

SAFETY DATA SHEET

According to Safe Work Australia

Revision: 01.09.2016

1 . IDENTIFICATION: PRODUCT IDENTIFIER AND CHEMICAL IDENTITY

Product Name: 4FARMERS BROMOXYNIL MA SELECTIVE HERBICIDE

Recommended Use of the Chemical and Restriction on Use: Agricultural herbicide

Details of Manufacturer or Importer:

4Farmers Australia Pty Ltd
70 McDowell Street
Welshpool WA 6106

Phone Number: +61 8 9356 3446

Emergency telephone number: National Poison Information Centre: 13 11 26

2 . HAZARDS IDENTIFICATION

Hazardous Nature:

Classified as Hazardous according to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) and Safe Work Australia criteria.

Not classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. (7th edition). However if transported by Air or Sea, then the product is classed as Dangerous (Class 9 Environmentally Hazardous) by IATA and IMDG/IMSBC respectively. See details below and in Section 14 of this SDS.



skull and crossbones

Acute Tox. (Inhalation) 3 H331 Toxic if inhaled.



health hazard

Repr. 2 H361 Suspected of damaging fertility or the unborn child.

Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.



environment

Aquatic Acute 1 H400 Very toxic to aquatic life.

Aquatic Chronic 1 H410 Very toxic to aquatic life with long lasting effects.



Acute Tox. (Oral) 4 H302 Harmful if swallowed.

Acute Tox. (Dermal) 4 H312 Harmful in contact with skin.

Eye Irrit. 2A H319 Causes serious eye irritation.

Skin Sens. 1 H317 May cause an allergic skin reaction.

Flam. Liq. 4 H227 Combustible liquid.

Signal Word Danger

Hazard Statements

H227 Combustible liquid.

H302+H312 Harmful if swallowed or in contact with skin.

H331 Toxic if inhaled.

(Contd. on page 2)

SAFETY DATA SHEET

According to Safe Work Australia

Printing date 01.09.2016

Revision: 01.09.2016

Product Name: 4FARMERS BROMOXYNIL MA SELECTIVE HERBICIDE

(Contd. of page 1)

H319	Causes serious eye irritation.
H317	May cause an allergic skin reaction.
H361	Suspected of damaging fertility or the unborn child.
H304	May be fatal if swallowed and enters airways.
H410	Very toxic to aquatic life with long lasting effects.

Precautionary Statements

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P273	Avoid release to the environment.
P264	Wash hands thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P272	Contaminated work clothing should not be allowed out of the workplace.
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P321	Specific treatment (see on this label).
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.
P330	Rinse mouth.
P331	Do NOT induce vomiting.
P370+P378	In case of fire: Use for extinction: CO ₂ , powder or water spray.
P302+P352	IF ON SKIN: Wash with plenty of water.
P391	Collect spillage.
P362+P364	Take off contaminated clothing and wash it before reuse.
P405	Store locked up.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P403+P235	Store in a well-ventilated place. Keep cool.
P501	Dispose of contents/container in accordance with local/regional/national regulations.

3 . COMPOSITION AND INFORMATION ON INGREDIENTS

Chemical Characterization: Mixtures**Description:** Mixture of substances listed below with nonhazardous additions.**Hazardous Components:**

64742-94-5	Solvent naphtha (petroleum), heavy arom. ☠ Asp. Tox. 1, H304	34%
29450-45-1	Acetic acid, (4-chloro-2-methylphenoxy)-, 2-ethylhexyl ester MCPA, 2- ethylhexyl ester ☠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410; ☠ Acute Tox. (Oral) 4, H302; Acute Tox. (Dermal) 4, H312; Eye Irrit. 2A, H319	30.3%
1689-99-2	Bromoxynil octanoate (ISO) ☠ Acute Tox. (Inhalation) 3, H331; ☠ Repr. 2, H361; ☠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410; ☠ Acute Tox. (Oral) 4, H302; Skin Sens. 1, H317	28.7%

(Contd. on page 3)

SAFETY DATA SHEET

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Printing date 01.09.2016

Revision: 01.09.2016

Product Name: 4FARMERS BROMOXYNIL MA SELECTIVE HERBICIDE

(Contd. of page 2)

4 . FIRST AID MEASURES

Inhalation:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention if breathing problems develop.

Skin Contact:

In case of skin contact, immediately remove contaminated clothing and wash affected areas with water and soap. Seek medical attention if symptoms occur.

Eye Contact:

In case of eye contact, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical attention.

Ingestion:

If swallowed, do not induce vomiting. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. Do not give anything by mouth to an unconscious person. Seek immediate medical attention.

Symptoms Caused by Exposure:

Inhalation: Toxic if inhaled. May cause weakness, headache, dizziness and nausea.

Skin Contact: Harmful in contact with skin. May cause skin irritation. May cause an allergic skin reaction.

Eye Contact: Causes serious eye irritation.

Ingestion: Harmful if swallowed. May cause weakness, headache, dizziness and nausea. May be fatal if swallowed and enters airways. If aspirated into the lung from vomiting, the presence of solvent may result in chemical pneumonitis or other lung damage.

5 . FIRE FIGHTING MEASURES

Suitable Extinguishing Media: Alcohol resistant foam, dry chemical powder and carbon dioxide.

Specific Hazards Arising from the Chemical:

Hazardous combustion products include oxides of carbon and nitrogen and other pyrolysis products.

Combustible liquid.

Closed containers may explode when exposed to extreme heat. Containers close to fire should be removed if safe to do so. Use water spray to cool fire exposed containers.

Special Protective Equipment and Precautions for Fire Fighters:

When fighting a major fire wear self-contained breathing apparatus and protective equipment.

6 . ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures:

Wear Safe Work Australia approved respiratory protection and full protective clothing. Evacuate all non-essential personnel from affected area. Do not breathe vapours. Ensure adequate ventilation. Extinguish all sources of ignition. Avoid sparks and open flames. No smoking.

Environmental Precautions:

In the event of a major spill, prevent spillage from entering drains or water courses.

Methods and Materials for Containment and Cleaning Up:

Stop leak if safe to do so and absorb spill with sand, earth, vermiculite or some other absorbent material. Collect the spilled material and place into a suitable container for disposal.

7 . HANDLING AND STORAGE

Precautions for Safe Handling:

Use of safe work practices are recommended to avoid eye or skin contact and inhalation of vapours. Use only outdoors or in a well-ventilated area.

Food, beverages and tobacco products should not be stored or consumed where this material is in use. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and

(Contd. on page 4)

SAFETY DATA SHEET

According to Safe Work Australia

Printing date 01.09.2016

Revision: 01.09.2016

Product Name: 4FARMERS BROMOXYNIL MA SELECTIVE HERBICIDE

(Contd. of page 3)

other protective equipment before storage or re-use. Provide eyewash fountains and safety showers in close proximity to points of potential exposure.

Contaminated work clothing must not be allowed out of the workplace.

Conditions for Safe Storage:

Store in a cool, dry and well ventilated area. Keep container tightly closed when not in use. Protect from direct sunlight, heat, sparks, open flames and hot surfaces. Keep away from strong oxidising agents.

8 . EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure Standards:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

Engineering Controls: Ensure adequate ventilation of the working area.

Respiratory Protection:

Use a Safe Work Australia approved vapour respirator under conditions where exposure to the substance is apparent (e.g. generation of high concentrations of mist or vapour, inadequate ventilation, development of respiratory tract irritation) and engineering controls are not feasible. See Australian Standards AS/NZS 1715 and 1716 for more information.

Skin Protection:

Elbow-length PVC gloves, cotton overall buttoned to the neck and wrist, safety boots and a washable hat. See Australian Standards AS/NZS 2161, 2210.1 and 2210.2 for more information.

Eye and Face Protection:

Eye and face protectors for protection against splashing materials or liquids. See Australian/New Zealand Standard AS/NZS 1337 for more information.

9 . PHYSICAL AND CHEMICAL PROPERTIES

Appearance:

Form:	Liquid
Colour:	Amber
Odour:	No information available Hydrocarbon odour

Odour Threshold: No information available

pH-Value: 4.5-4.7

Melting point/Melting range: No information available

Initial Boiling Point/Boiling Range: No information available

Flash Point: > 65 °C

Flammability: Combustible liquid

Auto-ignition Temperature: No information available

Decomposition Temperature: No information available

Explosion Limits:

Lower: No information available

Upper: No information available

Vapour Pressure: No information available

Relative Density at 20 °C: 1.028-1.034

Vapour Density: No information available

Evaporation Rate: No information available

Solubility in Water: Miscible in water

10 . STABILITY AND REACTIVITY

Possibility of Hazardous Reactions: Hazardous polymerisation will not occur.

(Contd. on page 5)

SAFETY DATA SHEET

According to Safe Work Australia

Printing date 01.09.2016

Revision: 01.09.2016

Product Name: 4FARMERS BROMOXYNIL MA SELECTIVE HERBICIDE

(Contd. of page 4)

Chemical Stability: Stable at ambient temperature and under normal conditions of use.**Conditions to Avoid:** Heat, sparks, open flames, hot surfaces and direct sunlight.**Incompatible Materials:** Strong oxidising agents.**Hazardous Decomposition Products:** Oxides of carbon and nitrogen.

11 . TOXICOLOGICAL INFORMATION

Toxicity:**LD₅₀/LC₅₀ Values Relevant for Classification:** No information available**Acute Health Effects****Inhalation:** Toxic if inhaled. May cause weakness, headache, dizziness and nausea.**Skin:** Harmful in contact with skin. May cause skin irritation. May cause an allergic skin reaction.**Eye:** Causes serious eye irritation.**Ingestion:**

Harmful if swallowed. May cause weakness, headache, dizziness and nausea. May be fatal if swallowed and enters airways. If aspirated into the lung from vomiting, the presence of solvent may result in chemical pneumonitis or other lung damage.

Skin Corrosion / Irritation: Based on classification principles, the classification criteria are not met.**Serious Eye Damage / Irritation:** Causes serious eye irritation.**Respiratory or Skin Sensitisation:** May cause an allergic skin reaction.**Germ Cell Mutagenicity:** Based on classification principles, the classification criteria are not met.**Carcinogenicity:** This product does NOT contain any IARC listed chemicals.**Reproductive Toxicity:**

Suspected of damaging fertility or the unborn child.

Bromoxynil octanoate (ISO) is classified by Safe Work Australia as Toxic to Reproduction Category 3.

Specific Target Organ Toxicity (STOT) - Single Exposure:

Based on classification principles, the classification criteria are not met.

Specific Target Organ Toxicity (STOT) - Repeated Exposure:

Based on classification principles, the classification criteria are not met.

Aspiration Hazard: May be fatal if swallowed and enters airways.**Chronic Health Effects:**

Prolonged contact with the concentrate can cause defatting of the skin and may result in dermatitis.

Chronic overexposure may cause weight loss and damage to liver and kidneys.

Existing Conditions Aggravated by Exposure: No information available**Additional toxicological information:**

The Australian Acceptable Daily Intake (ADI) for MCPA for a human is 0.01 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOEL of 1.1 mg/kg/day, the level determined to show no effects during long term exposure for the most sensitive indicators and the most sensitive species. (Ref: Comm. Dept. of Health and Ageing, Office of Chemical Safety, 'ADI List', March 2016).

The Australian Acceptable Daily Intake (ADI) for bromoxynil for a human is 0.003 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOEL of 0.3 mg/kg/day, the level determined to show no effects during long term exposure for the most sensitive indicators and the most sensitive species. (Ref: Comm. Dept. of Health and Ageing, Office of Chemical Safety, 'ADI List', March 2016).

(Contd. on page 6)

SAFETY DATA SHEET

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Revision: 01.09.2016

Product Name: 4FARMERS BROMOXYNIL MA SELECTIVE HERBICIDE

(Contd. of page 5)

12 . ECOLOGICAL INFORMATION

Ecotoxicity: Bromoxynil is moderately toxic to hens, quail and mallard ducks and non-toxic to bees.

Aquatic toxicity:

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

Persistence and Degradability: Bromoxynil has a low persistence in soil. Average soil half life is 7 days

Bioaccumulative Potential: No information available

Mobility in Soil: No information available

13 . DISPOSAL CONSIDERATIONS

Disposal Methods and Containers: Dispose according to applicable local and state government regulations.

Special Precautions for Landfill or Incineration:

Please consult your state Land Waste Management Authority for more information.

14 . TRANSPORT INFORMATION

UN Number

ADG Not regulated

IMDG, IATA UN3082

Proper Shipping Name

ADG Not regulated

IMDG ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (bromoxynil octanoate (ISO)), MARINE POLLUTANT

IATA ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (bromoxynil octanoate (ISO))

Dangerous Goods Class

ADG Class: Not regulated

IMDG Class: 9 Miscellaneous dangerous substances and articles.

Packing Group:

ADG Not regulated

IMDG, IATA III

Marine pollutant: Yes

Symbol (fish and tree)

EMS Number: F-A,S-F

Hazchem Code: •3Z

Limited Quantities: 5L

15 . REGULATORY INFORMATION

Australian Inventory of Chemical Substances:

64742-94-5	Solvent naphtha (petroleum), heavy arom.
29450-45-1	Acetic acid, (4-chloro-2-methylphenoxy)-, 2-ethylhexyl ester MCPA, 2- ethylhexyl ester
1689-99-2	Bromoxynil octanoate (ISO)

(Contd. on page 7)

SAFETY DATA SHEET

According to Safe Work Australia

Printing date 01.09.2016

Revision: 01.09.2016

Product Name: 4FARMERS BROMOXYNIL MA SELECTIVE HERBICIDE

(Contd. of page 6)

Standard for the Uniform Scheduling of Drugs and Poisons (SUSMP) - Poison Schedule:
Poisons Schedule: 6

16 . OTHER INFORMATION

Date of Preparation or Last Revision: 01.09.2016**Abbreviations and acronyms:**

ADG: Australian Dangerous Goods

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC₅₀: Lethal concentration, 50 percentLD₅₀: Lethal dose, 50 percent

IARC: International Agency for Research on Cancer

STEL: Short Term Exposure Limit

TWA: Time Weighted Average

NES: National Exposure Standard (Safe Work Australia - Workplace Exposure Standards For Airborne Contaminants)

Flam. Liq. 4: Flammable liquids – Category 4

Acute Tox. (Oral) 4: Acute toxicity – Category 4

Acute Tox. (Inhalation) 3: Acute toxicity – Category 3

Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A

Skin Sens. 1: Skin sensitisation, Hazard Category 1

Repr. 2: Reproductive toxicity – Category 2

Asp. Tox. 1: Aspiration hazard – Category 1

Aquatic Acute 1: Hazardous to the aquatic environment, short-term (Acute). Category 1

Aquatic Chronic 1: Hazardous to the aquatic environment, long-term (Chronic). Category 1

Disclaimer

This SDS is prepared in accord with the Safe Work Australia document “Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals - December 2011”

The information contained in this material safety data sheet is provided in good faith and is believed to be accurate at the date of issuance. 4Farmers Australia Pty Ltd makes no representation of the accuracy or comprehensiveness of the information and to the full extent allowed by law excludes all liability for any loss or damage related to the supply or use of the information in this material safety data sheet. The user is cautioned to make their own determinations as to the suitability of the information provided to the particular circumstances in which the product is used.