

Safety Data Sheet according to WHS Regulations

Printing date 25.01.2023 Revision date: 25.01.2023

1 Identification

Product Name: Titan Imazapic 525 + Imazapyr 175 WG Herbicide

Other Means of Identification: Mixture APVMA Approval Number: 92478

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), 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.



Environment

Aquatic Acute 1 H400 Very toxic to aquatic life.

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



Eye Irritation 2A H319 Causes serious eye irritation.

Signal Word Warning

Hazard Statements

H319 Causes serious eye irritation.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary Statements

P264 Wash thoroughly after handling.
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.

P337+P313 If eye irritation persists: Get medical advice/attention.

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.

according to WHS Regulations

Printing date 25.01.2023 Revision date: 25.01.2023

Product Name: Titan Imazapic 525 + Imazapyr 175 WG Herbicide

(Contd. of page 1)

Hazardous Components:			
CAS: 104098-48-8		50-55%	
	Aquatic Acute 1, H400 (M=10); Aquatic Chronic 1, H410 (M=10); Acute Toxicity (Inhalation) 4, H332		
CAS: 81334-34-1	Imazapyr	15-20%	
	◆ Eye Irritation 2A, H319; Aquatic Chronic 3, H412		

4 First Aid Measures

Inhalation: If inhaled, remove to fresh air. 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 irritation develops.

Eye Contact:

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

Ingestion:

If swallowed, do not induce vomiting. Immediately rinse mouth with water. Give a glass of water to drink in small sips. 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: Causes serious eye irritation.

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

5 Fire Fighting Measures

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

Specific Hazards Arising from the Chemical:

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

Product is not flammable. However, finely dispersed dust may form explosive mixture with air.

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: 2Z

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 dust/particulate filter respirator and full protective clothing. Evacuate all non-essential personnel from affected area. Do not breathe dust. Ensure adequate ventilation. Avoid generating dust.

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:

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 dust. Food, beverages and tobacco products should not be stored or consumed where this material is in use. Always

(Contd. on page 3)

according to WHS Regulations

Printing date 25.01.2023 Revision date: 25.01.2023

Product Name: Titan Imazapic 525 + Imazapyr 175 WG Herbicide

(Contd. of page 2)

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. Protect from moisture and direct sunlight. Keep container tightly closed when not in use. Protect from heat, sparks, open flames and other sources of ignition. Keep away from strong oxidising agents, strong acids and strong bases.

8 Exposure Controls and Personal Protection

Exposure Standards:

Nuisance dust

WES TWA: 10 mg/m³

Engineering Controls: Natural ventilation should be adequate under normal use conditions.

Respiratory Protection:

Respiratory protection is not required under normal use conditions.

Where an inhalation risk exists, wear approved particulate respirator (filter type P). At high dust levels, wear a powered air purifying respirator (PAPR) with P3 filter or an air-line respirator or a full-face P3 (particulate) respirator. See Australian/New Zealand Standards AS/NZS 1715 and 1716 for more information.

Skin Protection:

Chemical resistant 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 dust. See Australian/New Zealand Standard AS/NZS 1337 for more information.

9 Physical and Chemical Properties

Appearance:

Form: Granulate

Colour: According to product specification

Odour: Characteristic

Odour Threshold: No information available

pH-Value at 20 °C: >2 - <4 (1%)

Melting point/freezing point:No information available **Initial Boiling Point/Boiling Range:**No information available

Flash Point: Not applicable

Flammability: Product is not flammable Auto-ignition Temperature: No information available Decomposition Temperature: No information available

Explosion Limits:

Lower:
Upper:
Vapour Pressure:
Relative Density:
Vapour Density:
No information available

Solubility in Water: Dispersible

(Contd. on page 4)

according to WHS Regulations

Printing date 25.01.2023 Revision date: 25.01.2023

Product Name: Titan Imazapic 525 + Imazapyr 175 WG Herbicide

(Contd. of page 3)

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: Moisture and direct sunlight. Heat, sparks, open flames and other sources of ignition.

Incompatible Materials: Strong oxidising agents, strong acids and strong bases.

Hazardous Decomposition Products: Oxides of carbon and oxides of nitrogen.

11 Toxicological Information

Toxicity:

LD50/LC50 Values:				
CAS: 104098-48-8 Imazapic				
Oral	LD50	>5,000 mg/kg (Rattus norvegicus (rat))		
Dermal	LD50	>2,000 mg/kg (rab)		
Inhalation	LC50/4 h	4.83 mg/l (Rattus norvegicus (rat))		
CAS: 81334-34-1 Imazapyr				
Oral	LD50	>2,000 mg/kg (mus)		
		>2,000 mg/kg (Rattus norvegicus (rat))		
Inhalation	LC50/4 h	5.1 mg/l (Rattus norvegicus (rat))		

Acute Health Effects

Inhalation: May cause respiratory irritation.

Skin: May cause skin irritation. **Eye:** Causes serious eye irritation.

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

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

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:

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

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: No information available

Existing Conditions Aggravated by Exposure: No information available

Additional toxicological information:

The Australian Acceptable Daily Intake (ADI) for imazapic for a human is 0.3 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the LOAEL of 137 mg/kg/day, the level determined to show no effects during long term exposure for the most sensitive indicators and the most sensitive species.

The Australian Acceptable Daily Intake (ADI) for imazapyr for a human is 2.5 mg/kg/day, set for the public for

(Contd. on page 5)

according to WHS Regulations

Printing date 25.01.2023 Revision date: 25.01.2023

Product Name: Titan Imazapic 525 + Imazapyr 175 WG Herbicide

(Contd. of page 4)

daily, lifetime exposure. This is based on the NOAEL of 250 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', 2022).

12 Ecological Information

Ecoto	Ecotoxicity:		
CAS:	CAS: 104098-48-8 Imazapic		
LD50	>2,150 mg/kg (Colinus virginianus (bobwhite quail))		
	>2,150 mg/kg (Anas platyrhynchos (mallard duck))		
LD50	>100 μg/bee (Apis mellifera (honey bee))		

Aquatic toxicity:

Very toxic to aquatic life with long lasting effects.

CAS: 104098-48-8 Imazapic		
EC50/72	h 0.051 mg/l (Algae)	
LC50	>100 mg/l (Lepomis macrochirus (bluegill))	
	>100 mg/l (Oncorhynchus mykiss (rainbow trout))	
CAS: 81334-34-1 Imazapyr		
EC50	>100 mg/l (Daphnia magna (water flea))	
LC50	>100 mg/l (Lepomis macrochirus (bluegill))	
	>100 mg/l (Oncorhynchus mykiss (rainbow trout))	

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:

Must not be disposed together with household garbage. Do not allow product to reach sewage system. 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, IMDG, IATA UN3077

Proper Shipping Name

ADG, IATA ENVIRONMENTALLY HAZARDOUS SUBSTANCE,

SOLID, N.O.S. (Imazapic, Imazapyr)

IMDG ENVIRONMENTALLY HAZARDOUS SUBSTANCE,

SOLID, N.O.S. (Imazapic, Imazapyr), MARINE

POLLUTANT

Dangerous Goods Class

ADG Class: 9

Packing Group:

ADG, IMDG, IATA

(Contd. on page 6)

according to WHS Regulations

Printing date 25.01.2023 Revision date: 25.01.2023

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(Contd. of page 5)

Marine pollutant: Yes **EMS Number:** F-A,S-F

Hazchem Code: 27

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:** 5 kg

Packagings & IBCs - Packing Instruction: P002, IBC08, LP02

Packagings & IBCs - Special Packing Provisions: PP12, B3 Portable Tanks & Bulk Containers - Instructions: T1, BK2, BK3

Portable Tanks & Bulk Containers - Special

Provisions: TP33

15 Regulatory Information

Australian Inventory of Industrial Chemicals:

All components are on the inventory, or in compliance with the inventory.

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

Poisons Schedule: 5

Australian Pesticides and Veterinary Medicines Authority:

This product is registered with the Australian Pesticides and Veterinary Medicines Authority. APVMA approval number 92478.

16 Other Information

Date of Preparation or Last Revision: 25.01.2023

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)

Acute Toxicity (Inhalation) 4: Acute toxicity - Category 4

Eye Irritation 2A: Serious eye damage/eye irritation - Category 2A

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 Aquatic Chronic 3: Hazardous to the aquatic environment, long-term (Chronic). Category 3

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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(Contd. on page 7)

Safety Data Sheet according to WHS Regulations

Revision date: 25.01.2023 Printing date 25.01.2023

Product Name: Titan Imazapic 525 + Imazapyr 175 WG Herbicide

(Contd. of page 6)

suitability of the information provided to the particular circumstances in which the product is used.