

1 Identification

Product Name: TITAN PINOXADEN 100EC 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
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)



health hazard

Toxic To Reproduction 1B	H360Df	May damage the unborn child. Suspected of damaging fertility.
Aspiration Hazard 1	H304	May be fatal if swallowed and enters airways.



Serious Eye Damage/Irritation 2A	H319	Causes serious eye irritation.
Skin Sensitisation 1	H317	May cause an allergic skin reaction.
Flammable Liquids 4	H227	Combustible liquid.
Aquatic Acute 3	H402	Harmful to aquatic life.
Aquatic Chronic 3	H412	Harmful to aquatic life with long lasting effects.

Signal Word Danger

Hazard Statements

H227 Combustible liquid.
H319 Causes serious eye irritation.
H317 May cause an allergic skin reaction.
H360Df May damage the unborn child. Suspected of damaging fertility.
H304 May be fatal if swallowed and enters airways.
H412 Harmful to aquatic life with long lasting effects.

Precautionary Statements

P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P210 Keep away from flames and hot surfaces. No smoking.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P264 Wash hands thoroughly after handling.
P272 Contaminated work clothing should not be allowed out of the workplace.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

Safety Data Sheet

according to WHS Regulations

Printing date 26.09.2018

Revision: 26.09.2018

Product Name: TITAN PINOXADEN 100EC HERBICIDE

(Contd. of page 1)

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.
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.
P362+P364	Take off contaminated clothing and wash it before reuse.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.
P370+P378	In case of fire: Use to extinguish: CO ₂ , powder or water spray.
P403+P235	Store in a well-ventilated place. Keep cool.
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: 64742-94-5	Solvent naphtha (petroleum), heavy arom. ⚠️ Aspiration Hazard 1, H304	30 - 60%
CAS: 97-99-4	Tetrahydro-2-furylmethanol ⚠️ Toxic To Reproduction 1B, H360Df; ⚠️ Serious Eye Damage/Irritation 2A, H319; Flammable Liquids 4, H227	20 - 40%
CAS: 243973-20-8	Pinoxaden ⚠️ Acute Toxicity (Inhalation) 4, H332; Serious Eye Damage/Irritation 2A, H319; STOT SE 3, H335	10%
CAS: 99607-70-2	Cloquintocet mexyl ⚠️ Aquatic Acute 1, H400; Aquatic Chronic 1, H410; ⚠️ Skin Sensitisation 1, H317	2.5%

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. 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, breathing difficulties, coughing and chest tightness.

Skin Contact: May cause skin irritation. May cause an allergic skin reaction.

Eye Contact: Causes serious eye irritation.

Ingestion: May be fatal if swallowed and enters airways. May cause pulmonary oedema and pneumonitis.

(Contd. on page 3)

Safety Data Sheet

according to WHS Regulations

Printing date 26.09.2018

Revision: 26.09.2018

Product Name: TITAN PINOXADEN 100EC HERBICIDE

(Contd. of page 2)

5 Fire Fighting Measures

Suitable Extinguishing Media:

Water fog, alcohol-resistant foam, dry chemical or carbon dioxide. For large fires use water or alcohol-resistant foam.

Specific Hazards Arising from the Chemical:

Hazardous combustion products include toxic and irritating vapours.

Combustible liquid.

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.

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. Decontaminate spill area with detergent and water.

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.

Take precautionary measures against static discharge. 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.

Contaminated work clothing must not be allowed out of the workplace. 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 direct sunlight. Do not store for prolonged periods in direct sunlight.

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:

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. See Australian Standards AS/NZS 1715 and 1716 for more information.

(Contd. on page 4)

Safety Data Sheet

according to WHS Regulations

Printing date 26.09.2018

Revision: 26.09.2018

Product Name: TITAN PINOXADEN 100EC HERBICIDE

(Contd. of page 3)

Skin Protection:

PVC 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:	Clear yellow to orange.
Odour:	Aromatic
Odour Threshold:	No information available
pH-Value:	3 - 7 (1% w/v)
Melting point/freezing point:	No information available
Initial Boiling Point/Boiling Range:	No information available
Flash Point:	79 °C
Flammability:	Combustible
Auto-ignition Temperature:	No information available
Decomposition Temperature:	No information available
Explosion Limits:	
Lower:	Not applicable
Upper:	Not applicable
Vapour Pressure:	Not applicable
Density at 20 °C:	1.03 g/cm ³
Vapour Density:	No information available
Evaporation Rate:	No information available
Solubility in Water:	Miscible
Partition Coefficient (n-octanol/water):	No information available
Viscosity at 20 °C:	8.34 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 use.

Conditions to Avoid: Direct sunlight.

Incompatible Materials: No further relevant information available.

Hazardous Decomposition Products: Toxic and irritating vapours.

11 Toxicological Information

Toxicity:**LD₅₀/LC₅₀ Values Relevant for Classification:**

Oral	LD ₅₀	3129 mg/kg
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(Contd. on page 5)

Safety Data Sheet

according to WHS Regulations

Printing date 26.09.2018

Revision: 26.09.2018

Product Name: TITAN PINOXADEN 100EC HERBICIDE

(Contd. of page 4)

Dermal	LD ₅₀	>2000 mg/kg
Inhalation	LC ₅₀ /4 h	>5 mg/L
CAS: 64742-94-5 Solvent naphtha (petroleum), heavy arom.		
Oral	LD ₅₀	5,000 mg/kg (rat)
Dermal	LD ₅₀	2,000 mg/kg (rabbit)
CAS: 97-99-4 Tetrahydro-2-furylmethanol		
Oral	LD ₅₀	1,600 mg/kg (rat)
CAS: 99607-70-2 Cloquintocet mexyl		
Oral	LD ₅₀	>2,000 mg/kg (rat)
Dermal	LD ₅₀	>2,000 ml/kg (rat)

Acute Health Effects**Inhalation:** May cause respiratory irritation, breathing difficulties, coughing and chest tightness.**Skin:** May cause skin irritation. May cause an allergic skin reaction.**Eye:** Causes serious eye irritation.**Ingestion:** May be fatal if swallowed and enters airways. May cause pulmonary oedema and pneumonitis.**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:** May cause an allergic skin reaction.**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:**

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

The Australian Acceptable Daily Intake (ADI) for pinoxaden for a human is 0.1 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOAEL of 10 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 cloquintocet-mexyl for a human is 0.04 mg/kg/day, set for the public for daily, lifetime exposure.

This is based on the NOAEL of 4 mg/kg/day.

(Ref: Australian Pesticides and Veterinary Medicines Authority, 'Acceptable Daily Intakes for Agricultural and Veterinary Chemicals', 2018).

12 Ecological Information

Ecotoxicity:**Aquatic toxicity:**

Harmful to aquatic life with long lasting effects.

LC ₅₀ /96 h	5.6 mg/l (rainbow trout)
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(Contd. on page 6)

Safety Data Sheet

according to WHS Regulations

Printing date 26.09.2018

Revision: 26.09.2018

Product Name: TITAN PINOXADEN 100EC HERBICIDE

(Contd. of page 5)

EC ₅₀ /48 h	3.2 mg/l (daphnia)
EC ₅₀ /72 h	4.6 mg/l (pseudokirchnerie lla subcapitata)
CAS: 64742-94-5 Solvent naphtha (petroleum), heavy arom.	
EC ₅₀ /48 h	12 mg/l (daphnia)
EC ₅₀ /72 h	2.5 mg/l (skeletonema costatum)
LC ₅₀ /96 h	45 mg/l (fathead minnow)

Persistence and Degradability: This product is not readily biodegradable.

Bioaccumulative Potential:

Pinoxaden has low potential for bioaccumulation.
Cloquintocet-mexyl does not bioaccumulate.

Mobility in Soil:

Pinoxaden has medium mobility in soil.
Cloquintocet-mexyl is immobile 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 Not regulated

Proper Shipping Name Not regulated

Dangerous Goods Class Not regulated

Packing Group: Not regulated

15 Regulatory Information

Australian Inventory of Chemical Substances:

CAS: 64742-94-5	Solvent naphtha (petroleum), heavy arom.
CAS: 97-99-4	Tetrahydro-2-furylmethanol
CAS: 99734-09-5	Poly(oxy-1,2-ethanediyl), .alpha.-[tris(1-phenylethyl)phenyl]-.omega.-hydroxy-

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

Poisons Schedule: 5

16 Other Information

Date of Preparation or Last Revision: 26.09.2018

Prepared by: MSDS.COM.AU Pty Ltd

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)

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

(Contd. on page 7)

Safety Data Sheet

according to WHS Regulations

Printing date 26.09.2018

Revision: 26.09.2018

Product Name: TITAN PINOXADEN 100EC HERBICIDE

(Contd. of page 6)

NES: National Exposure Standard (Safe Work Australia - Workplace Exposure Standards For Airborne Contaminants)

Flammable Liquids 4: Flammable liquids – Category 4

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

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

Skin Sensitisation 1: Skin sensitisation, Hazard Category 1

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

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

Aspiration Hazard 1: Aspiration hazard – Category 1

Aquatic Acute 1: Hazardous to the aquatic environment, short-term (Acute). Category 1

Aquatic Acute 3: Hazardous to the aquatic environment, short-term (Acute). Category 3

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

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 - February 2016”

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