

Safety Data Sheet

according to WHS Regulations

Printing date 23.07.2021

Revision: 23.07.2021

1 Identification

Product Name: TITAN BESUTO 480 LIQUID HERBICIDE

Other Means of Identification: Mixture

APVMA Number: 90984

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

Details of Manufacturer or Importer:

Titan Ag Pty Ltd

Princes Street Marina

Suite 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.

Classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail (7th edition).



Health hazard

Carcinogenicity 2 H351 Suspected of causing cancer.

STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.



Environment

Aquatic Acute 1 H400 Very toxic to aquatic life.

Aquatic Chronic 1 H410 Very toxic to aquatic life with long lasting effects.

Signal Word Warning

Hazard Statements

H351 Suspected of causing cancer.

H373 May cause damage to organs through prolonged or repeated exposure.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary Statements

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.

P308+P313 IF exposed or concerned: Get medical advice/attention.

P314 Get medical advice/attention if you feel unwell.

P391 Collect spillage.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national regulations.

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3 Composition and Information on Ingredients

Chemical Characterization: Mixtures**Description:** Mixture of substances listed below with nonhazardous additions.**Hazardous Components:**

CAS: 447399-55-5	Pyoxasulfone ⚠ Carcinogenicity 2, H351; STOT RE 2, H373; ⚠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410	40%
CAS: 57-55-6	Propylene glycol	5-15%

4 First Aid Measures

Inhalation: If inhaled, remove to fresh air. Seek medical attention if breathing problems persist.**Skin Contact:**

In case of skin contact, immediately remove contaminated clothing and wash affected areas with water and soap. Seek medical attention if symptoms persist.

Eye Contact:

In case of eye contact, rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical attention if symptoms persist.

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 be harmful if inhaled.

Skin Contact: May be harmful if absorbed through skin.

Eye Contact: May cause eye irritation.

Ingestion: Harmful if swallowed.

Medical Attention and Special Treatment: Treat symptomatically.

5 Fire Fighting Measures

Suitable Extinguishing Media: Use water spray, alcohol-resistant foam, sand or carbon dioxide.**Specific Hazards Arising from the Chemical:**

Hazardous combustion products include carbon monoxide, carbon dioxide, nitrogen oxides, sulphur oxides, hydrogen fluoride and hydrogen cyanide.

Product is not flammable but may burn or decompose in a fire.

Containers close to fire should be removed only if safe to do so. Use water spray to cool fire exposed containers.

Prevent run-off from fire fighting entering drains or water courses.

HAZCHEM Code: •3Z

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 protective equipment and safety boots. Evacuate all non-essential personnel from affected area. Ensure adequate ventilation.

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Environmental Precautions:

In the event of a major spill, prevent spillage from entering drains, water courses and ground water. Inform the appropriate authorities in the event of environmental contamination.

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 inert absorbent material. Collect the spilled material and place into a suitable closed 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.

Conditions for Safe Storage:

Store in a cool, dry and well ventilated area. Keep container tightly closed. Protect from direct sunlight and extreme temperatures. Keep away from strong acids and strong bases. Store in original container, kept in a place accessible by authorised persons only.

8 Exposure Controls and Personal Protection

Exposure Standards:**CAS: 57-55-6 Propylene glycol**

WES	TWA: 474* 10** mg/m ³ , 150* ppm *vapour&particulates;**particulates only
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Engineering Controls:

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapour below occupational exposure standards.

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 aerosol 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:

Wear nitrile rubber 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, polyester/cotton overalls (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:

Goggles 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:	Suspension
Colour:	White to light beige

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Odour:	Slight, characteristic
Odour Threshold:	No information available
pH-Value at 23 °C:	6-8
Melting point/freezing point:	No information available
Initial Boiling Point/Boiling Range:	No information available
Flash Point:	Not applicable
Flammability:	Product is not flammable
Ignition Temperature	No information available
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
Density at 20 °C:	1.2 g/cm ³
Relative Density:	No information available
Vapour Density:	No information available
Evaporation Rate:	No information available
Solubility in Water:	No information available
Partition Coefficient (n-octanol/water):	Pyroxasulfone: log Pow: 2.39 (25 °C) (pH 8.7)
Viscosity:	Dynamic (20 °C) 150-300 mPa.s Velocity gradient 20 /s 30-130 mPa.s Velocity gradient 100 /s

10 Stability and Reactivity

Possibility of Hazardous Reactions: No known hazardous reactions.

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

Conditions to Avoid: Extreme temperatures and direct sunlight.

Incompatible Materials: Strong acids and strong bases.

Hazardous Decomposition Products:

Hazardous combustion products include carbon monoxide, carbon dioxide, nitrogen oxides, sulphur oxides, hydrogen fluoride and hydrogen cyanide.

11 Toxicological Information

Toxicity:

LD50/LC50 Values Relevant for Classification:

CAS: 57-55-6 Propylene glycol

Oral	LD50	2,000 mg/kg (rat)
Dermal	LD50	20,800 mg/kg (rabbit)

Acute Health Effects

Inhalation: May be harmful if inhaled.

Skin: May be harmful if absorbed through skin.

Eye: May cause eye irritation.

Ingestion: Harmful if swallowed.

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.

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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:** Suspected of causing cancer.**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:

May cause damage to organs through prolonged or repeated exposure (Liver, Kidney, Bladder, Heart)

Aspiration Hazard: Based on classification principles, the classification criteria are not met.**Chronic Health Effects:** No data associated with long term health effects.**Existing Conditions Aggravated by Exposure:** No data available.**Additional toxicological information:**

The Australian Acceptable Daily Intake (ADI) for Pyroxasulfone for a human is 0.02 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOAEL of 2 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', 2021).

12 Ecological Information

Ecotoxicity:**Aquatic toxicity:**

Very toxic to aquatic life with long lasting effects.

CAS: 447399-55-5 Pyroxasulfone

LD50	>2,250 mg/kg (bobwhite quail)
EC50/48 h	>4.4 mg/l (daphnia)
EC50/96 h	0.00079 mg/l (algae)
LC50/96 h	>2.8 mg/l (bluegill)
	>2.2 mg/l (rainbow trout)

Persistence and Degradability: Pyroxasulfone is not rapidly biodegradable.**Bioaccumulative Potential:** Pyroxasulfone does not bioaccumulate.**Mobility in Soil:** Pyroxasulfone is mobile in soils.**Other adverse effects:** No further relevant information available.

13 Disposal Considerations

Disposal Methods and Containers:

Dispose according to applicable local and state government regulations. Triple-rinse containers before disposal, adding rinsings to spray tank. Replace cap and return cleaned containers for recycling. If not recycling, break, crush or puncture containers and deliver to an approved land waste management facility. Do not reuse containers.

Special Precautions for Landfill or Incineration:

Please consult your state Land Waste Management Authority for more information. Do not burn containers or product.

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14 Transport Information

UN Number ADG, IMDG, IATA	UN3082
Proper Shipping Name ADG, IMDG	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Pyroxasulfone)
IATA	Environmentally hazardous substance, liquid, n.o.s. (pyroxasulfone)
Dangerous Goods Class ADG Class: Subsidiary Risk:	9 Miscellaneous dangerous substances and articles.
Packing Group: ADG, IMDG, IATA	III
Marine pollutant:	YES
EMS Number:	F-A,S-F
Hazchem Code:	•3Z
Special Provisions:	274, 331, 335, 375, AU01
Transport/Additional information:	Not subject to the ADG Code when transported in Australia by Road or Rail in packages 500kg(L) or less; or IBCs (refer to SP AU01)
Limited Quantities:	5 L
Packagings & IBCs - Packing Instruction:	P001, IBC03, LP01
Packagings & IBCs - Special Packing Provisions:	PP1
Portable Tanks & Bulk Containers - Instructions:	T4
Portable Tanks & Bulk Containers - Special Provisions:	TP1, TP29

15 Regulatory Information

Australian Inventory of Industrial Chemicals: All ingredients are listed except one which are trade secret.

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

Poisons Schedule: 6

16 Other Information

Date of Preparation or Last Revision: 23.07.2021

Prepared by: MSDS.COM.AU Pty Ltd

www.msds.com.au

Abbreviations and acronyms:

ADG: Australian Dangerous Goods

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

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

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TWA: Time Weighted Average

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

Carcinogenicity 2: Carcinogenicity – Category 2

STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2

Aquatic Acute 1: Hazardous to the aquatic environment, short-term (Acute). Category 1

Aquatic Chronic 1: Hazardous to the aquatic environment, long-term (Chronic). Category 1

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 - July 2020”

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