

SAFETY DATA SHEET



DuPont™ Titus® herbicide

Version 4.0

Revision Date 07.12.2015

Document no. 130000000224

This SDS adheres to the standards and regulatory requirements of Australia and may not meet the regulatory requirements in other countries.

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product name : DuPont™ Titus® herbicide

Other names : B10022922

Recommended use of the chemical and restriction on use

Recommended use : Herbicide

Manufacturer, importer, supplier

Company : Du Pont (Australia) Pty Ltd
Street address : 7 Eden Park Drive
Macquarie Park NSW 2113
Australia

Telephone : (02) 9923 6111
Telefax : (02) 9923 6011

Emergency telephone number : (02) 9923 6275 (Transport Emergency)
(24 hr Emergency Medical Information: 1800 674 415)

2. HAZARDS IDENTIFICATION

Product hazard classification

Acute aquatic toxicity : Category 1
Chronic aquatic toxicity : Category 1

Endpoints which are not classified, cannot be classified or are not applicable are not shown.

Label content

Pictogram :



Signal word : Warning

Hazardous warnings : Very toxic to aquatic life with long lasting effects.

Precautionary statements : Collect spillage.
Dispose of contents/ container to an approved waste disposal plant.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature : Mixture

Components

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Chemical Name	CAS-No.	Concentration
Rimsulfuron	122931-48-0	25 %
Other Ingredients		75 %

4. FIRST AID MEASURES

If poisoning occurs, contact a doctor or Poisons Information Centre. In Australia 13 11 26.

- Inhalation** : Remove person to fresh air. If signs/symptoms continue, get medical attention. Artificial respiration and/or oxygen may be necessary. Call a poison control center or doctor for treatment advice.
- Skin contact** : Take off all contaminated clothing immediately. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison information centre or doctor for treatment advice.
- Eye contact** : Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison information centre or doctor for treatment advice.
- Ingestion** : Have person sip a glass of water if able to swallow. DO NOT induce vomiting unless directed to do so by a physician or poison control center. Never give anything by mouth to an unconscious person. Call a poison control center or doctor for treatment advice.
- Most important symptoms/effects, acute and delayed** : No information available.
- Protection of first-aiders** : No information available.
- Notes to physician** : Treat symptomatically.

5. FIREFIGHTING MEASURES

- Suitable extinguishing media** : Water spray, Dry chemical, Foam, Carbon dioxide (CO₂)
- Unsuitable extinguishing media** : High volume water jet, (contamination risk)
- Specific hazards** : Not a fire or explosion hazard.
- Special protective equipment for firefighters** : In the event of fire, wear self-contained breathing apparatus. Wear full protective equipment.
- Specific extinguishing methods** : No information available.
- Further information** : Prevent fire extinguishing water from contaminating surface water or the ground water system. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. Control Runoff.

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Hazchem Code : 2Z

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : No information available.

Environmental precautions : No information available.

Methods and materials for containment and cleaning up : Sweep up and shovel into suitable containers for disposal.

Additional advice : Dispose of in accordance with local regulations.

7. HANDLING AND STORAGE

Handling

Technical measures/Precautions : Wash hands thoroughly after handling.

Precautions for safe handling : No information available.

Storage

Suitable storage conditions : Store product in original container only, away from other pesticides, fertilizer, food or feed. Keep containers tightly closed in a cool, well-ventilated place. Keep away from direct sunlight.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

No information available.

Engineering measures : Information presented in Section 8 conforms to the requirements of the Occupational Safety and Health Administration (OSHA) Hazard Communication Standard of 2012. See Section 15 for applicable information conforming to the requirements of the Federal Insecticide Fungicide and Rodenticide Act (FIFRA), as required by the US Environmental Protection Agency (EPA), or by state Regulatory Agencies.
Use only with adequate ventilation.

Biological occupational exposure limits : No information available.

Personal protective equipment

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Respiratory protection	:	None specified.
Hand protection	:	None specified.
Eye protection	:	Opening the container and preparing spray: Face-shield, Goggles
Skin protection	:	None specified.
Hygiene measures	:	Avoid contact with eyes. Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet.

9. PHYSICAL AND CHEMICAL PROPERTIES**Appearance (Physical state, form, colour, etc.)**

Physical state	:	solid
Form	:	solid
Colour	:	off-white, tan

Odour : none**Odour Threshold** : No information available.**pH** : 6.2 - 7.2
(1% solution in water)**Melting point/freezing point**

No information available.

Initial boiling point and boiling range

No information available.

Flash point : No information available.**Evaporation rate** : No information available.**Flammability (solid, gas)** : No information available.**Upper/lower flammability or explosive limits**

Upper explosion limit	:	No information available.
Lower explosion limit	:	No information available.

Vapour pressure : No information available.**Vapour density** : No information available.**Density**

Bulk density	:	617 kg/m3 loose
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Solubility(ies)

Water solubility	:	dispersible
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Partition coefficient: n-octanol/water : No information available.

Auto-ignition temperature
No information available.

Decomposition temperature : No information available.

Viscosity
Viscosity, kinematic : No information available.

Molecular weight : No information available.

10. STABILITY AND REACTIVITY

Reactivity : No information available.

Chemical stability : Stable under normal conditions.

Possibility of hazardous reactions : Polymerization will not occur.

Conditions to avoid : No information available.

Materials to avoid : None reasonably foreseeable.

Hazardous decomposition products : No materials to be especially mentioned.

11. TOXICOLOGICAL INFORMATION
Acute toxicity

Oral

DuPont™ Titus® herbicide : LD50/Rat: > 5,000 mg/kg

Inhalation

DuPont™ Titus® herbicide : LC50/4 h/Rat(dust/mist): > 7.5 mg/l

Dermal

DuPont™ Titus® herbicide : LD50/Rabbit: > 2,000 mg/kg

Skin corrosion/irritation

DuPont™ Titus® herbicide : Species: Rabbit
Result: No skin irritation

Serious eye damage/eye irritation

DuPont™ Titus® herbicide : Species: Rabbit
Result: No eye irritation

Respiratory or skin sensitisation

DuPont™ Titus® herbicide : Species: Guinea pig
Result: Animal test did not cause sensitization by skin contact.

Germ cell mutagenicity

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Rimsulfuron : Tests on bacterial or mammalian cell cultures did not show mutagenic effects. Did not show mutagenic effects in animal experiments.

Carcinogenicity

Rimsulfuron : Did not show carcinogenic effects in animal experiments.

Reproductive toxicity

Rimsulfuron : Reproductive toxicity: Animal testing did not show any effects on fertility. Teratogenicity: Evidence suggests the substance is not a developmental toxin in animals.

Specific Target Organ Toxicity

Specific target organ toxicity - repeated exposure

DuPont™ Titus® herbicide : Refer to acute toxicity and/or repeated dose toxicity data for more information on target organs if applicable.

Aspiration hazard

No information available.

Other

Rimsulfuron : Repeated dose toxicity:
The following effects occurred at levels of exposure that significantly exceed those expected under labeled usage conditions.
Oral/multiple species
altered blood chemistry, Liver effects, Organ weight changes

12. ECOLOGICAL INFORMATION

Ecotoxicity effects

Acute and prolonged toxicity to fish

DuPont™ Titus® herbicide : LC50/96 h/Oncorhynchus mykiss (rainbow trout): > 1,000 mg/l
LC50/96 h/Lepomis macrochirus (Bluegill sunfish): > 1,000 mg/l

Toxicity to aquatic plants

DuPont™ Titus® herbicide : EC50/72 h/Pseudokirchneriella subcapitata (green algae): 0.805 mg/l
EC50/14 d/Lemna gibba (duckweed): 0.031 mg/l

Acute toxicity to aquatic invertebrates

DuPont™ Titus® herbicide : EC50/48 h/Daphnia magna (Water flea): > 1,000 mg/l

Chronic toxicity to fish

Rimsulfuron : NOEC/90 d/Oncorhynchus mykiss (rainbow trout): 110 mg/l

Chronic toxicity to aquatic Invertebrates

DuPont™ Titus® herbicide : NOEC/21 d/Daphnia magna (Water flea): 4.0 mg/l
(Data on the product itself)

Persistence and degradability

Rimsulfuron : According to the results of tests of biodegradability this product is not readily biodegradable.

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Bioaccumulation

Rimsulfuron : Does not bioaccumulate.

Mobility in soil

No information available.

Other adverse effects

No information available.

13. DISPOSAL CONSIDERATIONS

Waste disposal methods : Dispose of in accordance with local regulations.

Contaminated packaging : Do not re-use empty containers.
Triple or preferably pressure rinse containers before disposal. Add rinsings to spray tank. DO NOT dispose of undiluted chemicals on-site. If recycling, replace cap and return clean containers to recycler or designated collection point. If not recycling, break, crush, or puncture, and bury empty containers in a local authority landfill. If no landfill is available, bury the containers below 500 mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty containers and product should not be burnt.

14. TRANSPORT INFORMATION

ADG

UN number : 3077
Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
(Rimsulfuron)
Class : 9
Packing group : III
Hazchem Code : 2Z

IMDG

UN number : 3077
Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
(Rimsulfuron)
Class : 9
Packing group : III
Marine pollutant : yes

IATA

UN number : 3077
Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
(Rimsulfuron)
Class : 9
Packing group : III

Matters needing attention for transportation : Not dangerous goods under ADG code when being transported in IBCs or other receptacles < 500 kg (Special Provision AU01). Marine Pollutants in single or combination packaging containing a net quantity per single or inner packaging of 5 L or less for liquids or having a net mass per single or inner packaging of 5 KG or less for solids may be transported as non-dangerous goods as provided in section 2.10.2.7 of IMDG code and IATA special provision A197.

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15. REGULATORY INFORMATION

SUSMP: Schedule 5

APVMA Approval number: 49213

16. OTHER INFORMATION

References

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Significant change from previous version is denoted with a double bar.

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