

Safety Data Sheet

according to WHS & OHS Regulations

Print date: 14.01.2026

Revision date: 12.01.2026

1 Identification

Product Name: Titan Vitessa Herbicide

Other Means of Identification: Mixture

Recommended Use of the Chemical and Restriction on Use: 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), IATA and IMDG/IMSBC.
Not subject to the ADG Code when transported in Australia by Road or Rail in packagings that do not incorporate a receptacle exceeding 500 kg(L); or IBCs (refer to SP AU01). However if transported by Air or Sea, this provision does not apply.



GHS06 Skull and crossbones

Acute toxicity - inhalation – Category 3 H331 Toxic if inhaled.



GHS08 Health hazard

Reproductive toxicity – Category 2 H361d Suspected of damaging the unborn child.

Aspiration hazard – Category 1 H304 May be fatal if swallowed and enters airways.



GHS05 Corrosion

Skin corrosion/irritation – Category 1C H314 Causes severe skin burns and eye damage.

Eye damage/irritation – Category 1 H318 Causes serious eye damage.



GHS09 Environment

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



GHS07

Acute toxicity - oral – Category 4 H302 Harmful if swallowed.

Skin sensitisation – Category 1 H317 May cause an allergic skin reaction.

Flammable liquids – Category 4 H227 Combustible liquid.

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Aquatic Acute 2

H401 Toxic to aquatic life.

Signal Word Danger**Hazard Statements**

- H227 Combustible liquid.
 H302 Harmful if swallowed.
 H331 Toxic if inhaled.
 H314 Causes severe skin burns and eye damage.
 H317 May cause an allergic skin reaction.
 H361d Suspected of damaging the unborn child.
 H304 May be fatal if swallowed and enters airways.
 H401 Toxic to aquatic life.
 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.
 P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
 P260 Do not breathe dusts or mists.
 P264 Wash thoroughly after handling.
 P270 Do not eat, drink or smoke when using this product.
 P271 Use only outdoors or in a well-ventilated area.
 P272 Contaminated work clothing should not be allowed out of the workplace.
 P273 Avoid release to the environment.
 P280 Wear protective gloves/protective clothing/eye protection/face protection.
 P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
 P321 Specific treatment (see on this label).
 P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
 P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
 P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P308+P313 IF exposed or concerned: Get medical advice/attention.
 P362+P364 Take off contaminated clothing and wash it before reuse.
 P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
 P363 Wash contaminated clothing before reuse.
 P370+P378 In case of fire: Use CO₂, powder or water spray to extinguish.
 P391 Collect spillage.
 P403+P233 Store in a well-ventilated place. Keep container tightly closed.
 P405 Store locked up.
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

3 Composition and Information on Ingredients

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

CAS: 64742-94-5	Solvent naphtha (petroleum), heavy arom. ⚠️ Aspiration hazard – Category 1, H304	30-40%
CAS: 1689-99-2	Bromoxynil octanoate ⚠️ Acute toxicity - inhalation – Category 3, H331; ⚠️ Reproductive toxicity – Category 2, H361d; ⚠️ Aquatic Chronic 1, H410 (M=10); ⚠️ Acute toxicity - oral – Category 4, H302; Skin sensitisation – Category 1, H317	30-40%

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CAS: 108-32-7	Propylene carbonate ⚠ Eye damage/irritation – Category 2A, H319	20-30%
CAS: 104-76-7	2-Ethyl-1-hexanol ⚠ Reproductive toxicity – Category 2, H361d; ⚠ Skin corrosion/irritation – Category 1A, H314; ⚠ Acute toxicity - inhalation – Category 4, H332	1-10%
CAS: 26264-06-2	Calcium dodecylbenzenesulfonate ⚠ Acute toxicity - oral – Category 4, H302; Skin corrosion/irritation – Category 2, H315	1-10%
CAS: 61791-26-2	Amines, tallow alkyl, ethoxylated ⚠ Skin corrosion/irritation – Category 1C, H314; Eye damage/irritation – Category 1, H318; ⚠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410; ⚠ Acute toxicity - oral – Category 4, H302	1-10%
CAS: 135590-91-9	Mefenpyr-diethyl ⚠ Aquatic Chronic 2, H411	0.800-5%

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 several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing for at least 15 minutes. Seek medical attention if symptoms persist.

Ingestion:

If swallowed, do not induce vomiting. Immediately rinse mouth with 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: Causes severe skin burns.

Eye Contact: Causes serious eye damage.

Ingestion: May cause gastrointestinal irritation, nausea, diarrhoea and vomiting.

5 Fire Fighting Measures

Suitable Extinguishing Media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Specific Hazards Arising from the Chemical:

Hazardous combustion products include Oxides of carbon, nitrogen, sulphur, hydrogen chloride, hydrogen bromide, hydrogen fluoride, hydrogen cyanide.

Product is Combustible liquid.

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

Minimise 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.

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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. Extinguish all sources of ignition. Avoid sparks and open flames. No smoking.

Environmental Precautions:

In the event of a major spill, prevent spillage from entering drains or water courses. Inform respective authorities in case of seepage into water course or sewage system.

Methods and Materials for Containment and Cleaning Up:

Soak up spill with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Collect the spilled material and place in suitable labelled container. Clean contaminated floors.

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.

Take precautionary measures against static discharge. 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. Protect from freezing.

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 mixed type organic vapour and gas filter (types A) 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:

Wear gloves (nitrile rubber), overalls, polyester/cotton or cotton overalls and chemical protection suit. See Australian Standards AS/NZS 2161, 2210.1 and 2210.2 for more information.

Eye and Face Protection:

Safety glasses with top and side shields or goggles. See Australian/New Zealand Standards AS/NZS 1336 and 1337 for more information.

9 Physical and Chemical Properties

Appearance:

Form:	Clear liquid
Colour:	Light to dark brown
Odour:	Aromatic
Odour Threshold:	No information available
pH-Value at 23 °C:	3-6
Melting point/freezing point:	No information available
Initial Boiling Point/Boiling Range:	No information available

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Flash Point:	91 °C
Flammability	Not applicable
Auto-ignition Temperature:	No information available
Decomposition Temperature:	No information available
Explosion Limits:	
Lower:	0.6 Vol %
Upper:	7 Vol %
Vapour Pressure at 20 °C:	0.06 hPa
Density at 20 °C:	1.14 g/cm ³
Relative Density:	Not determined
Vapour Density:	No information available
Evaporation Rate:	No information available
Solubility in Water:	No information available
Partition Coefficient (n-octanol/water):	No information available

10 Stability and Reactivity

Possibility of Hazardous Reactions: No dangerous reactions known under conditions of normal use.

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

Conditions to Avoid: Extremes of temperature and direct sunlight.

Incompatible Materials: Oxidising agents, Acids, Bases.

Hazardous Decomposition Products:

Oxides of carbon, nitrogen, sulphur, hydrogen chloride, hydrogen bromide, hydrogen fluoride and hydrogen cyanide.

11 Toxicological Information

Toxicity:

LD50/LC50 Values:

CAS: 64742-94-5 Solvent naphtha (petroleum), heavy arom.

Oral	LD50	5,000 mg/kg (Rattus norvegicus (rat))
	LD50	2,000 mg/kg (Oryctolagus cuniculus (rabbit))

CAS: 1689-99-2 Bromoxynil octanoate

Oral	LD50	>141 mg/kg (Rattus norvegicus (rat))
		260 mg/kg (Oryctolagus cuniculus (rabbit))
Dermal	LD50	>2,000 mg/kg (Rattus norvegicus (rat))
Inhalation	LC50/4 h	0.72-0.81 mg/l (Rattus norvegicus (rat))

CAS: 108-32-7 Propylene carbonate

Oral	LD50	29,000 mg/kg (Rattus norvegicus (rat))
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CAS: 104-76-7 2-Ethyl-1-hexanol

Oral	LD50	2,049 mg/kg (Rattus norvegicus (rat))
	LD50	1,970 mg/kg (Oryctolagus cuniculus (rabbit))
Inhalation	LC50	890 mg/m ³ (Rattus norvegicus (rat))

CAS: 26264-06-2 Calcium dodecylbenzenesulfonate

Oral	LD50	1,300 mg/kg (Rattus norvegicus (rat))
Dermal	LD50	>2,000 mg/kg (Rattus norvegicus (rat))

Acute Health Effects

Inhalation: Toxic if inhaled.

Skin: Causes severe skin burns.

Eye: Causes serious eye irritation.

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Ingestion: Harmful if swallowed.**Skin Corrosion / Irritation:** Causes severe skin burns.**Serious Eye Damage / Irritation:** Causes serious eye damage.**Respiratory or Skin Sensitisation:** May cause an allergic skin reaction.**Germ Cell Mutagenicity:** Based on classification principles, the classification criteria are not met.**Carcinogenicity:** Based on classification principles, the classification criteria are not met.**Reproductive Toxicity:** Suspected of damaging fertility or the unborn child.**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: May be fatal if swallowed and enters airways.**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 Mefenpyr-diethyl for a human is 0.03 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOAEL of 2.8 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', 2024)

The Australian Acceptable Daily Intake (ADI) for Pyrasulfotole for a human is 0.01 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOAEL of 1 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', 2024)

12 Ecological Information

Ecotoxicity:**CAS: 1689-99-2 Bromoxynil octanoate**

Oral LD50	2,350 mg/kg (Anas platyrhynchos (mallard duck))
	170 mg/kg (Coturnix coturnix (common quail))

Aquatic toxicity:

Very toxic to aquatic life with long lasting effects.

Toxic to aquatic life.

CAS: 64742-94-5 Solvent naphtha (petroleum), heavy arom.

EC50/48 h	12 mg/l (Daphnia magna (water flea))
EC50/72 h	2.5 mg/l (Skeletonema costatum (diatom))
LC50/96 h	45 mg/l (Pimephales promelas (fathead minnow))

CAS: 1689-99-2 Bromoxynil octanoate

LC50	0.46 mg/l (Carassius auratus (goldfish))
	0.05 mg/l (Oncorhynchus mykiss (rainbow trout))

CAS: 104-76-7 2-Ethyl-1-hexanol

EC50/48 h	39 mg/l (Crustacea)
EC50/72 h	11.5 mg/l (Algae)
LC50/96 h	<0.075 mg/l (fish)

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CAS: 26264-06-2 Calcium dodecylbenzenesulfonate	
EC50/48 h	2.5 mg/l (Crustacea)
EC50/96 h	2.736 mg/l (Algae)
LC50/96 h	1.67 mg/l (fish)

Persistence and Degradability: No data available on finished product.**Bioaccumulative Potential:** No data available on finished product.**Mobility in Soil:** No data available on finished product.**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	UN3082
ADG, IMDG, IATA	
Proper Shipping Name	3082 ENVIRONMENTALLY HAZARDOUS
ADG	SUBSTANCE, LIQUID, N.O.S. (Bromoxynil)
IMDG, IATA	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Bromoxynil)
Dangerous Goods Class	
ADG Class:	9
Packing Group:	
ADG, IMDG, IATA	III
Marine pollutant:	Symbol (fish and tree)
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 by road or rail in packagings that do not incorporate a receptacle exceeding 500 kg(L) or IBCs. (refer to SP AU01)
Excepted quantities (EQ):	E1
Limited Quantities:	5L
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.

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Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Poison Schedule:
Poisons Schedule: 7

16 Other Information

Date of Preparation or Last Revision: 12.01.2026**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

TWA: Time Weighted Average

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

Flammable liquids – Category 4: Flammable liquids – Category 4

Acute toxicity - oral – Category 4: Acute toxicity – Category 4

Acute toxicity - inhalation – Category 3: Acute toxicity – Category 3

Skin corrosion/irritation – Category 1A: Skin corrosion/irritation – Category 1A

Skin corrosion/irritation – Category 1C: Skin corrosion/irritation – Category 1C

Skin corrosion/irritation – Category 2: Skin corrosion/irritation – Category 2

Eye damage/irritation – Category 1: Serious eye damage/eye irritation – Category 1

Eye damage/irritation – Category 2A: Serious eye damage/eye irritation – Category 2A

Skin sensitisation – Category 1: Skin sensitisation, Hazard Category 1

Reproductive toxicity – Category 2: Reproductive toxicity – Category 2

Aspiration hazard – Category 1: Aspiration hazard – Category 1

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

Aquatic Acute 2: Hazardous to the aquatic environment, short-term (Acute). Category 2

Aquatic Chronic 1: Hazardous to the aquatic environment, long-term (Chronic). 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 - June 2023”.

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.