

# Safety Data Sheet

according to WHS Regulations

Printing date 03.12.2021

Revision: 03.12.2021

## 1 Identification

**Product Name: TITAN IMMENSE HERBICIDE**

**Other Means of Identification:** Mixture

**APVMA Approval Number:** 88704

**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(L) or less; or IBCs (refer to SP AU01). However if transported by Air or Sea, this provision does not apply.



Environment

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

Aquatic Acute 2 H401 Toxic to aquatic life.

**Signal Word** None

**Hazard Statements**

H411 Toxic to aquatic life with long lasting effects.

**Precautionary Statements**

P273 Avoid release to the environment.

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: 114311-32-9	Imazamox ⚠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410	<5%
CAS: 81334-34-1	Imazapyr ⚠ Serious Eye Damage/Irritation 2, H319; Aquatic Chronic 3, H412	<1.5%
CAS: 2634-33-5	1,2-benzisothiazol-3(2H)-one ⚠ Serious Eye Damage/Irritation 1, H318; ⚠ Aquatic Acute 1, H400; ⚠ Acute Toxicity (Oral) 4, H302; Skin Corrosion/Irritation 2, H315; Skin Sensitisation 1A, H317	<0.05%

(Contd. on page 2)

# Safety Data Sheet

## according to WHS Regulations

Printing date 03.12.2021

Revision: 03.12.2021

**Product Name: TITAN IMMENSE HERBICIDE**

(Contd. of page 1)

### 4 First Aid Measures

**Inhalation:**

If inhaled, remove to fresh air. If not breathing, give artificial respiration. Seek medical attention if breathing problems develop.

**Skin Contact:**

In case of skin contact, 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. 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: No adverse health effects expected.

Skin Contact: No adverse health effects expected.

Eye Contact: No adverse health effects expected.

Ingestion: No adverse health effects expected.

### 5 Fire Fighting Measures

**Suitable Extinguishing Media:** Water fog, foam, dry chemical or carbon dioxide.

**Specific Hazards Arising from the Chemical:**

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

This 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 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.

**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. 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

(Contd. on page 3)

# Safety Data Sheet

## according to WHS Regulations

Printing date 03.12.2021

Revision: 03.12.2021

**Product Name: TITAN IMMENSE HERBICIDE**

(Contd. of page 2)

proximity to points of potential exposure.

**Conditions for Safe Storage:**

Store in a cool, dry and well ventilated area. Keep container tightly closed when not in use. Protect from extreme temperatures and direct sunlight. Keep away from strong oxidising agents, strong acids and strong bases.

Recommended storage temperature: -10 °C to +40 °C

### 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:** Respiratory protection is not required under normal use conditions.

**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.

**Eye and Face Protection:** Eye protection is not required under normal use conditions.

### 9 Physical and Chemical Properties

**Appearance:**

<b>Form:</b>	Liquid
<b>Colour:</b>	Yellow to amber
<b>Odour:</b>	Aliphatic
<b>Odour Threshold:</b>	No information available
<b>pH-Value:</b>	~ 5 - 7
<b>Melting point/freezing point:</b>	~ -14 °C
<b>Initial Boiling Point/Boiling Range:</b>	~100 °C
<b>Flash Point:</b>	Not applicable
<b>Flammability:</b>	Product is not flammable
<b>Ignition Temperature</b>	398 °C
<b>Decomposition Temperature:</b>	No information available
<b>Explosion Limits:</b>	
<b>Lower:</b>	Not applicable
<b>Upper:</b>	Not applicable
<b>Vapour Pressure at 20 °C:</b>	~23.4 hPa
<b>Density at 20 °C:</b>	~1.08 g/cm <sup>3</sup>
<b>Vapour Density:</b>	No information available
<b>Evaporation Rate:</b>	No information available
<b>Solubility in Water:</b>	Soluble
<b>Partition Coefficient (n-octanol/water):</b>	Not applicable
<b>Viscosity at 20 °C:</b>	~83 mPa.s

### 10 Stability and Reactivity

**Possibility of Hazardous Reactions:** Hazardous polymerisation will not occur.

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

**Conditions to Avoid:** Extreme temperatures and direct sunlight.

(Contd. on page 4)

# Safety Data Sheet

## according to WHS Regulations

Printing date 03.12.2021

Revision: 03.12.2021

**Product Name: TITAN IMMENSE HERBICIDE**

(Contd. of page 3)

**Incompatible Materials:** Strong oxidising agents, strong acids and strong bases.**Hazardous Decomposition Products:** Oxides of carbon and nitrogen and ammonia.

### 11 Toxicological Information

**Toxicity:****LD50/LC50 Values:****CAS: 114311-32-9 Imazamox**

Oral	LD50	>5,000 mg/kg (rat)
	LD50	>4,000 mg/kg (rat)

**CAS: 81334-34-1 Imazapyr**

Oral	LD50	>2,000 mg/kg (mouse)
		>2,000 mg/kg (rat)
	LD50	>2,000 mg/kg (rabbit)
Inhalation	LC50/4 h	>5.22 mg/l (rat)

**Acute Health Effects****Inhalation:** No adverse health effects expected.**Skin:** No adverse health effects expected.**Eye:** No adverse health effects expected.**Ingestion:** No adverse health effects expected.**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.**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:** 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 imazamox for a human is 2.8 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOAEL of 282 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 ADI for imazapyr for a human is 2.5 mg/kg/day. This is based on the NOAEL of 250 mg/kg/day.

(Ref: Australian Pesticides and Veterinary Medicines Authority, 'Acceptable Daily Intakes for Agricultural and Veterinary Chemicals', 2021).

(Contd. on page 5)

# Safety Data Sheet

according to WHS Regulations

Printing date 03.12.2021

Revision: 03.12.2021

**Product Name: TITAN IMMENSE HERBICIDE**

(Contd. of page 4)

## 12 Ecological Information

**Ecotoxicity:****Aquatic toxicity:**

Toxic to aquatic life with long lasting effects.

**CAS: 114311-32-9 Imazamox**

EC50	>100 mg/l (daphnia)
EC50/72 h	29.1 mg/l (pseudokirchnerie lla subcapitata)
LC50/96 h	>122 ppm (rainbow trout)
LC50	>119 mg/l (lepomis macrochirus)
EC50/120hr	>0.037 mg/l (algae)

**CAS: 81334-34-1 Imazapyr**

EC50	>100 mg/l (daphnia)
LC50	>100 mg/l (bluegill)
	>100 mg/l (rainbow trout)

**Persistence and Degradability:** Not readily biodegradable.**Bioaccumulative Potential:**

Imaxamox BCF: &lt;1

Imazapyr BCF: &lt;1

**Mobility in Soil:** Product may be mobile in soil.**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

<b>UN Number</b>	
<b>ADG, IMDG, IATA</b>	UN3082
<b>Proper Shipping Name</b>	
<b>ADG, IATA</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Imazamox)
<b>IMDG</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Imazamox), MARINE POLLUTANT
<b>Dangerous Goods Class</b>	
<b>ADG Class:</b>	9
<b>Subsidiary Risk:</b>	
<b>Packing Group:</b>	
<b>ADG, IMDG, IATA</b>	III
<b>Marine pollutant:</b>	Symbol (fish and tree)
<b>EMS Number:</b>	F-A,S-F
<b>Hazchem Code:</b>	•3Z

(Contd. on page 6)

# Safety Data Sheet

## according to WHS Regulations

Printing date 03.12.2021

Revision: 03.12.2021

**Product Name: TITAN IMMENSE HERBICIDE**

(Contd. of page 5)

<b>Special Provisions:</b>	274, 331, 335, 375, AU01
<b>Transport/Additional information:</b>	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)
<b>Limited Quantities:</b>	5L
<b>Packagings &amp; IBCs - Packing Instruction:</b>	P001, IBC03, LP01
<b>Packagings &amp; IBCs - Special Packing Provisions:</b>	PP1
<b>Portable Tanks &amp; Bulk Containers - Instructions:</b>	T4
<b>Portable Tanks &amp; Bulk Containers - Special Provisions:</b>	TP1, TP29

### 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:**

Not Scheduled.

**Australian Pesticides and Veterinary Medicines Authority:**

This product is registered with the Australian Pesticides and Veterinary Medicines Authority. APVMA number 88704.

### 16 Other Information

**Date of Preparation or Last Revision:** 03.12.2021

**Prepared by:** MSDS.COM.AU Pty Ltd

[www.msds.com.au](http://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 (Oral) 4: Acute toxicity – Category 4

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

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

Serious Eye Damage/Irritation 2: Serious eye damage/eye irritation – Category 2

Skin Sensitisation 1A: Skin sensitisation, Hazard Category 1A

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

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

**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"

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

(Contd. on page 7)

# Safety Data Sheet

according to WHS Regulations

Printing date 03.12.2021

Revision: 03.12.2021

**Product Name: TITAN IMMENSE HERBICIDE**

(Contd. of page 6)

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.