



Safety Data Sheet

according to WHS Regulations

Printing date 18.03.2019

Revision: 18.03.2019

1 Identification

Product Name: TITAN AMINE 450 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 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)



corrosion

Serious Eye Damage/Irritation 1 H318 Causes serious eye damage.



Acute Toxicity (Oral) 4

H302 Harmful if swallowed.

Skin Sensitisation 1

H317 May cause an allergic skin reaction.

STOT SE 3

H335 May cause respiratory irritation.

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

H302 Harmful if swallowed.

H318 Causes serious eye damage.

H317 May cause an allergic skin reaction.

H335 May cause respiratory irritation.

H412 Harmful to aquatic life with long lasting effects.

Precautionary Statements

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P264 Wash hands thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P271 Use only outdoors or in a well-ventilated area.

P272 Contaminated work clothing should not be allowed out of the workplace.

P273 Avoid release to the environment.

P280 Wear protective gloves / eye protection / face protection.

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

P302+P352 IF ON SKIN: Wash with plenty of water.

(Contd. on page 2)

Safety Data Sheet

according to WHS Regulations

Printing date 18.03.2019

Revision: 18.03.2019

Product Name: TITAN AMINE 450 HERBICIDE

(Contd. of page 1)

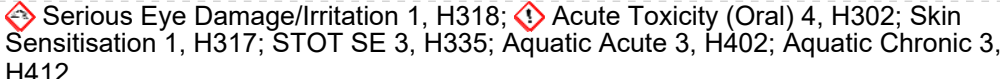
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER/doctor.
P321	Specific treatment (see on this label).
P330	Rinse mouth.
P362+P364	Take off contaminated clothing and wash it before reuse.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
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: 5742-17-6	Acetic acid, (2,4-dichlorophenoxy)-, compound with 2-propanamine (1:1) 	45%
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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:

Immediately rinse mouth with water. Give a glass of water. Never give anything by mouth to an unconscious person. If more than 15 minutes from a hospital induce vomiting using syrup of ipecac. Seek immediate medical attention.

Symptoms Caused by Exposure:

Inhalation: May cause respiratory irritation.

Skin Contact: May cause an allergic skin reaction.

Eye Contact: Causes eye damage.

Ingestion: Harmful if swallowed.

5 Fire Fighting Measures

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

Specific Hazards Arising from the Chemical:

Hazardous combustion products include oxides of carbon, nitrogen and sulphur, nitrogen compounds, hydrogen cyanide, sulphur compounds, hydrogen chloride gas, other chlorine products, smoke and water. This product is not flammable, but may decompose or burn in a fire.

Containers close to fire should be removed if safe to do so. Use water spray to cool fire exposed containers.

(Contd. on page 3)

Safety Data Sheet

according to WHS Regulations

Printing date 18.03.2019

Revision: 18.03.2019

Product Name: TITAN AMINE 450 HERBICIDE

(Contd. of page 2)

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 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. Keep away from strong oxidising agents, strong acids and strong bases. Store away from fertilisers and seeds.

8 Exposure Controls and Personal Protection**Exposure Standards:****CAS: 94-75-7 2,4-D (ISO)**NES TWA: 10 mg/m³

Sen

WES TWA: 10 mg/m³

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Engineering Controls:

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

Respiratory Protection:

Respiratory protection is not required under normal use conditions.

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.

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

(Contd. on page 4)

Safety Data Sheet

according to WHS Regulations

Printing date 18.03.2019

Revision: 18.03.2019

Product Name: TITAN AMINE 450 HERBICIDE

(Contd. of page 3)

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 red or brown
Odour:	Ammoniacal
Odour Threshold:	No information available
pH-Value:	No information available
Melting point/freezing point:	No information available
Initial Boiling Point/Boiling Range:	~100 °C
Flash Point:	Not applicable
Flammability:	Product is not flammable.
Auto-ignition Temperature:	Not applicable
Decomposition Temperature:	No information available
Explosion Limits:	
Lower:	No information available
Upper:	No information available
Vapour Pressure:	16 mmHg
Relative Density:	1.15 ± 0.01
Vapour Density:	No information available
Evaporation Rate:	No information available
Solubility in Water:	Soluble
Partition Coefficient (n-octanol/water):	No information available

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 oxidising agents, strong acids and strong bases.

Hazardous Decomposition Products:

Oxides of carbon, nitrogen and sulphur, nitrogen compounds, hydrogen cyanide, sulphur compounds, hydrogen chloride gas, other chlorine products, smoke and water.

11 Toxicological Information

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

Oral	LD ₅₀	>500 mg/kg (rat)
Dermal	LD ₅₀	>2000 mg/kg (rat)

Acute Health Effects

Inhalation: May cause respiratory irritation.

Skin: May cause an allergic skin reaction.

Eye: Causes eye damage.

Ingestion: Harmful if swallowed.

(Contd. on page 5)

Safety Data Sheet

according to WHS Regulations

Printing date 18.03.2019

Revision: 18.03.2019

Product Name: TITAN AMINE 450 HERBICIDE

(Contd. of page 4)

Skin Corrosion / Irritation: Based on classification principles, the classification criteria are not met.**Serious Eye Damage / Irritation:** Causes eye damage.**Respiratory or Skin Sensitisation:** May cause an allergic skin reaction.**Germ Cell Mutagenicity:** Based on classification principles, the classification criteria are not met.**Carcinogenicity:**

2,4-D (2,4-dichlorophenoxyacetic acid) is classified by IARC as Group 2B - Possibly carcinogenic to humans.

Reproductive Toxicity: Based on classification principles, the classification criteria are not met.**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: Based on classification principles, the classification criteria are not met.**Chronic Health Effects:**

Prolonged inhalation may cause coughing, burning, dizziness and temporary incoordination.

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

The Australian Acceptable Daily Intake (ADI) for 2,4-Dichlorophenoxyacetic acid (2,4-D) for a human is 0.01 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOAEL of 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', 2019).

12 Ecological Information

Ecotoxicity:

2,4-D is nontoxic to bees.

2,4-D does not pose a threat to birds.

LD50 >500 mg/kg (Mallard duck)

Aquatic toxicity:

Harmful to aquatic life with long lasting effects.

CAS: 5742-17-6 Acetic acid, (2,4-dichlorophenoxy)-, compound with 2-propanamine (1:1)LC₅₀/96 h >100 mg/l (rainbow trout)LC₅₀/48 h 184 mg/l (daphnia)**Persistence and Degradability:** No further relevant information available.**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.**Special Precautions for Landfill or Incineration:**

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

(Contd. on page 6)

Safety Data Sheet

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Product Name: TITAN AMINE 450 HERBICIDE

(Contd. of page 5)

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: 5742-17-6 Acetic acid, (2,4-dichlorophenoxy)-, compound with 2-propanamine (1:1)

Standard for the Uniform Scheduling of Drugs and Poisons (SUSMP) - Poison Schedule:
 Poisons Schedule: 6

16 Other Information

Date of Preparation or Last Revision: 18.03.2019**Prepared by:** MSDS.COM.AU Pty Ltdwww.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 percentLD₅₀: 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

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

Skin Sensitisation 1: Skin sensitisation, Hazard Category 1

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

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

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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