

## 1. IDENTIFICATION: PRODUCT IDENTIFIER AND CHEMICAL IDENTITY

**Product Name:** TITAN FLUROXYPYR 200 EC HERBICIDE

**Other Means of Identification:** Mixture

**Recommended Use of the Chemical and Restriction on Use:** Agricultural herbicide

**Details of Manufacturer or Importer:**

Titan Ag Pty Ltd  
15/16 Princes Street  
Newport NSW 2106

**Phone Number:** 02 9999 6655

**Emergency telephone number:** 02 9999 6655

## 2. HAZARDS 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)



health hazard

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



environment

Aquatic Acute 1 H400 Very toxic to aquatic life.

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

Flammable Liquids 4 H227 Combustible liquid.

**Signal Word** Danger

### Hazard Statements

H227 Combustible liquid.

H304 May be fatal if swallowed and enters airways.

H410 Very toxic to aquatic life with long lasting effects.

### Precautionary Statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

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

P273 Avoid release to the environment.

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.

P331 Do NOT induce vomiting.

P370+P378 In case of fire: Use for extinction: CO2, powder or water spray.

P391 Collect spillage.

P405 Store locked up.

P403+P235 Store in a well-ventilated place. Keep cool.

P501 Dispose of contents/container in accordance with local/regional/national regulations.

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### 3 . COMPOSITION AND INFORMATION ON INGREDIENTS

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

64742-94-5	Solvent naphtha (petroleum), heavy arom. ☠ Aspiration Hazard 1, H304	58%
81406-37-3	Fluoroxypyr-meptyl(ISO) ☠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410	30%

### 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 at least 15 minutes. Remove contact lenses, if present and easy to do. Seek medical attention if symptoms occur.

**Ingestion:**

If swallowed, do not induce vomiting. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. Do not give anything by mouth to an unconscious person. Seek immediate medical attention.

**Symptoms Caused by Exposure:**

Inhalation: May cause respiratory irritation, headaches, dizziness and Central Nervous System (CNS) effects.

Skin Contact: May cause skin irritation.

Eye Contact: May cause eye irritation.

Ingestion: May cause headache, nausea, lethargy, motor weakness and incoordination. May be fatal if swallowed and enters airways.

### 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, sulphur and nitrogen, hydrogen chloride gas and other chlorine compounds.

Combustible Liquid Class 1.

There is a moderate risk of explosion if involved in a fire.

Vapours are heavier than air and may accumulate in low areas, potentially forming explosive mixtures.

Closed containers may explode when exposed to extreme heat. Containers close to fire should be removed if safe to do so. Use water spray to cool fire exposed containers.

**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.

**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 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 heat, sparks, open flames, hot surfaces and direct sunlight. Do not store in direct sunlight for prolonged periods. Store at temperatures below 30°C. Keep away from strong acids, bases and oxidising agents. Do not store with seed, fertilisers or foodstuff.

### 8 . EXPOSURE CONTROLS AND PERSONAL PROTECTION

**Exposure Standards:**

Total hydrocarbons:

TWA - 17 ppm/ 100 mg/m<sup>3</sup>

**Engineering Controls:**

Maintain air concentration below occupational exposure standards, providing adequate ventilation.

**Respiratory Protection:**

Use an 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. A full face supplied air respirator may be required if high concentrations are present. See Australian Standards AS/NZS 1715 and 1716 for more information.

**Skin Protection:**

Impervious elbow-length 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.

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## 9 . PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	
<b>Form:</b>	Liquid
<b>Colour:</b>	Brown to black.
<b>Odour:</b>	Mild solvent odour.
<b>Odour Threshold:</b>	No information available
<b>pH-Value:</b>	No information available
<b>Melting point/Melting range:</b>	No information available
<b>Initial Boiling Point/Boiling Range:</b>	No information available
<b>Flash Point:</b>	67 °C
<b>Flammability:</b>	Combustible Liquid Class 1
<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 at 20 °C:</b>	0.135 mPa
<b>Relative Density at 20 °C:</b>	0.98
<b>Vapour Density:</b>	No information available
<b>Evaporation Rate:</b>	No information available
<b>Solubility in Water at 25 °C:</b>	1 mg/L Emulsifiable.
<b>Partition Coefficient (n-octanol/water):</b> -1.24 log POW	

## 10 . STABILITY AND REACTIVITY

- Possibility of Hazardous Reactions:** Hazardous polymerisation will not occur.
- Chemical Stability:** Stable at ambient temperature and under normal conditions of use.
- Conditions to Avoid:** Heat, sparks, open flames, hot surfaces and direct sunlight.
- Incompatible Materials:** Strong acids, bases and oxidising agents.
- Hazardous Decomposition Products:**  
Oxides of carbon, sulphur and nitrogen, hydrogen chloride gas and other chlorine compounds.

## 11 . TOXICOLOGICAL INFORMATION

### Toxicity:

#### LD<sub>50</sub>/LC<sub>50</sub> Values Relevant for Classification:

#### 81406-37-3 Fluoroxypyr-meptyl(ISO)

	LC <sub>50</sub>	>1 mg/L (rat)
Oral	LD <sub>50</sub>	>5000 mg/kg (rat)
Dermal	LD <sub>50</sub>	>2000 mg/kg (rabbit)

### Acute Health Effects

#### Inhalation:

May cause respiratory irritation, headaches, dizziness and Central Nervous System (CNS) effects.

**Skin:** May cause skin irritation.

**Eye:** May cause eye irritation.

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**Ingestion:**

May cause headache, nausea, lethargy, motor weakness and incoordination. May be fatal if swallowed and enters airways.

**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:** May be fatal if swallowed and enters airways.

**Chronic Health Effects:**

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

Repeated or prolonged eye contact may cause damage.

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

**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 NOEL 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: Comm. Dept. of Health and Ageing Office of Chemical Safety, 'ADI List', March 2016).

## 12 . ECOLOGICAL INFORMATION

**Ecotoxicity:**

Not toxic to birds or bees:

LC50 >2000 mg/kg (bobwhite quail)

LD50 >2000 mg/kg (mallard duck)

LD50 (oral) = 100 µg/bee

**Aquatic toxicity:**

Toxic to aquatic life with long lasting effects.

LC<sub>50</sub> >100 mg/L (rainbow trout)

**Persistence and Degradability:**

Readily biodegradable. This product will not accumulate in water or soil or cause long-term problems.

**Bioaccumulative Potential:** No further relevant information available.

**Mobility in Soil:** No further relevant information available.

**Other adverse effects:** No further relevant information available.

## 13 . DISPOSAL CONSIDERATIONS

**Disposal Methods and Containers:** Dispose according to applicable local and state government regulations.

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**Special Precautions for Landfill or Incineration:**

Please consult your state Land Waste Management Authority for more information.

**14 . TRANSPORT INFORMATION****UN Number** Not regulated**Proper Shipping Name** Not regulated**Dangerous Goods Class** Not regulated**Packing Group:** Not regulated**15 . REGULATORY INFORMATION****Australian Inventory of Chemical Substances:**

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

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

Poisons Schedule: 5

**16 . OTHER INFORMATION****Date of Preparation or Last Revision:** 09.12.2016**Prepared by:** MSDS.COM.AU Pty Ltd[www.msds.com.au](http://www.msds.com.au)**Abbreviations and acronyms:**

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC<sub>50</sub>: Lethal concentration, 50 percentLD<sub>50</sub>: 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 4: Flammable liquids – Category 4

Aspiration Hazard 1: Aspiration hazard – Category 1

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

**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 - December 2011”

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.