

1 Identification

Product Name: TITAN 2,4-DB 500 SL HERBICIDE

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 Princess Street
Newport NSW 2106

Phone Number: 02 9999 6655

Emergency telephone number: 02 9999 6655

2 Hazard(s) 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)



environment

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.



Acute Toxicity (Oral) 4 H302 Harmful if swallowed.

Signal Word Warning

Hazard Statements

H302 Harmful if swallowed.

H411 Toxic to aquatic life with long lasting effects.

Precautionary Statements

P264 Wash hands thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P273 Avoid release to the environment.

P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

P330 Rinse mouth.

P391 Collect spillage.

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:

CAS: 94-82-6	2,4-DB (ISO)	 Aquatic Chronic 2, H411;  Acute Toxicity (Oral) 4, H302	50%
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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, 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. Immediately rinse mouth with water. Give a glass of water. Never give anything by mouth to an unconscious person. Seek immediate medical attention.

Symptoms Caused by Exposure:

Inhalation: May cause respiratory irritation.

Skin Contact: May cause skin irritation.

Eye Contact: May cause eye irritation.

Ingestion: Harmful if swallowed. May cause gastrointestinal irritation, nausea, vomiting, dizziness and headache.

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 phosphorous and possibly phosgene gas.

This product is not flammable, but may burn or decompose in a fire.

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 approved respiratory protection, chemical resistant gloves, protective clothing and safety boots.

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:

Mixture with acids will precipitate a solid that may block spray equipment.

Mixture with bases may generate dimethylamine vapour.

Equipment that has been used for this chemical should be washed with hot soapy water or a 1% ammonia solution and rinsed with clean water.

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.

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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 direct sunlight. Keep away from acids and bases.

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 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.

Skin Protection:

PVC 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:	Liquid
Colour:	Light brown
Odour:	Faint ammoniacal odour
Odour Threshold:	No information available
pH-Value:	9.8 - 10.1
Melting point/freezing point:	~-5 °C
Initial Boiling Point/Boiling Range:	100 °C
Flash Point:	Not applicable
Flammability:	Product is not flammable.
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:	1.179 - 1.181
Vapour Density:	No information available
Evaporation Rate:	No information available

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Solubility in Water: Soluble
Partition Coefficient (n-octanol/water): No information available
% Volatiles by Volume: 16 - 30 %

10 Stability and Reactivity

Possibility of Hazardous Reactions:

Hazardous polymerisation will not occur.
 Mixture with acids will precipitate a solid that may block spray equipment.
 Mixture with bases may generate dimethylamine vapour.

Chemical Stability: Stable at ambient temperature and under normal conditions of use.**Conditions to Avoid:** Direct sunlight.**Incompatible Materials:** Acids and bases.**Hazardous Decomposition Products:** Oxides of carbon and phosphorous and possibly phosgene gas.

11 Toxicological Information

Toxicity:**LD₅₀/LC₅₀ Values Relevant for Classification:****CAS: 94-82-6 2,4-DB (ISO)**

Oral	LD ₅₀	700 mg/kg (rat)
Dermal	LD ₅₀	800 mg/kg (rat)

Acute Health Effects**Inhalation:** May cause respiratory irritation.**Skin:** May cause skin irritation.**Eye:** May cause eye irritation.**Ingestion:**

Harmful if swallowed. May cause gastrointestinal irritation, nausea, vomiting, dizziness and headache.

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

Prolonged or repeated exposure may cause skin irritation.

May cause damage to the liver and kidneys. May cause weight loss, cyanosis, twitching and exhaustion.

Existing Conditions Aggravated by Exposure: No information available

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Additional toxicological information:

The Australian Acceptable Daily Intake (ADI) for 2,4-dichlorophenoxybutyric acid (2,4-DB) for a human is 0.004 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOAEL of 1.9 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', 2019).

12 Ecological Information

Ecotoxicity: Not toxic to bees.

Aquatic toxicity:

Very Toxic to aquatic life with long lasting effects.

CAS: 94-82-6 2,4-DB (ISO)

LC₅₀/96 h | 4 mg/l (rainbow trout)

Persistence and Degradability: The average half-life of 2,4-DB is 10 days.

Bioaccumulative Potential: No further relevant information available.

Mobility in Soil: No further relevant information available.

Other adverse effects: No further relevant 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

Dangerous Goods Class Not regulated

Packing Group: Not regulated

15 Regulatory Information

Australian Inventory of Chemical Substances:

CAS: 94-82-6 | 2,4-DB (ISO)

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

Poisons Schedule: 5

16 Other Information

Date of Preparation or Last Revision: 06.11.2019

Prepared by: MSDS.COM.AU Pty Ltd

www.msds.com.au

Abbreviations and acronyms:

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

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

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STEL: Short Term Exposure Limit

TWA: Time Weighted Average

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

Acute Toxicity (Oral) 4: Acute toxicity – Category 4

Aquatic Chronic 2: Hazardous to the aquatic environment, long-term (Chronic). Category 2

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”

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