Gravity (water=1): 1.164

pH (as supplied): Not Available

Vapour Pressure (kPa): Not Available

Evaporation Rate: Not Available

Flash Point (°C): 92 (PMCC)

Upper Explosive Limit (%): Not Available

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**

- Harmful by inhalation and if swallowed.
- Irritating to eyes and skin.
- Vapours may cause dizziness or suffocation.
- Vapours may cause drowsiness and dizziness.
- May produce discomfort of the respiratory system\*.
- \* (limited evidence).

#### **CHRONIC HEALTH EFFECTS**

- 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.

■ The material may produce moderate eye irritation leading to inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.  
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.

For diethylene glycol monoalkyl ethers and their acetates:

This category includes diethylene glycol ethyl ether (DGEE), diethylene glycol propyl ether (DGPE) diethylene glycol butyl ether (DGBE) and diethylene glycol hexyl ether (DGHE) and their acetates.

Acute toxicity: There are adequate oral, inhalation and/or dermal toxicity studies on the category members.

For haloxyfop, haloxyfop methyl, haloxyfop ethoxyethyl

Acute Toxicity: haloxyfop and its derivatives are non-irritating to skin and do not cause skin sensitization. They are mild eye irritants. The symptoms of toxicity in rats are reduced food intake and reduced food consumption.

#### HALOXYFOP-METHYL:

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

#### TOXICITY

Oral (Rat) LD50: 393 mg/kg \*

Oral (Rat) LD50: 300 mg/kg \*

Dermal (Rabbit) LD50: >5000 mg/kg \*

#### IRRITATION

Eye (rabbit): Moderate \*

Skin (rabbit): non-Irritant \*

■ The material may produce moderate eye irritation leading to inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.

For haloxyfop, haloxyfop methyl, haloxyfop ethoxyethyl

Acute Toxicity: haloxyfop and its derivatives are non-irritating to skin and do not cause skin sensitization. They are mild eye irritants. The symptoms of toxicity in rats are reduced food intake and reduced food consumption.

[ \* The Pesticides Manual, Incorporating The Agrochemicals Handbook, 10th Edition, Editor Clive Tomlin, 1994, British Crop Protection Council].

#### DIETHYLENE GLYCOL MONOETHYL ETHER:

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

#### TOXICITY

Oral (rat) LD50: 5500 mg/kg

Dermal (rabbit) LD50: 8500 mg/kg

#### IRRITATION

Skin (rabbit): 500 mg/24h Mild

Eye (rabbit): 125 mg Mild

Eye (rabbit): 500 mg Moderate

■ The material may produce moderate eye irritation leading to inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.

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.

For diethylene glycol monoalkyl ethers and their acetates:

This category includes diethylene glycol ethyl ether (DGEE), diethylene glycol propyl ether (DGPE) diethylene glycol butyl ether (DGBE) and diethylene glycol hexyl ether (DGHE) and their acetates.

Acute toxicity: There are adequate oral, inhalation and/or dermal toxicity studies on the category members.

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## Section 12 - ECOLOGICAL INFORMATION

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Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Avoid release to the environment.

Refer to special instructions/ safety data sheets.

### Ecotoxicity

Ingredient	Persistence: Water/Soil	Persistence: Air	Bioaccumulation	Mobility
4Farmers HALOXYFOP 520 Selective Herbicide		No data		
haloxyfop-methyl		No data		
diethylene glycol monoethyl ether		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 or consult manufacturer for recycling options.
  - Consult State Land Waste Authority for disposal.

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## Section 14 - TRANSPORTATION INFORMATION

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Labels Required: COMBUSTIBLE LIQUID, regulated under AS1940 for Bulk Storage purposes only.

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

**haloxyfop-methyl (CAS: 69806-40-2,72619-32-0) is found on the following regulatory lists;**

"Australia Hazardous Substances"

**diethylene glycol monoethyl ether (CAS: 111-90-0) is found on the following regulatory lists;**

"Australia Inventory of Chemical Substances (AICS)", "IMO MARPOL 73/78 (Annex II) - List of Other Liquid Substances", "International Council of Chemical Associations (ICCA) - High Production Volume List", "OECD Representative List of High Production Volume (HPV) Chemicals"

**No data for 4Farmers HALOXYFOP 520 Selective Herbicide (CW: 21-1251)**

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## Section 16 - OTHER INFORMATION

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### INGREDIENTS WITH MULTIPLE CAS NUMBERS

Ingredient Name	CAS
haloxyfop-methyl	69806-40-2, 72619-32-0

■ 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.