

Safety Data Sheet (SDS) Diuron 800 SC

According to UN GHS 8th Ed
Revision Date: 03/07/2022

First print date: 01/06/2018
Version: 1.1

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

Product identifier:

Identification as on the label/Trade name: **Diuron 800 SC**

Common name: **Diuron 800 g/l SC**

Relevant identification uses of the substance and uses advised against:

Identified uses: Herbicide

Uses advised against: Use only as directed.

Details of the supplier of the Safety Data Sheet:

Enviro Bio-Chem (Pty) Ltd, 44 Kerk Street,
Lichtenburg, North West, South Africa, 2740

Details of the Registration Holder:

Erintrade t/a RT Chemicals 44 Kerk Street,
Lichtenburg, North West, South Africa, 2740

Contact Details:

Telephone: +27 87 231 7261

Fax: 086 541 7948

Website: www.envirobiochem.co.za

Emergency telephone numbers:

24 Hour Emergency Number: Bateleur: +27 83 123 3911

Griffon Poison Information Centre: +27 82 446 8946

Poisons Information Helpline: 0861 555 777

Tygerberg Hospital: +27 21 931 6129

SECTION 2. HAZARD IDENTIFICATION

Classification of the substances or mixture

The mixture is classified according to Regulation (EC) No 1272/2008 EU-GHS/CLP

Hazard classes/Hazard categories	Hazard statement
Acute toxicity oral (Category 4)	H302
Carcinogenicity (Category 2)	H351
STOT RE (Category 2)	H373
Aquatic Toxicity Acute (Category 1)	H400
Aquatic Toxicity Chronic (Category 1)	H410

Label elements



Hazard pictograms:

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

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H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects

Precautionary Statements:

P102	Keep out of reach of children
P201	Obtain special instructions before use.
P270	Do not eat, drink, or smoke when using this product.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P272	Contaminated work clothing should not be allowed out of the workplace.
P260	Do not breathe dust/fumes/gas/mist/vapours/spray.
P233	Keep container tightly closed
P273	Avoid release to the environment.
P301+P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P301+P330+P331	IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P403+P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up
P391	Collect spillage
P501	Dispose of contents/container in accordance with local/regional/ national regulations

Other hazards: None known.
SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS
Substance/Mixture: Mixture
Ingredients:

Substance name (IUPAC)	CAS Number.	Concentration % by weight	Classification EC1272/2008
Diuron	330-54-1	66.3%	Acute Toxicity Oral (Category 4) H302 Carcinogenicity (Category 2) H351 STOT RE (Category 2) H373 Aquatic Acute (Category 2) H400 Aquatic Chronic (Category 1) H410
Nonyl phenol polyoxyethylene ether	14409-72-4	<5%	Acute Toxicity Oral (Category 4) H302 Skin irritation (Category 2) H315 Eye irritation (Category 2) H319 Aquatic Chronic (Category 2) H411
Sodium dodecyl benzene sulfonate	25155-30-0	<3%	Acute Toxicity Oral (Category 4) H302 Skin irritation (Category 2) H315 Eye damage (Category 1) H318
Ethylene glycol	107-21-1	<3%	Acute Toxicity Oral (Category 4) H302

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

SECTION 4. FIRST AID MEASURES
Description of first aid measures:

General: If symptoms persist, call a physician. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes,

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on skin, or on clothing.

In case of inhalation: If inhaled, remove to fresh air. Treat symptomatically and supportively. Seek medical attention.

In case of skin contact: Remove contaminated clothing and wash skin with soap and plenty of water. Consult a physician if necessary. Wash clothing before reuse.

In case of eye contact: Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. If symptoms persist, call a physician.

In case of ingestion: Rinse mouth. Drink plenty of water. If symptoms persist, call a physician Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed: None known

Indication of any immediate medical attention and special treatment needed: Treat symptomatically and supportively.

SECTION 5. FIRE FIGHTING MEASURES

Extinguisher media:

Suitable extinguisher media: Foam. Dry powder. Carbon dioxide. Water spray.

Small Fire: Extinguish small fires with carbon dioxide, dry powder, or alcohol-resistant foam.

Large Fire: Foam or water spray can be used for larger fires or cooling of unaffected stock but avoid the accumulation of polluted run-off from the site.

Unsuitable extinguishing media: Do not use high volume water jet, due to contamination risk.

Special hazards arising from the mixture:

Hazardous decomposition products in case of fire: Refer to Section 10: Stability and Reactivity.

Advice for fire-fighters:

Remove spectators from surrounding area. Evacuate downwind. Remove container from fire area if possible. Avoid inhaling hazardous vapours and fumes from burning materials. Wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear. Use an approved/certified respirator or equivalent.

Contain fire control agents for later disposal according to Section 13.

SECTION 6. ACCIDENTAL RELEASE

Personal precautions, protective equipment, and emergency procedures:

Personal precautions: Avoid inhalation of vapour and fumes. Avoid contact with skin and eyes.

For emergency responders: Fire fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear. Use an approved/certified respirator or equivalent Avoid contact with eyes and skin. Do not breathe in fumes. Refer to section 8 for recommended personal protective equipment. Evacuate unnecessary personnel.

Environmental precautions:

Stop leak if without risk. Do not touch spilled material. Prevent entry into drains, watercourses, or confined areas: dike if needed. If the product contaminates public water, inform appropriate authorities immediately in accordance with local regulations. Dispose in a safe manner in accordance with local/national regulations.

Methods for containment and cleaning up:

For small spills Contain spilled material if possible. Collect in suitable and properly labelled containers. Absorb with materials such as: sand, earth, vermiculite, or diatomaceous earth.

For large spills Prevent entry into drains, watercourses, or confined areas. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in well labelled container for disposal according to local regulations.

Reference to other sections:

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See section 7 for information on safe handling.
See section 8 for information on personal protection equipment.
See section 13 for information on disposal.

SECTION 7. HANDLING AND STORAGE

Precautions for safe handling:

Read the label before use. Use protective clothing. Avoid direct contact with eyes, skin, and clothing. Avoid ingestion and inhalation. Do not breathe mist/vapours/spray. Do not eat, drink or smoke when using this product.

Protective measures: Observe directions on label and instructions for use.

Advice on general occupational hygiene: Do not eat drink or smoke when handling this product. Wash contaminated clothing before reuse.

Conditions for safe storage, including incompatibilities:

Store locked up in the closed original packaging out of reach of children, unauthorised persons, and animals. Store in a dry, cool, well-ventilated area. Keep away from food, drink, and animal feed.

Specific end uses:

Use as directed. Use original container.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters:

NOISH REL TO DUIRON-air: 10H TWA 10 mg/m3.

Exposure control:

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. A Risk Assessment should be conducted before handling is to commence to determine specific exposure control.

Appropriate engineering controls: Provide adequate ventilation, exhaust ventilation or other engineering controls. Ensure that control systems are properly designed and maintained. Comply with occupational safety, environmental, fire, and other applicable regulations. Ensure that eyewash stations and safety showers are proximal to the work-station location.

Personal Protective Equipment

Eye/face protection: Wear chemical goggles or face shield when mixing or applying product.

Hand protection: Use chemical resistant gloves. Examples of preferred glove barrier materials include Nitrile/butadiene rubber, Polyethylene, Ethyl vinyl alcohol laminate, Polyvinyl alcohol, Polyvinyl chloride.

Body protection: Employee must wear appropriate protective (impervious) clothing and equipment to prevent repeated or prolonged skin contact with the substance. Gloves: Employee must wear appropriate synthetic protective gloves to prevent contact with substance.

Respiratory protection: Where product is being sprayed and a mist could be produced a respirator should be worn. It should be fitted with a NOSH approved cartridge, suitable for dusts and mists. Limitations of respirator used specified by the approving agency and the manufacturer must be observed.

Environmental exposure controls: Prevent product from entry into sewers and water courses.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Viscous Liquid
Colour	White
Odour	No data available

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Odour threshold	No data available
pH	6,0-8,0 (5% solution)
Melting point / freezing point (°C)	No data available
Boiling point (°C)	No data available
Flash point (°C)	No data available
Evaporation rate	No data available
Flammability	Not flammable
Upper /lower flammability limits	No data available
Vapour pressure	No data available
Vapour density	No data available
Relative density (20°C)	1.28 g/ml
Water solubility (g/l) at 20°C	The product disperses in water
Partition coefficient : n-octanol/water	No data available
Auto-ignition temperature (°C)	No data available
Decomposition temperature (°C)	No data available
Viscosity,	216 cps at (20°C) and 150 cps (40°C)
Explosive properties	No data available
Oxidising properties	No data available
Explosive limits	Not explosive

SECTION 10. STABILITY AND REACTIVITY

Reactivity:

The product is stable under normal conditions.

Chemical stability:

Stable for up to 2 years under normal storage conditions

Possibility of hazardous reactions:

No information available.

Conditions to avoid:

Avoid overheating, exposure to direct sunlight, temperatures above 40°C

Incompatible materials:

Compatible with most other herbicides. However, a compatibility test is required before using with other products. Hydrolysis may occur in the presence of strong acids and alkalis.

Hazardous decomposition products:

Thermal decomposition products may include toxic oxides of nitrogen and carbon and toxic and corrosive fumes of chlorides.

SECTION 11. TOXICOLOGICAL INFORMATION

Toxicokinetics, metabolism and distribution: No data available

Information on toxicological effects:

Assessment of acute toxicity:

The product has not been tested. The data reported is for the main ingredients in the mixture.

Diuron CAS No. 330-54-1	
Acute toxicity:	
Acute Oral LD50 (rat - male)	1017 mg/kg
Acute Dermal LD50 (rat): (rat male and female)	> 5000 mg/kg
Acute Inhalation LC50 - 4 h (rat male and female)	>5.05 mg/l air

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Skin irritation/ corrosion (rabbits)	Not a skin irritant
Eye damage / irritation (rabbits)	Not an eye irritant
Respiratory or skin sensitization (guinea pig)	Does not cause sensitisation
Germ cell mutagenicity	Negative in Ames test
Carcinogenicity	Suspected of causing cancer
Reproductive toxicity	Not toxic for the reproductive system
Specific Target Organ Toxicity STOT single exposure	No data available
Specific Target Organ Toxicity STOT repeated exposure	May cause damage to organs through prolonged or repeated exposure
Aspiration hazard	Not classified

SECTION 12. ECOLOGICAL INFORMATION

Diuron CAS No. 330-54-1	
Toxicity	
Birds Acute oral LD ₅₀	1104 mg/kg Bobwhite quail
Aquatic Toxicity Fish static test LC ₅₀ (96 hr) Aquatic Toxicity Daphnia static test EC ₅₀ (48 hr) Algae Toxicity static test EC ₅₀ (72h) Bacteria Toxicity respiration inhibition EC50 (30min) sludge treatment Bee Toxicity LD ₅₀	14.7 mg/l (rainbow trout) 1.4 mg/l Daphnia magna (Water flea) 0.022 mg/l Desmodesmus subspicatus (green algae) 3080 mg/l 145 µg/bee (oral)
Persistence and degradability	Diuron is moderately to highly persistent in soils. Residue half-lives are from 1 month to 1 year. Some pineapple fields contained residues 3 years after the last application. Mobility in the soil is related to organic matter and to the type of the residue. The metabolites are less mobile than the parent compound.
Bioaccumulation potential	Low bioaccumulation potential.
Mobility in soil	Stable in water. Mobile in soil. Will leach

SECTION 13. DISPOSAL CONSIDERATIONS

Waste treatment methods:

Product:

Keep out of drains, sewers, ditches, and waterways. Refer to container label for disposal information. Treat as hazardous waste and dispose of in accordance with local/ regional/ national/ international regulations.

Container:

Refer to container label for disposal information. Triple or pressure rinse empty containers. Pour rinse water into spray tank. Dispose of as hazardous waste. Do not contaminate water when disposing of rinse water. Dispose of using an approved waste disposal service provider. Follow all local/ regional/ national/ international regulations.

SECTION 14. TRANSPORT INFORMATION

UN Number	3082
UN proper shipping name	Environmentally hazardous substance, liquid, N.O.S. (Diuron 800 g/l)
Transport hazard class	9

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Packaging group	III
Marine pollutant	Yes

SECTION 15. REGULATORY INFORMATION

Safety, health, and environmental regulations/legislation for the mixture:

Relevant information regarding authorization: Occupational Health and Safety Act 1993. Regulation for Hazardous Chemical Agents, 2021. UN Recommendations on the Transport of Dangerous Goods Model Regulations Rev. 21 (2019), Globally Harmonized System of Classification and Labelling of Chemicals (GHS) Rev 8, 2019.

Relevant information regarding restrictions:

EU regulations: Regulation EC 1272/2008 [EU-GHS/CLP]

Other National regulations:

National Road Traffic Act, 1996 (ACT NO. 93 of 1996).

SANS 10228:2012- The identification and classification of dangerous goods for transport by road and rail modes.

National Environmental Management Waste Act 59 of 2008.

Act 36 of 1947 of the Republic of South Africa. This product is registered under it is a violation of South African law to use this product in any manner inconsistent with its approved labelling. Read and follow all label directions

Chemical Safety Assessment carried out? No

SECTION 16. OTHER INFORMATION

Indication of changes:

Classification according to SANS 10234:2019, Regulation EC 1272/2008 [EU-GHS/CLP]
GHS aligned – all sections

Relevant H statements (number and full text):

H315-Causes skin irritation

H318-Causes serious eye damage

H319-Causes serious eye irritation

H411-Toxic to aquatic life with long lasting effects

STOT RE 2- Specific Target Organ Toxicity repeated exposure (Category 2) : May cause damage to organs through prolonged or repeated exposure.

Aquatic acute toxicity (Category 1): Very toxic to aquatic life

Aquatic chronic toxicity (Category 1): Very toxic to aquatic life with long lasting effects

Training instructions:

Use as indicated on the label, special training may be required for application.

Further information:

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.

The information on this sheet is not a specification; it does not guarantee specific properties. The information is intended to provide general guidance as to health and safety based upon our knowledge of the handling, storage, and use of the product. It is not applicable to unusual or non-standard uses of the product, nor where instructions or recommendations are not followed.