

# Safety Data Sheet

according to WHS Regulations

Printing date 03.12.2021

Revision: 03.12.2021

## 1 Identification

**Product Name: TITAN FLUROXYPYR 400 HERBICIDE**

**Other Means of Identification:** Mixture

**APVMA Approval Number:** 68005

**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.



Health hazard

Toxic To Reproduction 1A H360 May damage fertility or the unborn child.

Aspiration Hazard 1 H304 May be fatal if swallowed and enters airways.



Environment

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



Skin Corrosion/Irritation 2 H315 Causes skin irritation.

Eye Irrit. 2A H319 Causes serious eye irritation.

STOT SE 3 H335 May cause respiratory irritation.

**Signal Word** Danger

**Hazard Statements**

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H360 May damage fertility or the unborn child.

H335 May cause respiratory irritation.

H304 May be fatal if swallowed and enters airways.

H410 Very toxic to aquatic life with long lasting effects.

**Precautionary Statements**

P201 Obtain special instructions before use.

(Contd. on page 2)

# Safety Data Sheet

## according to WHS Regulations

Printing date 03.12.2021

Revision: 03.12.2021

**Product Name: TITAN FLUROXYPYR 400 HERBICIDE**

(Contd. of page 1)

P202	Do not handle until all safety precautions have been read and understood.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P264	Wash thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
P321	Specific treatment (see on this label).
P331	Do NOT induce vomiting.
P302+P352	IF ON SKIN: Wash with plenty of water.
P304+P340	IF INHALED: Remove person to fresh air and keep 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.
P312	Call a POISON CENTER/doctor if you feel unwell.
P362+P364	Take off contaminated clothing and wash it before reuse.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.
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 regulations.

### 3 Composition and Information on Ingredients

#### Chemical Characterization: Mixtures

**Description:** Mixture of substances listed below with nonhazardous additions.

#### Hazardous Components:

CAS: 81406-37-3	Fluroxypyr-meptyl (ISO)	35-40%
	⚠ Aquatic Chronic 1, H410	
CAS: 64742-94-5	Solvent naphtha (petroleum), heavy arom.	25-30%
	⚠ Aspiration Hazard 1, H304	
CAS: 872-50-4	N-methyl-2-pyrrolidone	10%
	⚠ Toxic To Reproduction 1B, H360; ⚠ Skin Corrosion/Irritation 2, H315; Eye Irrit. 2A, H319; STOT SE 3, H335	

### 4 First Aid Measures

#### General Information:

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

#### 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, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical attention if symptoms occur.

(Contd. on page 3)

# Safety Data Sheet

## according to WHS Regulations

Printing date 03.12.2021

Revision: 03.12.2021

**Product Name: TITAN FLUROXYPYR 400 HERBICIDE**

(Contd. of page 2)

**Ingestion:**

If swallowed, do not induce vomiting. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. Immediately rinse mouth with water. Give a glass of water. Do not give anything by mouth to an unconscious person. Seek immediate medical attention.

**Symptoms Caused by Exposure:**

Inhalation: May cause respiratory irritation, headaches and dizziness.

Skin Contact: Causes skin irritation.

Eye Contact: Causes serious eye irritation.

Ingestion: May be fatal if swallowed and enters airways. May cause headaches and nausea.

### 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, hydrogen chloride, phosgene and toxic fumes.

Product is not flammable. However, it will burn in larger 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 self-contained breathing apparatus and full protective clothing. 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.

**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 labelled container for disposal. Clean up all spills immediately.

### 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 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, heat, sparks, open flames and other sources of ignition. Keep away from strong oxidising agents.

(Contd. on page 4)

# Safety Data Sheet

according to WHS Regulations

Printing date 03.12.2021

Revision: 03.12.2021

**Product Name: TITAN FLUROXYPYR 400 HERBICIDE**

(Contd. of page 3)

## 8 Exposure Controls and Personal Protection

**Exposure Standards:****CAS: 872-50-4 N-methyl-2-pyrrolidone**

WES	STEL: 309 mg/m <sup>3</sup> , 75 ppm TWA: 103 mg/m <sup>3</sup> , 25 ppm Sk
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**Engineering Controls:** Ensure adequate ventilation of the working area.**Respiratory Protection:**

Use approved vapour respirator 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:**

PVC or 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 (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 splashing materials or liquids. See Australian/New Zealand Standard AS/NZS 1337 for more information.

## 9 Physical and Chemical Properties

**Appearance:****Form:** Liquid**Colour:** Amber**Odour:** Solvent odour**Odour Threshold:** No information available**pH-Value:** 5 (1% solution)**Melting point/freezing point:** No information available**Initial Boiling Point/Boiling Range:** ~200 °C (solvent)**Flash Point:** 105 °C (expected)**Flammability:** Product is not flammable. However, it will burn in larger fire.**Auto-ignition Temperature:** No information available**Decomposition Temperature:** No information available**Explosion Limits:****Lower:** No information available**Upper:** No information available**Vapour Pressure:****Relative Density:** 1.136**Vapour Density:** No information available**Evaporation Rate:** No information available**Solubility in Water:** Emulsifies into water.**Partition Coefficient (n-octanol/water):** 4.53 log POW

(Contd. on page 5)

# Safety Data Sheet

according to WHS Regulations

Printing date 03.12.2021

Revision: 03.12.2021

**Product Name: TITAN FLUROXYPYR 400 HERBICIDE**

(Contd. of page 4)

## 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:** Heat, sparks, open flames, hot surfaces and direct sunlight.

**Incompatible Materials:** Strong oxidising agents.

**Hazardous Decomposition Products:**

Decomposes on heating emitting toxic fumes including those of hydrogen chloride and phosgene.

## 11 Toxicological Information

**Toxicity:**

**LD50/LC50 Values:**

**CAS: 81406-37-3 Fluroxypyr-meptyl (ISO)**

Oral	LD50	>5,000 mg/kg (rat)
	LD50	>2,000 mg/kg (rabbit)

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

Oral	LD50	5,000 mg/kg (rat)
	LD50	2,000 mg/kg (rabbit)

**CAS: 872-50-4 N-methyl-2-pyrrolidone**

Oral	LD50	3,914 mg/kg (rat)
	LD50	8,000 mg/kg (rabbit)

**Acute Health Effects**

**Inhalation:** May cause respiratory irritation, headaches and dizziness.

**Skin:** Causes skin irritation.

**Eye:** Causes serious eye irritation.

**Ingestion:** May be fatal if swallowed and enters airways. May cause headaches and nausea.

**Skin Corrosion / Irritation:** Causes skin irritation.

**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:** This product does NOT contain any IARC listed chemicals.

**Reproductive Toxicity:** May damage fertility or the unborn child.

**Specific Target Organ Toxicity (STOT) - Single Exposure:** May cause respiratory irritation.

**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 information available

Repeated or prolonged skin exposure may cause de-fatting of the skin and dermatitis.

**Existing Conditions Aggravated by Exposure:** No information available

(Contd. on page 6)

# Safety Data Sheet

## according to WHS Regulations

Printing date 03.12.2021

Revision: 03.12.2021

**Product Name: TITAN FLUROXYPYR 400 HERBICIDE**

(Contd. of page 5)

**Additional toxicological information:**

The Australian Acceptable Daily Intake (ADI) for fluroxypyr for a human is 0.2 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOAEL of 20 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:** Fluroxypyr is not toxic to bees or birds.

**Aquatic toxicity:**

Very toxic to aquatic life with long lasting effects.

<b>CAS: 81406-37-3 Fluroxypyr-meptyl (ISO)</b>	
EC50/48 h	>100 mg/l (daphnia)
EC50/96 h	>100 mg/l (green algae)
LC50/96 h	>100 mg/l (golden orfe)
<b>CAS: 64742-94-5 Solvent naphtha (petroleum), heavy arom.</b>	
EC50/48 h	12 mg/l (daphnia)
EC50/72 h	2.5 mg/l (skeletonema costatum)
LC50/96 h	45 mg/l (fathead minnow)
<b>CAS: 872-50-4 N-methyl-2-pyrrolidone</b>	
EC50/24 h	>1,000 mg/l (daphnia)
EC50/72 h	>500 mg/l (green algae)
LC50/96 h	1,072 mg/l (fathead minnow)
	>5,000 mg/l (rainbow trout)

**Persistence and Degradability:** Product is not persistent. Half-life is less than 7 days.

**Bioaccumulative Potential:** No information available

**Mobility in Soil:** Moderately 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

**UN Number****ADG, IMDG, IATA**

UN3082

**Proper Shipping Name****ADG, IATA**ENVIRONMENTALLY HAZARDOUS SUBSTANCE,  
LIQUID, N.O.S. (Fluroxypyr-meptyl (ISO))**IMDG**ENVIRONMENTALLY HAZARDOUS SUBSTANCE,  
LIQUID, N.O.S. (Fluroxypyr-meptyl (ISO)), MARINE  
POLLUTANT

(Contd. on page 7)

# Safety Data Sheet

## according to WHS Regulations

Printing date 03.12.2021

Revision: 03.12.2021

**Product Name: TITAN FLUROXYPYR 400 HERBICIDE**

(Contd. of page 6)

<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
<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 ingredients are listed.

#### 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 number 68005.

### 16 Other Information

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

#### 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)

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

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

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

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

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

(Contd. on page 8)

# Safety Data Sheet

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**Product Name: TITAN FLUROXYPYR 400 HERBICIDE**

(Contd. of page 7)

Aspiration Hazard 1: Aspiration hazard – 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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