

# Safety Data Sheet

according to WHS Regulations

Printing date 19.07.2022

Revision: 19.07.2022

## 1 Identification

**Product Name: Titan Glufosinate 880SG Herbicide****Other Means of Identification:** Mixture**APVMA Approval Number:** 92275**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.

Not 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.



Health hazard

Toxic To Reproduction 1B H360FD May damage fertility. May damage the unborn child.

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



Acute Toxicity (Oral) 4 H302 Harmful if swallowed.

Acute Toxicity (Inhalation) 4 H332 Harmful if inhaled.

**Signal Word** Danger**Hazard Statements**

H302 Harmful if swallowed.

H332 Harmful if inhaled.

H360FD May damage fertility. May damage the unborn child.

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

**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.

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.

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

P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

P330 Rinse mouth.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

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

P314 Get medical advice/attention if you feel unwell.

(Contd. on page 2)

# Safety Data Sheet

## according to WHS Regulations

Printing date 19.07.2022

Revision: 19.07.2022

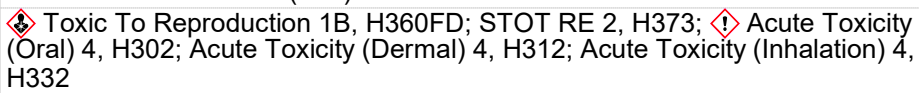
**Product Name: Titan Glufosinate 880SG Herbicide**

(Contd. of page 1)

P405 Store locked up.  
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: 77182-82-2	Glufosinate ammonium (ISO) 	85-90%
-----------------	--	--------

### 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 irritation persists.

**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. Never give anything by mouth to an unconscious person. Seek immediate medical attention.

**Symptoms Caused by Exposure:**

Inhalation: Harmful if inhaled. May cause respiratory irritation.

Skin Contact: May cause skin irritation.

Eye Contact: May cause eye irritation.

Ingestion: Harmful if swallowed. May cause gastrointestinal irritation, nausea, diarrhoea and vomiting. May cause abdominal pain, tremors, hypotension, muscular weakness, coma, convulsions and tachycardia.

### 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, oxides of nitrogen, oxides of phosphorus, oxides of sulfur and ammonia.

Product is not flammable.

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.

**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.

(Contd. on page 3)

# Safety Data Sheet

## according to WHS Regulations

Printing date 19.07.2022

Revision: 19.07.2022

**Product Name: Titan Glufosinate 880SG Herbicide**

(Contd. of page 2)

**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. Decontaminate spill area with water and detergents.

## 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 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 container tightly closed when not in use. Protect from freezing. Keep away from direct sunlight, heat, flames, sparks and other sources of ignition. Store away from food, drink and animal feedingstuffs. Keep away from strong oxidising agents, acids, bases and alkali metals.

## 8 Exposure Controls and Personal Protection

**Exposure Standards:****Nuisance dust**WES | TWA: 10 mg/m<sup>3</sup>**Engineering Controls:**

Ensure adequate ventilation of the working area, keeping airborne concentrations below occupational exposure standards.

**Respiratory Protection:**

Where an inhalation risk exists, wear a Class P1 (particulate) respirator. At high dust levels, wear a powered air purifying respirator (PAPR) with Class P3 (Particulate) filter or an air-line respirator or a full-face Class P3 (particulate) respirator. See Australian/New Zealand Standards AS/NZS 1715 and 1716 for more information.

**Skin Protection:**

Elbow-length PVC or nitrile 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, including cotton overalls buttoned to the neck and wrist and washable hat (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:**

<b>Form:</b>	Solid
<b>Colour:</b>	White to yellowish
<b>Odour:</b>	Mild, characteristic

(Contd. on page 4)

# Safety Data Sheet

## according to WHS Regulations

Printing date 19.07.2022

Revision: 19.07.2022

**Product Name: Titan Glufosinate 880SG Herbicide**

(Contd. of page 3)

<b>Odour Threshold:</b>	No information available
<b>pH-Value:</b>	3 - 7
<b>Melting point/freezing point:</b>	No information available
<b>Initial Boiling Point/Boiling Range:</b>	No information available
<b>Flash Point:</b>	No information available
<b>Flammability:</b>	Product is not flammable
<b>Auto-ignition Temperature:</b>	No information available
<b>Decomposition Temperature:</b>	No information available
<b>Explosion Limits:</b>	
<b>Lower:</b>	No information available
<b>Upper:</b>	No information available
<b>Vapour Pressure:</b>	No information available
<b>Relative Density:</b>	No information available
<b>Solubility in Water:</b>	Miscible
<b>Partition Coefficient (n-octanol/water):</b>	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:** Freezing. Direct sunlight, heat, flames, sparks and other sources of ignition.

**Incompatible Materials:** Strong oxidising agents, acids, bases and alkali metals.

**Hazardous Decomposition Products:**

Oxides of carbon, oxides of nitrogen, oxides of phosphorus, oxides of sulfur and ammonia.

### 11 Toxicological Information

**Toxicity:**

**LD50/LC50 Values:**

**CAS: 77182-82-2 Glufosinate ammonium (ISO)**

Oral	LD50	416 mg/kg (mouse)
Dermal	LD50	2,000 mg/kg (rabbit)
Inhalation	LC50/4 h	1.26 mg/l (rat)

**Acute Health Effects**

**Inhalation:** Harmful if inhaled. May cause respiratory irritation.

**Skin:** May cause skin irritation.

**Eye:** May cause eye irritation.

**Ingestion:**

Harmful if swallowed. May cause gastrointestinal irritation, nausea, diarrhoea and vomiting. May cause abdominal pain, tremors, hypotension, muscular weakness, coma, convulsions and tachycardia.

**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:** May damage fertility. May damage the unborn child.

(Contd. on page 5)

# Safety Data Sheet

## according to WHS Regulations

Printing date 19.07.2022

Revision: 19.07.2022

**Product Name: Titan Glufosinate 880SG Herbicide**

(Contd. of page 4)

**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.

**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 glufosinate ammonium for a human is 0.02 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOAEL of 2.1 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', 2022).

## 12 Ecological Information

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

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

**CAS: 77182-82-2 Glufosinate ammonium (ISO)**

EC50	560-1,000 mg/l (daphnia magna)
LC50	>1,000 mg/l (bluegill)
	>1,000 mg/l (carp)
	>1,000 mg/l (golden orfe)
	710 mg/l (rainbow trout)
	≥1,000 mg/l (scenedesmus subspicatus)
	37 mg/l (selenastrum capricornutum)

**Persistence and Degradability:** Readily biodegradable.**Bioaccumulative Potential:** Bioaccumulation is not expected to occur.**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****ADG, IMDG, IATA** Not regulated**Proper Shipping Name****ADG, IMDG, IATA** Not regulated**Dangerous Goods Class** Not regulated

(Contd. on page 6)

# Safety Data Sheet

## according to WHS Regulations

Printing date 19.07.2022

Revision: 19.07.2022

**Product Name: Titan Glufosinate 880SG Herbicide**

(Contd. of page 5)

**Packing Group:** Not regulated

### 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 92275.

### 16 Other Information

**Date of Preparation or Last Revision:** 19.07.2022**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

Toxic To Reproduction 1B: Reproductive toxicity – Category 1B

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