



Safety Data Sheet

according to WHS Regulations

Printing date 09.12.2019

Revision: 09.12.2019

1 Identification

Product Name: GLYPHOSATE 450 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:

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: Void

Non Hazardous Components:

CAS: 1071-83-6	Glyphosate (ISO)	45%
	Serious Eye Damage/Irritation 1, H318; Aquatic Chronic 2, H411	

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4 First Aid Measures

Inhalation:

If inhaled, remove to fresh air. Keep warm and rested. 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 immediate medical attention.

Symptoms Caused by Exposure:

Inhalation: May cause respiratory irritation.

Skin Contact: Causes skin irritation.

Eye Contact: Causes serious eye irritation.

Ingestion: May be harmful if swallowed. May cause nausea, vomiting, gastrointestinal discomfort and diarrhoea. Ingestion of large quantities of the product may result in hypotension and pulmonary oedema.

5 Fire Fighting Measures

Suitable Extinguishing Media: Water spray, fog or foam.

Specific Hazards Arising from the Chemical:

Hazardous combustion products include oxides of carbon, nitrogen and phosphorous.

This product or spray solutions react with galvanised steel or unlined steel (except stainless steel) containers and tanks, to produce hydrogen gas which may form a highly flammable or explosive gas mixtures.

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 vapour respirator and full 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. If spill is too large or absorbent material is not available create a dyke to stop the spill from spreading. Collect the spilled material and place into a suitable container for disposal. Wash area after spills.

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.

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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 prolonged periods in direct sunlight. Keep away from strong oxidising agents, nitrates, oxidising acids, chlorine bleaches, pool chlorine, strong alkalis and alkaline materials such as lime. Do not mix or store this product in unlined or galvanised steel (except stainless steel), as this product may react to form flammable and explosive hydrogen gas.

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, natural ventilation is usually adequate.

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:

Elbow-length 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:	Clear blue, viscous
Odour:	Faint amine odour
Odour Threshold:	No information available
pH-Value:	No information available
Melting point/freezing point:	Not applicable
Initial Boiling Point/Boiling Range:	>100 °C
Flash Point:	Not applicable
Flammability:	Product is not flammable.
Auto-ignition Temperature:	Not applicable
Decomposition Temperature:	No information available
Explosion Limits:	
Lower:	No information available
Upper:	No information available
Vapour Pressure:	Not applicable
Density:	Not applicable
Relative Density:	1.2
Vapour Density:	Not applicable

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Evaporation Rate: No information available
Solubility in Water: Soluble in water

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. May be unstable at temperatures below 5 °C.

Conditions to Avoid: Extreme temperatures.

Incompatible Materials:

Strong oxidising agents, nitrates, oxidising acids, chlorine bleaches, pool chlorine, strong alkalis and alkaline materials such as lime.

Hazardous Decomposition Products: Oxides of carbon, nitrogen and phosphorous.

11 Toxicological Information

Toxicity:

LD₅₀/LC₅₀ Values Relevant for Classification:

CAS: 1071-83-6 Glyphosate (ISO)

Oral	LD50	>5600 mg/kg (rat)
Dermal	LD50	>10,000 mg/kg (rabbit)
Inhalation	LC50	5-12 mg/L / 4hr (rat)

Acute Health Effects

Inhalation: May cause respiratory irritation.

Skin: May cause skin irritation.

Eye: Causes serious eye irritation.

Ingestion:

May be harmful if swallowed. May cause nausea, vomiting, gastrointestinal discomfort and diarrhoea. Ingestion of large quantities of the product may result in hypotension and pulmonary oedema.

Skin Corrosion / Irritation: May cause skin irritation.

Serious Eye Damage / Irritation: Causes serious eye irritation.

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:

Prolonged eye contact may cause damage to the eye. Prolonged skin contact may cause irritation.

Existing Conditions Aggravated by Exposure: No information available

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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', 2019).

12 Ecological Information

Ecotoxicity:

Glyphosate is a non-selective contact herbicide. Spray drift may cause damage. Not toxic to birds or bees.
 LD50 >2000 mg/kg (mallard duck)
 LD50 >100 µg/bee

Aquatic toxicity:

CAS: 38641-94-0 N-(phosphonomethyl)glycine, compound with 2-propylamine (1:1)

LC₅₀/96 h ~8.2-26 mg/L (rainbow trout)

Persistence and Degradability:

Half-life in soil is typically 47 days. Loss from soil is primarily by microbial degradation.

Bioaccumulative Potential: No information available

Mobility in Soil: Low mobility under normal conditions.

Other adverse effects: Spray drift can cause damage, read label for more information.

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

15 Regulatory Information

Australian Inventory of Chemical Substances:

CAS: 1071-83-6 Glyphosate (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: 09.12.2019

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Prepared by: MSDS.COM.AU Pty Ltdwww.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 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)

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 - February 2016"

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