

1 Identification

Product Name: DIURON 900 WG HERBICIDE by TITAN

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)



health hazard

Carcinogenicity 2 H351 Suspected of causing cancer.

STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.



environment

Aquatic Acute 1 H400 Very toxic to aquatic life.

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



Acute Toxicity (Oral) 4 H302 Harmful if swallowed.

Signal Word Warning

Hazard Statements

H302 Harmful if swallowed.

H351 Suspected of causing cancer.

H373 May cause damage to organs through prolonged or repeated exposure.

H410 Very toxic 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.

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.

P273 Avoid release to the environment.

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

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

P308+P313 IF exposed or concerned: Get medical advice/attention.

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P314	Get medical advice/attention if you feel unwell.
P330	Rinse mouth.
P391	Collect spillage.
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:**

330-54-1	Diuron(ISO)	90%
	 Carcinogenicity 2, H351; STOT RE 2, H373;  Aquatic Acute 1, H400; Aquatic Chronic 1, H410;  Acute Toxicity (Oral) 4, H302	

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 apart and flush the eye continuously with large amounts of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical attention if symptoms persist.

Ingestion:

If swallowed, do not induce vomiting. Immediately rinse mouth with water. Give a glass of water. Never give anything by mouth to an unconscious person. Seek medical attention if symptoms occur.

Symptoms Caused by Exposure:

Inhalation: Dust may cause mild respiratory irritation.

Skin Contact: May cause mild skin irritation.

Eye Contact: May cause mild eye irritation.

Ingestion: Harmful if swallowed. May be irritating to mucous membranes.

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 and nitrogen, other nitrogen compounds, hydrogen cyanide, hydrogen chloride, other chlorine compounds and water.

This product is not flammable and poses no risk of explosion.

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 and protective clothing. Evacuate all non-essential personnel from affected area. Do not breathe dust. Ensure adequate ventilation.

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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. Sweep granules into a pile and shovel into drums for subsequent disposal. Avoid generating dust. Consider vacuuming. Provide adequate ventilation. Decontaminate spill area, preventing runoff from entering drains.

7 Handling and Storage

Precautions for Safe Handling:

Use of safe work practices are recommended to avoid eye or skin contact and inhalation of dust. Avoid generating dusts while handling the product and mixing.

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. Keep away from strong acids, strong bases and strong oxidising agents.

8 Exposure Controls and Personal Protection

Exposure Standards:**330-54-1 Diuron(ISO)**

NES	TWA: 10 mg/m ³
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Engineering Controls:

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations below occupational exposure standards.

Respiratory Protection:

Where an inhalation risk exists, wear a Class P1 (particulate) respirator. At high dust levels, wear a powered air purifying respirator (PAPR) with Class P3 (Particulate) filter or an air-line respirator or a full-face Class P3 (particulate) respirator. See Australian/New Zealand 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 dust. See Australian/New Zealand Standard AS/NZS 1337 for more information.

9 Physical and Chemical Properties

Appearance:

Form:	Granules
Colour:	Pale brown-beige
Odour:	No specific odour
Odour Threshold:	No information available

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pH-Value:	Not applicable
Melting point/freezing point:	158-159 °C (diuron)
Initial Boiling Point/Boiling Range:	No information available
Flash Point:	Not applicable
Flammability:	Product is not flammable.
Auto-ignition Temperature:	No information available
Decomposition Temperature:	No information available
Explosion Limits:	
Lower:	Not applicable
Upper:	Not applicable
Vapour Pressure at 25 °C:	0.0011 mPa (diuron)
Relative Density:	~1.48 (diuron)
Vapour Density:	No information available
Evaporation Rate:	No information available
Solubility in Water at 25 °C:	36.4 mg/L (diuron) Wettable
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: Direct sunlight.

Incompatible Materials: Strong acids, strong bases and strong oxidising agents.

Hazardous Decomposition Products: Oxides of carbon and nitrogen.

11 Toxicological Information

Toxicity:

LD₅₀/LC₅₀ Values Relevant for Classification:

330-54-1 Diuron(ISO)

Oral	LD ₅₀	3400 mg/kg (rat)
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Dermal	LD ₅₀	2000 mg/kg (rat)
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Acute Health Effects

Inhalation: Dust may cause mild respiratory irritation.

Skin: May cause mild skin irritation.

Eye: May cause mild eye irritation.

Ingestion: Harmful if swallowed. May be irritating to mucous membranes.

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:

Suspected of causing cancer.

Diuron (ISO) is classified by Safe Work Australia as Carcinogen Category 3.

Reproductive Toxicity: Based on classification principles, the classification criteria are not met.

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Specific Target Organ Toxicity (STOT) - Single Exposure:

Based on classification principles, the classification criteria are not met.

Specific Target Organ Toxicity (STOT) - Repeated Exposure:

May cause damage to organs through prolonged or repeated exposure.

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

Repeated and prolonged exposure may cause growth retardation, increased mortality, changes to blood chemistry and pigment and may cause anaemia.

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

The Australian Acceptable Daily Intake (ADI) for diuron for a human is 0.007 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOAEL of 0.7 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', 2017).

Pyrethroids like cypermethrin may cause adverse effects on the central nervous system

12 Ecological Information

Ecotoxicity:

Non-toxic to bees.

Slightly toxic to birds:

Oral LC50 >1730 ppm (bobwhite quail)

Oral LC50 >5000 ppm (Japanese quail)

Oral LC50 >5000 ppm (ring-necked pheasant)

Oral LC50 ~5000 ppm (mallard duck)

Aquatic toxicity:**330-54-1 Diuron(ISO)**LC₅₀/48 h 1 - 2.5 mg/L (invertebrata)

4.3 - 42 mg/L (fish)

LC₅₀/96 h 3.5 mg/L (rainbow trout)

Very toxic to aquatic life with long lasting effects.

Persistence and Degradability:

Diuron is highly persistent in soils.

Half-life in soil: 1 month- 1 year.

Bioaccumulative Potential: No information available**Mobility in Soil:** The mobility of diuron is dependent on organic matter and soil type.

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

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Proper Shipping Name Not regulated**Dangerous Goods Class** Not regulated**Packing Group:** Not regulated

15 Regulatory Information

Australian Inventory of Chemical Substances:

330-54-1 | Diuron(ISO)

Standard for the Uniform Scheduling of Drugs and Poisons (SUSMP) - Poison Schedule:
Not Scheduled.

16 Other Information

Date of Preparation or Last Revision: 12.12.2017**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

Carcinogenicity 2: Carcinogenicity – Category 2

STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2

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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