



Safety Data Sheet

according to WHS Regulations

Printing date 12.12.2017

Revision: 12.12.2017

1 Identification

Product Name: DIFLUFENICAN 500 SELECTIVE HERBICIDE by TITAN

Other Means of Identification: Mixture

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

Details of Manufacturer or Importer:

Titan Ag Pty Ltd
15/16 Princes Street
Newport NSW 2106

Phone Number: 02 9999 6655

Emergency telephone number: 02 9999 6655

2 Hazard(s) Identification

Hazardous Nature:

Not 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)

Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

Signal Word Void

Hazard Statements

H412 Harmful to aquatic life with long lasting effects.

Precautionary Statements

P273 Avoid release to the environment.

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:

83164-33-4	Diflufenican	Aquatic Chronic 3, H412	50%
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4 First Aid Measures

Inhalation: If inhaled, remove to fresh air. 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, hold eyelids open and rinse with water for at least 15 minutes. Seek medical attention if symptoms occur.

Ingestion:

If swallowed, do not induce vomiting. Do not give anything by mouth to an unconscious person. Seek medical attention if symptoms occur.

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Symptoms Caused by Exposure:

Inhalation: May cause mild respiratory irritation.

Skin Contact: May cause mild skin irritation.

Eye Contact: May cause mild eye irritation.

5 Fire Fighting Measures**Suitable Extinguishing Media:** Use fire extinguishing methods suitable to surrounding conditions.**Specific Hazards Arising from the Chemical:**

Hazardous combustion products include oxides of carbon and nitrogen, nitrogen compounds, hydrogen cyanide gas, hydrogen fluoride gas, fluorine compounds, and water.

No fire or explosion hazard exists. Non combustible.

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 an approved protective clothing. Evacuate all non-essential personnel from affected area. Do not breathe vapours. Ensure adequate ventilation.

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.

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 in original container, tightly closed when not in use. Protect from direct sunlight.

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:**

Respiratory protection is not required under normal use conditions.

Use an 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:

PVC, PVA, nitrile, neoprene, rubber or vinyl gloves. See Australian/New Zealand Standard AS/NZS 2161 for more information. When selecting gloves for use against certain chemicals, the degradation resistance, permeation rate and permeation breakthrough time should be considered.

Occupational protective clothing (depending on conditions in which it has to be used, in particular as regards the period for which it is worn, which shall be determined on the basis of the seriousness of the risk, the frequency of exposure to the risk, the characteristics of the workstation of each worker and the performance of the protective clothing). See Australian/New Zealand Standard AS/NZS 4501 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:	Off-white/dark brown
Odour:	Mild
Odour Threshold:	No information available
pH-Value:	No information available
Melting point/freezing point:	No information available
Initial Boiling Point/Boiling Range:	~100 °C
Flash Point:	Not applicable
Flammability:	Non flammable
Auto-ignition Temperature:	Not applicable
Decomposition Temperature:	No information available
Explosion Limits:	
Lower:	Not applicable
Upper:	Not applicable
Vapour Pressure:	Not determined.
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: Extreme temperatures and direct sunlight.

Incompatible Materials: No further relevant information available.

Hazardous Decomposition Products:

Oxides of carbon, oxides of nitrogen, nitrogen compounds, hydrogen cyanide gas, hydrogen fluoride gas, fluorine compounds, and water.

11 Toxicological Information

Toxicity:**LD₅₀/LC₅₀ Values Relevant for Classification:****83164-33-4 Diflufenican**

Oral	LD ₅₀	>1000 mg/kg (mouse)
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		>2000 mg/kg (rat)
		>5000 mg/kg (rabbit)
Dermal	LD ₅₀	>2000 mg/kg (rat)
Inhalation	LC ₅₀ /4 h	>2.34 mg/L (rat)

Acute Health Effects**Inhalation:** May cause mild respiratory irritation.**Skin:** May cause mild skin irritation.**Eye:** May cause mild eye irritation.**Ingestion:** No adverse health effects expected.**Skin Corrosion / Irritation:** Based on classification principles, the classification criteria are not met.**Serious Eye Damage / Irritation:** Based on classification principles, the classification criteria are not met.**Respiratory or Skin Sensitisation:** No sensitising effects known.**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:** 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 diflufenican for a human is 0.2 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOAEL 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: Australian Pesticides and Veterinary Medicines Authority, 'Acceptable Daily Intakes for Agricultural and Veterinary Chemicals', 2017).

12 Ecological Information

Ecotoxicity:

Birds:

LD50 (quail) > 2150 mg/kg

LD50 (mallard duck) > 4000 mg/kg

Non toxic to bees and worms.

Aquatic toxicity:**83164-33-4 Diflufenican**LC₅₀ 105 mg/L (carp)

56-100 mg/L (rainbow trout)

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

Persistence and Degradability: Biodegradable**Bioaccumulative Potential:** Low bioaccumulative potential.

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Mobility in Soil: Diflufenican is not mobile in soil, but is readily absorbed by soil particles.**Other adverse effects:** 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 Not regulated**Proper Shipping Name** Not regulated**IMDG****Dangerous Goods Class** Not regulated**Packing Group:** Not regulated

15 Regulatory Information

Australian Inventory of Chemical Substances:

83164-33-4 | Diflufenican

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

Not a scheduled poison.

16 Other Information

Date of Preparation or Last Revision: 12.12.2017**Abbreviations and acronyms:**

IMDG: International Maritime Code for Dangerous Goods

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)

Aquatic Chronic 3: Hazardous to the aquatic environment, long-term (Chronic). Category 3

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 - February 2016"

The information contained in this safety data sheet is provided in good faith and is believed to be accurate at the date of issuance. Titan Ag 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.