

SAFETY DATA SHEET

According to Safe Work Australia

Printing date 27.01.2015

Revision: 27.01.2015

1 . IDENTIFICATION: PRODUCT IDENTIFIER AND CHEMICAL IDENTITY

Product Name: 4FARMERS TURF CONTROL SELECTIVE HERBICIDE

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

Details of Manufacturer or Importer:

4Farmers 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 criteria of National Occupational Health & Safety Commission (NOHSC), Australia.

Not classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. (7th edition)



corrosion

Eye Dam. 1 H318 Causes serious eye damage.



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. 4 H302 Harmful if swallowed.

Skin Irrit. 2 H315 Causes skin irritation.

Signal Word Danger

Hazard Statements

H302 Harmful if swallowed.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary Statements

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.

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).

P332+P313 If skin irritation occurs: Get medical advice/attention.

P330 Rinse mouth.

P391 Collect spillage.

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P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
P302+P352 IF ON SKIN: Wash with plenty of water.
P310 Immediately call a POISON CENTER/doctor.
P362+P364 Take off contaminated clothing and wash it before reuse.
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:

94-74-6	MCPA (ISO) ☞ Eye Dam. 1, H318; ☞ Aquatic Acute 1, H400; Aquatic Chronic 1, H410; ☞ Acute Tox. 4, H302; Skin Irrit. 2, H315	30%
1702-17-6	Clopyralid (ISO) ☞ Eye Dam. 1, H318	2%
83164-33-4	Diflufenican Aquatic Chronic 3, H412	1.5%

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 eye and under eyelids cautiously with water for at least 15 minutes. Seek medical attention if eye irritation or redness persists.

Ingestion:

If swallowed, do not induce vomiting. Rinse mouth with water. Do not give anything by mouth to an unconscious person. Seek immediate medical attention.

Information for Doctor:

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.

Several cases of sensorimotor peripheral neuropathies have been associated with chronic dermal exposure to 2,4-D. For acute exposures the usual methods of gut and skin contamination (lavage, charcoal, cathartic) are recommended in the first several hours. Alkalisiation of the urine and generous fluid replacement have the added benefit of treating any myoglobinuria present. Monitor metabolic acidosis, hyperthermia, hyperkalaemia, myoglobinuria and hepatic/renal dysfunction. for 2,4- dichlorophenoxyacetic acid (2,4-D) and its derivatives

Gastric lavage if there are no signs of impending convulsions.

Symptoms Caused by Exposure:

Systemic symptoms: Cough, shortness of breath, nausea, vomiting, diarrhoea, abdominal pain, fever, tachycardia, low blood pressure, circulatory collapse, convulsions and coma.

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5 . FIRE FIGHTING MEASURES

Suitable Extinguishing Media: Water, foam and dry chemical powder.

Specific Hazards Arising from the Chemical:

Hazardous combustion products include oxides of carbon and nitrogen, hydrogen chloride, phosgene, 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:

Wear Safe Work Australia approved self-contained breathing apparatus and full protective clothing.

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

Conditions for Safe Storage:

Store in a cool, dry and well ventilated area. Keep container tightly closed when not in use. Protect from heat and direct sunlight. 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.

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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:	Viscous liquid
Colour:	Light brown
Odour:	Slight sweet odour
Odour Threshold:	No information available
pH-Value:	9-10
Melting point/Melting range:	No information available
Initial Boiling Point/Boiling Range:	No information available
Flash Point:	No information available
Flammability:	Combustible
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:	1.17
Vapour Density:	No information available
Evaporation Rate:	No information available
Solubility in Water:	Miscible

10 . STABILITY AND REACTIVITY

Possibility of Hazardous Reactions: Hazardous polymerisation will not occur.

Chemical Stability: Stable at ambient temperature and under normal conditions of use.

Conditions to Avoid: Extremes of temperature, sparks, open flames, hot surfaces and direct sunlight.

Incompatible Materials: Strong oxidising agents.

Hazardous Decomposition Products: Oxides of carbon and nitrogen, hydrogen chloride and phosgene.

11 . TOXICOLOGICAL INFORMATION

Toxicity:

LD ₅₀ /LC ₅₀ Values Relevant for Classification:		
94-74-6 MCPA (ISO)		
Oral	LD ₅₀	900-1160 mg/kg (rat)
Dermal	LD ₅₀	>4000 mg/kg (rat)
Inhalation	LC ₅₀ /4 h	>6.36 mg/l (rat)
1702-17-6 Clopyralid (ISO)		
Oral	LD ₅₀	2675-3738 mg/kg (rat)
Dermal	LD ₅₀	>2000 mg/kg (rabbit)

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Inhalation	LC ₅₀ /4 h	>0.38 mg/l (rat)
83164-33-4 Diflufenican		
Oral	LD ₅₀	>2000 mg/kg (rat)
Dermal	LD ₅₀	>2000 mg/kg (rat)
Inhalation	LC ₅₀ /4 h	>2.34 mg/l (rat)

Acute Health Effects

Inhalation: May cause respiratory irritation.

Skin: Causes skin irritation.

Eye: Causes serious eye damage.

Ingestion: Harmful if swallowed.

Skin Corrosion / Irritation: Causes skin irritation.

Serious Eye Damage / Irritation: Causes serious eye damage.

Respiratory or Skin Sensitisation: Based on classification principles, the classification criteria are not met.

Germ Cell Mutagenicity: Based on classification principles, the classification criteria are not met.

Carcinogenicity:

Chlorophenoxy herbicides (MCPA) are classified by IARC as Group 2B - Possibly carcinogenic to humans. Chlorophenoxy herbicides

Reproductive Toxicity: Based on classification principles, the classification criteria are not met.

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

Chronic Health Effects: No information available

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', June 2014).

The Australian Acceptable Daily Intake (ADI) for clopyralid for a human is 0.5 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOEL of 50 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', June 2014).

The Australian Acceptable Daily Intake (ADI) for diflufenican for a human is 0.2 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOEL of 16.3 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', June 2014).

12. ECOLOGICAL INFORMATION

Ecotoxicity: Clopyralid and diflufenican are non toxic to bees.

Aquatic toxicity:

Very Toxic to aquatic life with long lasting effects.

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1702-17-6 Clopyralid (ISO)	
EC ₅₀ /48 h	225 mg/l (daphnia)
EC ₅₀ /96 h	6.9 mg/l (senastrum capricornutum)
LC ₅₀ /96 h	103.5 mg/l (rainbow trout)
83164-33-4 Diflufenican	
LC ₅₀ /48 h	10 mg/l (daphnia)
LC ₅₀ /96 h	56-100 mg/l (rainbow trout)
94-74-6 MCPA (ISO)	
LC ₅₀	>100 mg/l (daphnia)
LC ₅₀ /96 h	232 mg/l (rainbow trout)

Persistence and Degradability:

Soil half-life for diflufenican is 15 to 30 weeks. MCPA residual activity in soil is 12 to 16 weeks.

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 classified as a dangerous good according to the Australian Code for the Transport of Dangerous goods by road or rail (IBC or any other receptacle not exceeding 500 kg or 500 L, according to AU01)

IMDG, IATA UN3082

Proper Shipping Name

IMDG ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., MARINE POLLUTANT

IATA ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

Dangerous Goods Class

IMDG Class: 9 Miscellaneous dangerous substances and articles.

Packing Group:

IMDG, IATA III

Marine pollutant: Yes

EMS Number: F-A,S-F

Hazchem Code: 3Z

15 . REGULATORY INFORMATION

Australian Inventory of Chemical Substances:

94-74-6	MCPA (ISO)
1702-17-6	Clopyralid (ISO)
83164-33-4	Diflufenican

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

Poisons Schedule: 5

16 . OTHER INFORMATION

Creation Date: 27.01.2015

Last Revision of MSDS: 25-09-2009

Abbreviations and acronyms:

ADG: Australian Dangerous Goods

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

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

LC₅₀: Lethal concentration, 50 percent

LD₅₀: 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)

Disclaimer

This MSDS 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"

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