Safety Data Sheet
according to WHS Regulations

Printing date 29.05.2020 Revision: 29.05.2020

1 Identification

Product Name: TITAN GLYPHOSATE 540 K SALT 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 Princes 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)


corrosion

Serious Eye Damage/Irritation 1 H318 Causes serious eye damage.


environment

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

Signal Word Danger

Hazard Statements
H318 Causes serious eye damage.
H411 Toxic to aquatic life with long lasting effects.

Precautionary Statements

P273	Avoid release to the environment.
P280	Wear eye protection / face protection.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER/doctor.
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: 1071-83-6	Glyphosate (ISO) Serious Eye Damage/Irritation 1, H318; Aquatic Chronic 2, H411	54%
CAS: 111-46-6	2,2'-oxybisethanol Acute Toxicity (Oral) 4, H302	6.05%

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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, 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: Spray may cause respiratory irritation.
Skin Contact: May cause slight skin irritation.
Eye Contact: Concentrate will cause severe eye irritation and possible eye damage.
Ingestion: May cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

5 Fire Fighting Measures

Suitable Extinguishing Media:
Fine water spray or water fog, foam, dry chemical powder or carbon dioxide. Do not use water jet.

Specific Hazards Arising from the Chemical:
Hazardous combustion products include oxides of nitrogen and phosphorus.
There is no risk of an explosion from this product if it is involved in fire.
This product does not burn.

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, safety glasses, 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:
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.

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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 extremes of temperature and direct sunlight. When wet, corrosive to mild steel, galvanised steel and zinc. Non corrosive to stainless steel, polyethylene and plastics. Do not mix, store or apply the product or spray solutions of the product in galvanised steel or unlined steel (except stainless steel) containers or spray tanks.

8 Exposure Controls and Personal Protection

Exposure Standards:	
CAS: 111-46-6 2,2'-oxybisethanol	
WES	TWA: 100 mg/m³, 23 ppm

Engineering Controls: Ensure adequate ventilation of the working area.

Respiratory Protection:
Use 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, 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:	Blue
Odour:	Odourless
Odour Threshold:	Odourless
pH-Value:	5
Melting point/freezing point:	No information available
Initial Boiling Point/Boiling Range:	No information available
Flash Point:	Not applicable
Flammability:	Product is not flammable.
Decomposition Temperature:	No information available
Explosion Limits:	
Lower:	Not applicable
Upper:	Not applicable
Vapour Pressure at 20 °C:	2.37 hPa
Relative Density at 20 °C:	1.35
Vapour Density:	No information available
Evaporation Rate:	No information available
Solubility in Water:	Soluble in water

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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 and direct sunlight.

Incompatible Materials:
When wet, corrosive to mild steel, galvanised steel and zinc. Non corrosive to stainless steel, polyethylene and plastics.

Hazardous Decomposition Products: Oxides of nitrogen and phosphorus.

11 Toxicological Information

Toxicity:

LD50/LC50 Values Relevant for Classification:		
CAS: 1071-83-6 Glyphosate (ISO)		
Oral	LD50	5600 mg/kg (rat)
Dermal	LD50	>5000 mg/kg (rat)
CAS: 111-46-6 2,2'-oxybisethanol		
Oral	LD50	12,565 mg/kg (rat)
Dermal	LD50	11,890 mg/kg (rabbit)

Acute Health Effects
Inhalation: May cause irritation to mucous membranes and respiratory tract.
Skin: May cause slight skin irritation.
Eye: Concentrate will cause severe eye irritation and possible eye damage.
Ingestion: May cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

Skin Corrosion / Irritation: Based on classification principles, the classification criteria are not met.

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: Glyphosate is classified by IARC as Group 2A - Probably carcinogenic to humans.

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 glyphosate for a human is 0.3 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOAEL of 30 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', 2020).

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12 Ecological Information

Ecotoxicity: Glyphosate is slightly toxic to wild birds and non toxic to bees.

Aquatic toxicity:
Toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

Persistence and Degradability: Glyphosate has average half-life of 47 days.

Bioaccumulative Potential: No information available

Mobility in Soil: Glyphosate has very low mobility.
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
ADG Not regulated

Proper Shipping Name
ADG Not regulated

Dangerous Goods Class
ADG Class: Not regulated

Packing Group:
ADG Not regulated

Marine pollutant: Symbol (fish and tree)

15 Regulatory Information

Australian Inventory of Chemical Substances:	
CAS: 1071-83-6	Glyphosate (ISO)
CAS: 61791-26-2	Amines, tallow alkyl, ethoxylated
CAS: 111-46-6	2,2'-oxybisethanol

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

16 Other Information

Date of Preparation or Last Revision: 29.05.2020

Prepared by: MSDS.COM.AU Pty Ltd www.msds.com.au

Abbreviations and acronyms:
ADG: Australian 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 percent
LD50: Lethal dose, 50 percent
IARC: International Agency for Research on Cancer
STEL: Short Term Exposure Limit
TWA: Time Weighted Average

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NES: National Exposure Standard (Safe Work Australia - Workplace Exposure Standards For Airborne Contaminants)
Acute Toxicity (Oral) 4: Acute toxicity – Category 4
Serious Eye Damage/Irritation 1: Serious eye damage/eye irritation – Category 1
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 - May 2018”
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. MSDS.COM.AU Pty Ltd is not in a position to warrant the accuracy of the data herein. 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.