

1 Identification

Product Name: TITAN PARAQUAT 360 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 Princess 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).



skull and crossbones

Acute Toxicity (Oral) 3

H301 Toxic if swallowed.

Acute Toxicity (Dermal) 3

H311 Toxic in contact with skin.

Acute Toxicity (Inhalation) 2

H330 Fatal if inhaled.



health hazard

STOT RE 1

H372 Causes damage to organs through prolonged or repeated exposure.



corrosion

Corrosive To Metals 1

H290 May be corrosive to metals.



environment

Aquatic Acute 1

H400 Very toxic to aquatic life.

Aquatic Chronic 1

H410 Very toxic to aquatic life with long lasting effects.



Skin Corrosion/Irritation 2

H315 Causes skin irritation.

Serious Eye Damage/Irritation 2A

H319 Causes serious eye irritation.

STOT SE 3

H335 May cause respiratory irritation.

Signal Word Danger

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Hazard Statements

H290 May be corrosive to metals.
 H301 Toxic if swallowed.
 H311 Toxic in contact with skin.
 H330 Fatal if inhaled.
 H315 Causes skin irritation.
 H319 Causes serious eye irritation.
 H335 May cause respiratory irritation.
 H372 Causes damage to organs through prolonged or repeated exposure.
 H410 Very toxic to aquatic life with long lasting effects.

Precautionary Statements

P234 Keep only in original container.
 P260 Do not breathe 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.
 P273 Avoid release to the environment.
 P280 Wear protective gloves/protective clothing/eye protection/face protection.
 P284 [In case of inadequate ventilation] wear respiratory protection.
 P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
 P330 Rinse mouth.
 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.
 P312 Call a POISON CENTER/doctor if you feel unwell.
 P314 Get medical advice/attention if you feel unwell.
 P320 Specific treatment is urgent (see on this label).
 P361+P364 Take off immediately all 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.
 P390 Absorb spillage to prevent material damage.
 P403+P233 Store in a well-ventilated place. Keep container tightly closed.
 P405 Store locked up.
 P406 Store in corrosive resistant container /container with a corrosion resistant inner liner.
 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: 1910-42-5	Paraquat (present as paraquat dichloride)	36%

4 First Aid Measures

Inhalation:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. Seek immediate medical attention.

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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. Seek immediate medical attention. Immediately rinse mouth with water and give absorbent such as charcoal or bentonite (100 g for adults or 2g/kg body weight for children). Never give anything by mouth to an unconscious person.

Symptoms Caused by Exposure:

Inhalation: Fatal if inhaled. May cause respiratory irritation. May cause nose bleeds.

Skin Contact: Toxic in contact with skin. Causes skin irritation.

Eye Contact: Causes serious eye irritation.

Ingestion: Toxic if swallowed. May cause gastrointestinal irritation, diarrhoea and inflammation of the mouth, throat and oesophagus.

Medical Attention and Special Treatment:

The use of gastric lavage without administration of an absorbent has not shown any clinical benefit.

Do not use supplemental oxygen.

5 Fire Fighting Measures

Suitable Extinguishing Media:

Water fog, alcohol-resistant foam, dry chemical or carbon dioxide. Do not use full water jet as it may scatter and spread the fire.

Specific Hazards Arising from the Chemical:

Hazardous combustion products include toxic and irritating vapours and thick black smoke.

This product is not flammable, but may burn or decompose in a fire.

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.

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 water and detergent and rinse with water.

7 Handling and Storage

Precautions for Safe Handling:

May be corrosive to metals.

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.

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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 direct sunlight. Keep away from aluminium, iron and steel.

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: Respiratory protection is not required under normal use conditions.

Skin Protection:

Elbow length 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:	Green
Odour:	Characteristic
Odour Threshold:	No information available
pH-Value:	4 - 6
Melting point/freezing point:	No information available
Initial Boiling Point/Boiling Range:	No information available
Flash Point:	107 °C
Flammability:	Product is not flammable.
Auto-ignition Temperature:	>650 °C
Decomposition Temperature:	No information available
Explosion Limits:	
Lower:	No information available
Upper:	No information available
Vapour Pressure:	No information available
Density at 20 °C:	1.137 g/cm ³
Vapour Density:	No information available
Evaporation Rate:	No information available
Solubility in Water:	Soluble
Partition Coefficient (n-octanol/water):	No information available
Metal Corrosivity:	Corrosive to tin plate, galvanised sheet metal and steel. Not corrosive to stainless steel.

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Viscosity: No information available

10 Stability and Reactivity

Possibility of Hazardous Reactions:

Hazardous polymerisation will not occur.
May be corrosive to metals.

Chemical Stability: Stable at ambient temperature and under normal conditions of use.**Conditions to Avoid:** Direct sunlight.**Incompatible Materials:** Aluminium, iron and steel.**Hazardous Decomposition Products:** Toxic and irritating vapours and thick black smoke.

11 Toxicological Information

Toxicity:**LD₅₀/LC₅₀ Values Relevant for Classification:****CAS: 1910-42-5 Paraquat (present as paraquat dichloride)**

Oral	LD ₅₀	283-344 mg/kg (rat)
Dermal	LD ₅₀	>2,000 mg/kg (rat)
Inhalation	LC ₅₀ /4 h	0.6-1.4 mg/m ³ (rat)

Acute Health Effects**Inhalation:** Fatal if inhaled. May cause respiratory irritation. May cause nose bleeds.**Skin:** Toxic in contact with skin. Causes skin irritation.**Eye:** Causes serious eye irritation.**Ingestion:**

Toxic if swallowed. May cause gastrointestinal irritation, diarrhoea and inflammation of the mouth, throat and oesophagus.

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:** 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:**

Causes 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 paraquat (as cation) for a human is 0.004 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOAEL of 0.45 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).

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12 Ecological Information

Ecotoxicity:**Aquatic toxicity:****CAS: 1910-42-5 Paraquat (present as paraquat dichloride)**EC₅₀/48 h 6.1 mg/l (daphnia)EC₅₀/72 h 0.00103 mg/l (diatom)

0.6 mg/l (pseudokirchnerie lla subcapitata)

LC₅₀/96 h 55 mg/l (rainbow trout)**Persistence and Degradability:** Paraquat is persistent in soil. Half-life in soil ~ 20 years.**Bioaccumulative Potential:** Bioaccumulation is not expected to occur.**Mobility in Soil:** Paraquat is rapidly bound to soil particles and 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

ADG, IMDG, IATA

UN2922

Proper Shipping Name

ADG

CORROSIVE LIQUID, TOXIC, N.O.S. (Paraquat (present as paraquat dichloride)), ENVIRONMENTALLY HAZARDOUS

IMDG

CORROSIVE LIQUID, TOXIC, N.O.S. (Paraquat (present as paraquat dichloride)), MARINE POLLUTANT

IATA

CORROSIVE LIQUID, TOXIC, N.O.S. (Paraquat (present as paraquat dichloride))

Dangerous Goods Class

ADG Class:

8 Corrosive substances.

Subsidiary Risk:

6.1 Toxic substances.

Packing Group:

ADG, IMDG, IATA

III

Marine pollutant:

Yes

Symbol (fish and tree)

EMS Number:

F-A,S-B

Hazchem Code:

2X

Special Provisions:

223, 274

Limited Quantities:

5L

Packagings & IBCs - Packing Instruction:

P001, IBC03

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Portable Tanks & Bulk Containers - Instructions: T7**Portable Tanks & Bulk Containers - Special Provisions:**

TP1, TP28

15 Regulatory Information

Australian Inventory of Chemical Substances:

CAS: 1910-42-5	Paraquat (present as paraquat dichloride)
CAS: 27277-00-5	[1,2,4]Triazolo[1,5-a]pyrimidin-5(4H)-one, 2-amino-6-methyl-4-propyl-
CAS: 7732-18-5	Water

Standard for the Uniform Scheduling of Drugs and Poisons (SUSMP) - Poison Schedule:
Poisons Schedule: 7

16 Other Information

Date of Preparation or Last Revision: 09.12.2019**Prepared by:** MSDS.COM.AU Pty Ltdwww.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)
 Corrosive To Metals 1: Corrosive to metals – Category 1
 Acute Toxicity (Oral) 3: Acute toxicity – Category 3
 Acute Toxicity (Inhalation) 2: Acute toxicity – Category 2
 Skin Corrosion/Irritation 2: Skin corrosion/irritation – Category 2
 Serious Eye Damage/Irritation 2A: Serious eye damage/eye irritation – Category 2A
 STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
 STOT RE 1: Specific target organ toxicity (repeated exposure) – 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 - February 2016"

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