Sulcoron (Sulcotrione 150 g/l + diuron 300 g/l)

Safety Data Sheet

according to SANS 10234:2019 and SANS 11014:2010
Issue date: 9/1/2022 Version: 1.0

SECTION 1: Identification

1.1. Product identifier

Product form	:	Mixture
Trade name	:	Sulcoron (Sulcotrione 150 g/l + diuron 300 g/l)
Type of product	:	Herbicide
CAS-No.	:	[99105-77-8] [330-54-1]
Product group	:	End product

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture	:	A suspension concentrate post-emergence herbicide acting through the foliage and roots for the control of broadleaf weeds, yellow nutsedge and grasses in sugarcane as indicated.

1.3. Supplier's details

Supplier
Farm-Ag International (Pty) Ltd
Old Mill Industrial Park
61, Marshall Drive
P.O. Box 1523
4300 Mount Edgecombe – Durban KwaZulu Natal
South Africa
T 031 003 3486

1.4. Emergency telephone number

Emergency number	:	24 Hr Emergency Number: In case of Poisoning: Poison Information Helpline : 0861 555 777 In case of Spillage: HAZMAT:0800 147 112

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to the United Nations GHS

Acute toxicity (dermal), Category 5	H313
Acute toxicity (inhalation:vapour) Category 3	H331
Skin sensitisation, Category 1	H317
Carcinogenicity, Category 2	H351
Specific target organ toxicity – Repeated exposure, Category 2	H373
Hazardous to the aquatic environment – Acute Hazard, Category 1	H400
Hazardous to the aquatic environment – Chronic Hazard, Category 1	H410

Full text of H-statements: see section 16

2.2. Label elements

Labelling according to the United Nations GHS

Hazard pictograms (GHS ZA) :

Signal word (GHS-ZA)	:	Danger
Hazardous ingredients	:	Sulcotrione 97% TC, Diuron 97% TC, Monoethylene glycol
Hazard statements (GHS ZA)	:	H313 - May be harmful in contact with skin H317 - May cause an allergic skin reaction.

		H331 - Toxic if inhaled. 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 (GHS ZA)	:	P201 - Obtain special instructions before use. P202 - Do not handle until all safety precautions have been read and understood. P260 - Do not breathe vapours,spray. 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/protective clothing/eye protection/face protection. P302+P352 - IF ON SKIN: Wash with plenty of soap and water. P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. P308+P313 - IF exposed or concerned: Get medical advice/attention. P312 - Call a doctor if you feel unwell. P314 - Get medical advice/attention if you feel unwell. P321 - Specific treatment (see supplemental first aid instruction on this label). P333+P313 - If skin irritation or rash occurs: Get medical advice/attention. P362+P364 - Take off contaminated clothing and wash it before reuse. P391 - Collect spillage. P403+P233 - Store in a well-ventilated place. Keep container tightly closed. P405 - Store locked up. P501 - Dispose of contents and container to an approved waste disposal plant.

2.3. Other hazards

Adverse physicochemical, human health and environmental effects	:	Suspected of causing cancer,May cause damage to organs through prolonged or repeated exposure,Toxic if inhaled,Harmful in contact with skin,May cause an allergic skin reaction,Very toxic to aquatic life with long lasting effects.

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to the United Nations GHS
Sulcotrione 97% TC	CAS-No.: 99105-77-8	≥ 25 – < 30	Acute Tox. Not classified (Oral) Acute Tox. 5 (Dermal), H313 Acute Tox. 4 (Inhalation:dust,mist), H332 Skin Sens. 1A, H317 STOT RE 2, H373 Aquatic Acute 2, H401 Aquatic Chronic 1, H410
Diuron 97% TC	CAS-No.: 330-54-1	≥ 10 – < 15	Acute Tox. 5 (Oral), H303 Acute Tox. 5 (Dermal), H313 Acute Tox. Not classified (Inhalation:dust,mist) Carc. 2, H351 STOT RE 2, H373 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410
Monoethylene glycol	CAS-No.: 107-21-1	≥ 1 – < 5	Flam. Liq. Not classified Acute Tox. Not classified (Oral) Acute Tox. 5 (Dermal), H313 Acute Tox. 3 (Inhalation:vapour), H331 Aquatic Acute Not classified

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : IF exposed or concerned: Get medical advice/attention. Call a poison center or a doctor if you feel unwell.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Call a doctor.

First-aid measures after skin contact : Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.

First-aid measures after eye contact : Immediately flush the contaminated eyes with gently flowing water for 20 minutes, holding the eyelid(s) open until no evidence of chemical remains. If irritation persists, obtain medical attention. Rinse eyes with water as a precaution.

First-aid measures after ingestion : Do not induce vomiting. Get medical attention immediately. Have victim rinse mouth thoroughly with water. Never give anything by mouth to an unconscious person. Establish and maintain airway. Treat respiratory difficulty with artificial respiration and oxygen. Administration of gastric lavage or oxygen should be performed by qualified medical personnel. This product contains an aromatic solvent.
If product is aspirated into the lungs during ingestion or vomiting, pulmonary injury may be caused.
. Call a poison center or a doctor if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects after skin contact : May cause an allergic skin reaction.

Symptoms/effects after ingestion : Harmful, possible risk of irreversible effects if swallowed.

4.3. Indication of any immediate medical attention and special treatment needed

There is no specific antidote. Gastric levels and catharsis may be required on consumption of large quantities of the product. Methemoglobinemia may be noted in large ingestions.
METHEMOGLOBINEMIA: Administer 1 to 2 mg / kg of 1% methylene blue slowly IV if the patient is cyanotic and symptomatic or the methemoglobin level is greater than 30% in an asymptomatic patient. Additional doses may be required. Treat symptomatically and supportively as and when required.

SECTION 5: Firefighting measures

5.1. Extinguishing media

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

Unsuitable extinguishing media : Water spray as a fog can be used for cooling of unaffected stock, but avoid water coming in contact with the product. Do not use direct jet of water. Contain water used for fire-fighting for later disposal. Avoid the accumulation of polluted run-off from the site.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Advice for firefighters

Firefighting instructions : Fire fighting: Remove container from fire area if possible. Contain fire control water for later disposal. Use a recommended extinguishing agent for the type of surrounding fire. Avoid inhaling hazardous vapours. Keep material away from water sources and sewers. Do not touch material and avoid breathing fumes. Keep upwind.
Personal Protective Equipment: Fire may produce irritating or poisonous vapors (corrosive fumes of chlorides and toxic oxides of nitrogen and carbon) of combustion. Fire fighters and others that may be exposed should wear full chemical protective clothing and self-contained breathing apparatus.

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

Personal protection (Emergency response) : Wear respiratory protection,Wear protective gloves,Wear protective clothing,Wear eye protection,Wear a face shield

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

No additional information available

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Do not breathe spray, vapours. Avoid contact with skin, eyes and clothing.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment. Do not allow entering drains or watercourses. Spillage or uncontrolled discharges into water courses (or public waters) to be reported immediately to the Police and to the Department of Water/Environmental Affairs.

6.3. Methods and material for containment and cleaning up

For containment : Collect spillage.

Methods for cleaning up : Take up liquid spill into absorbent material. Occupational spill:
Do not touch spilled material; stop leak if you can do it without risk. Keep out unprotected persons and animals.
For spills: Soak up with absorptive material such as damp earth or sand or other suitable non-combustible absorbent material. Place the material into a clean, dry container and cover for subsequent disposal. In situations where product comes in contact with water, contain contaminated water for later disposal. Prevent material from spreading by damming in with absorptive material. Do not flush spilled material into drains. Keep spectators away and upwind.
To decontaminate spill area, tools and equipment, wash with a suitable solution (i.e. organic solvent, detergent bleach or caustic). Add the solution to the drums already collected. Label drums with its content and dispose it in accordance with local regulations.
Open burning or dumping of this material is prohibited.
Do not get water inside containers.
. Notify authorities if product enters sewers or public waters.

Other information : Dispose of materials or solid residues at an authorized site.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear personal protective equipment. Do not breathe spray, vapours. Use only outdoors or in a well-ventilated area. Do not get in eyes, on skin, or on clothing.

Hygiene measures : Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store locked up. Store in a well-ventilated place. Keep container tightly closed. Keep cool.

Storage area : Store away from heat. Store out of reach of unauthorised persons, children and animals.

Information on mixed storage : KEEP SUBSTANCE AWAY FROM: Food supplies. Water supplies.

Maximum storage period : 2 years

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Diuron 97% TC (330-54-1)	
South Africa - Occupational Exposure Limits (Recommended Limits)	
Local name	Diuron
OEL TWA	10 mg/m³
Regulatory reference	Government Notice No. R. 280, 2021
South Africa - Occupational Exposure Limits (Airborne Pollutants)	
Local name	Diuron
OEL TWA	10 mg/m³
Regulatory reference	Government Notice No. R 904

Monoethylene glycol (107-21-1)	
South Africa - Occupational Exposure Limits (Recommended Limits)	
Local name	Ethylene glycol
OEL TWA	50 mg/m³ (V: vapour fraction) 100 mg/m³ (V: vapour fraction)
OEL STEL	20 mg/m³ (H: aerosol only)
Remark	SKIN (danger of cutaneous absorption)
Regulatory reference	Government Notice No. R. 280, 2021
South Africa - Occupational Exposure Limits (Airborne Pollutants)	
Local name	Ethylene glycol (Ethane-1,2-diol; 1,2-Dihydroxyethane)
OEL TWA	20 mg/m³
OEL STEL	40 mg/m³
Regulatory reference	Government Notice No. R 904

Avicel CL 6111 (9004-34-6)	
South Africa - Occupational Exposure Limits (Recommended Limits)	
Local name	Cellulose
OEL TWA	10 mg/m³
Regulatory reference	Government Notice No. R. 280, 2021
South Africa - Occupational Exposure Limits (Airborne Pollutants)	
Local name	Cellulose
OEL TWA	10 mg/m³ inhalable particulate 5 mg/m³ respirable particulate
OEL STEL	20 mg/m³ inhalable particulate
Regulatory reference	Government Notice No. R 904

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.
Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures, such as personal protective equipment (PPE)

Hand protection : Protective gloves
Eye protection : Safety glasses

Skin and body protection	:	Wear suitable protective clothing
Respiratory protection	:	In case of inadequate ventilation wear respiratory protection.

Personal protective equipment symbol(s):

8.4. Exposure limit values for the other components

No additional information available

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Appearance	:	Viscous liquid.
Colour	:	Off white.
Odour	:	Faint odour.
Odour threshold	:	No data available
pH	:	6.5 – 8.5
pH solution	:	No data available
Relative evaporation rate (butylacetate=1)	:	No data available
Relative evaporation rate (ether=1)	:	No data available
Melting point	:	Not applicable
Freezing point	:	No data available
Boiling point	:	No data available
Flash point	:	No data available
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Flammability (solid, gas)	:	Not applicable
Vapour pressure	:	No data available
Vapour pressure at 50 °C	:	No data available
Relative vapour density at 20 °C	:	No data available
Relative density	:	1.08
Relative density of saturated gas/air mixture	:	No data available
Density	:	No data available
Relative gas density	:	No data available
Solubility	:	Miscible with water.
Partition coefficient n-octanol/water (Log Pow)	:	No data available
Partition coefficient n-octanol/water (Log Kow)	:	No data available
Viscosity, kinematic	:	No data available
Viscosity, dynamic	:	No data available
Explosive properties	:	No data available
Oxidising properties	:	No data available
Explosive limits	:	No data available
Lower explosion limit	:	No data available
Upper explosion limit	:	No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : May be harmful in contact with skin.
Acute toxicity (inhalation) : Toxic if inhaled.

Sulcoron (Sulcotrione 150 g/l + diuron 300 g/l) ([99105-77-8] [330-54-1])	
ATE ZA (Dermal)	2530.543 mg/kg bodyweight
ATE ZA (vapours)	3.838 mg/l/4h
Unknown acute toxicity (GHS ZA)Unknown acute toxicity (GHS ZA)	27.13% of the mixture consists of ingredient(s) of unknown acute toxicity (Oral) 54.82% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal) 95.51% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Vapours))

Sulcotrione 97% TC (99105-77-8)	
LD50 oral rat	> 5000 mg/kg bodyweight (OECD 401: Acute Oral Toxicity, Rat, Experimental value, Oral)
LD50 dermal rabbit	> 4000 mg/kg bodyweight (OECD 402: Acute Dermal Toxicity, Rabbit, Experimental value, Dermal)
LC50 Inhalation - Rat	> 1.63 mg/l (OECD 403: Acute Inhalation Toxicity, 4 h, Rat, Experimental value, Inhalation (dust))

Diuron 97% TC (330-54-1)	
LD50 oral rat	4150 mg/kg
LD50 dermal rat	> 5000 mg/kg bodyweight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Experimental value, Dermal, 14 day(s))
LD50 dermal rabbit	> 2000 mg/kg
LC50 Inhalation - Rat	> 7 mg/l/4h (4 hr)

Naphthalenesulfonic acid polymer with formaldehyde sodium salt (9084-06-4)	
LD50 oral rat	3800 mg/kg
LD50 dermal rabbit	> 16000 mg/kg

Monoethylene glycol (107-21-1)	
LD50 oral rat	7712 mg/kg bodyweight (according to BASF-internal standards, Rat, Male / female, Experimental value, Aqueous solution, Oral, 7 day(s))
LD50 dermal	> 3500 mg/kg bodyweight (Mouse, Male / female, Experimental value, Dermal)

Monoethylene glycol (107-21-1)	
LC50 Inhalation - Rat	> 2.5 mg/l (6 h, Rat, Male / female, Experimental value, Inhalation (aerosol))

Emulson AG TRST (39464-66-9)	
LD50 oral rat	6550 mg/kg Source: NLM; ChemIDplus

poly(dimethylsiloxane) (9016-00-6)	
LD50 oral rat	> 5000 mg/kg (Rat, Literature study, Oral)

Avicel CL 6111 (9004-34-6)	
LD50 oral rat	> 5000 mg/kg (Rat, Oral)
LD50 dermal rabbit	> 2000 mg/kg (Rabbit, Dermal)
LC50 Inhalation - Rat	> 6 mg/l (4 h, Rat, Inhalation)

1,2-Benzisothiazolin-3-one (2634-33-5)	
LD50 oral rat	490 mg/kg bodyweight (Equivalent or similar to OECD 401, Rat, Male / female, Experimental value, Oral, 14 day(s))
LD50 dermal rat	> 2000 mg/kg bodyweight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Experimental value, Dermal, 14 day(s))

Xanthan gum (11138-66-2)	
LD50 oral rat	45000 mg/kg

Water (7732-18-5)	
LD50 oral rat	90000 mg/kg

Skin corrosion/irritation : Not a skin irritant
pH: 6.5 – 8.5

Serious eye damage/irritation : Slight eye irritant
pH: 6.5 – 8.5

Respiratory or skin sensitisation : Possible skin sensitizer

Germ cell mutagenicity : Diuron was mutagenic in the Ames Salmonella microsome assay and caused inhibition of DNA repair in mice
(HSDB). No human information available.

Carcinogenicity : Diuron has been an equivocal tumor agent in mice (RTECS). It induced gastric, liver, and pancreatic tumors in rats
by the oral exposure route. No human information available.

Reproductive toxicity : Fetal anomalies after maternal treatment with 250mg / kg Diuron. Most of the anomalies consisted of minor skeletal
defects associated with embryotoxicity than with true teratogenic effects. No human information available.

STOT-single exposure : Not classified

1,2-Benzisothiazolin-3-one (2634-33-5)	
STOT-single exposure	May cause respiratory irritation.

STOT-repeated exposure : May cause damage to organs through prolonged or repeated exposure.

Sulcotrione 97% TC (99105-77-8)	
	May cause damage to organs through prolonged or repeated exposure.

Diuron 97% TC (330-54-1)	
	May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard : Not classified

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Very toxic to aquatic life with long lasting effects.

Hazardous to the aquatic environment, short–term (acute) : Very toxic to aquatic life.

Hazardous to the aquatic environment, long–term (chronic) : Very toxic to aquatic life with long lasting effects.

Sulcotrione 97% TC (99105-77-8)	
LC50 - Fish [1]	227 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Oncorhynchus mykiss, Static system, Experimental value)
LC50 - Fish [2]	240 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Cyprinus carpio, Static system, Experimental value)
EC50 - Crustacea [1]	> 848 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Experimental value)
ErC50 algae	54 mg/l
Partition coefficient n-octanol/water (Log Kow)	< 0 pH 7, 9)
Partition coefficient n-octanol/water (Log Pow)	-1.7 (20 °C)
Additional ecotoxicological information	Birds: Acute oral LD50 for bobwhite quail >2111, mallard ducks >1350 mg/kg b.w. Dietary LC50 for bobwhite quail and mallard ducks >5620 mg/kg diet. Bees (LD50, mg/bee) >50 (oral); >200 (contact); Worms LC50 (14d) >1000 mg/kg soil.

Diuron 97% TC (330-54-1)	
LC50 - Fish [1]	14.7 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Oncorhynchus mykiss, Static system, Fresh water, Experimental value, GLP)
LC50 - Fish [2]	6.7 mg/l Sheepshead minnow
EC50 - Crustacea [1]	1.4 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value)
EC50 - Other aquatic organisms [1]	0.0183 mg/l Lemna gibba (7d)
EC50 - Other aquatic organisms [2]	1 mg/l Brown shrimps
EC50 72h - Algae [1]	22 µg/l (OECD 201: Alga, Growth Inhibition Test, Scenedesmus subspicatus, Static system, Fresh water, Experimental value, GLP)
BCF - Fish [1]	< 14 (Cyprinus carpio, Chronic)
BCF - Fish [2]	174 – 305 (Pisces)
BCF - Other aquatic organisms [1]	5.2 (OECD 305: Bioconcentration: Flow-Through Fish Test, 42 day(s), Mytilus edulis, Flow-through system, Salt water, Experimental value)
Partition coefficient n-octanol/water (Log Kow)	2.85
Partition coefficient n-octanol/water (Log Pow)	2.68 – 2.96
Additional ecotoxicological information	Oral LD50 (14d) for bobwhite quail 1104 mg/kg. Dietary LC50 (8d) for bobwhite quail 1730, Japanese Quail >5000, mallard ducks 5000, pheasants > 5000 ppm diet. Bees (LD50, mg/bee) Practically non toxic; Worms LC50 (14d) >400 mg/kg.

Monoethylene glycol (107-21-1)	
LC50 - Fish [1]	> 72860 mg/l (EPA 600/4-90/027, 96 h, Pimephales promelas, Static system, Fresh water, Experimental value, Nominal concentration)
EC50 - Crustacea [1]	> 100 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, Daphnia magna, Static system, Fresh water, Experimental value)

Monoethylene glycol (107-21-1)	
Partition coefficient n-octanol/water (Log Pow)	-1.36 (Experimental value)

poly(dimethylsiloxane) (9016-00-6)	
LC50 - Fish [1]	> 10000 mg/l (96 h, Salmo gairdneri, Static system, Literature study)
BCF - Fish [1]	2.9 – 1250 (3 day(s), Hypophthalmichthys molitrix, Literature study)

Avicel CL 6111 (9004-34-6)	
LC50 - Fish [1]	> 100 mg/l (Pisces)
EC50 - Crustacea [1]	> 100 mg/l (Invertebrata)

1,2-Benzisothiazolin-3-one (2634-33-5)	
LC50 - Fish [1]	2.18 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Oncorhynchus mykiss, Static system, Experimental value, Nominal concentration)
EC50 - Crustacea [1]	2.94 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Experimental value, Lethal)
ErC50 algae	150 µg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Experimental value, GLP)
BCF - Fish [1]	6.62 (Equivalent or similar to OECD 305, 56 day(s), Lepomis macrochirus, Experimental value, Fresh weight)
Partition coefficient n-octanol/water (Log Pow)	-0.9 – 0.99 (Experimental value, EU Method A.8: Partition Coefficient, 20 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0.97 (log Koc, OECD 121: Estimation of the Adsorption Coefficient (Koc) on Soil and on Sewage Sludge using High Performance Liquid Chromatography (HPLC), Experimental value, GLP)

Xanthan gum (11138-66-2)	
LC50 - Fish [1]	420 mg/l Source: ECOTOX

Water (7732-18-5)	
Partition coefficient n-octanol/water (Log Pow)	-1.38

12.2. Persistence and degradability

Sulcoron (Sulcotrione 150 g/l + diuron 300 g/l) ([99105-77-8] [330-54-1])	
Persistence and degradability	No additional information available

Sulcotrione 97% TC (99105-77-8)	
Persistence and degradability	Not readily biodegradable in water.

Diuron 97% TC (330-54-1)	
Persistence and degradability	Non degradable in the soil. Not readily biodegradable in water.

Monoethylene glycol (107-21-1)	
Persistence and degradability	Biodegradable in the soil. Readily biodegradable in water.
Biochemical oxygen demand (BOD)	0.47 g O_2/g substance
Chemical oxygen demand (COD)	1.24 g O_2/g substance
ThOD	1.29 g O_2/g substance

poly(dimethylsiloxane) (9016-00-6)	
Persistence and degradability	Biodegradable in the soil. Not readily biodegradable in water.

Avicel CL 6111 (9004-34-6)	
Persistence and degradability	Biodegradable in water.

1,2-Benzisothiazolin-3-one (2634-33-5)	
Persistence and degradability	Not readily biodegradable in water.

12.3. Bioaccumulative potential

Sulcoron (Sulcotrione 150 g/l + diuron 300 g/l) ([99105-77-8] [330-54-1])	
Bioaccumulative potential	No additional information available

Sulcotrione 97% TC (99105-77-8)	
Partition coefficient n-octanol/water (Log Pow)	-1.7 (20 °C)
Partition coefficient n-octanol/water (Log Kow)	< 0 pH 7, 9)
Bioaccumulative potential	Not bioaccumulative.

Diuron 97% TC (330-54-1)	
BCF - Fish [1]	< 14 (Cyprinus carpio, Chronic)
BCF - Fish [2]	174 – 305 (Pisces)
BCF - Other aquatic organisms [1]	5.2 (OECD 305: Bioconcentration: Flow-Through Fish Test, 42 day(s), Mytilus edulis, Flow-through system, Salt water, Experimental value)
Partition coefficient n-octanol/water (Log Pow)	2.68 – 2.96
Partition coefficient n-octanol/water (Log Kow)	2.85
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

Monoethylene glycol (107-21-1)	
Partition coefficient n-octanol/water (Log Pow)	-1.36 (Experimental value)
Bioaccumulative potential	Not bioaccumulative.

poly(dimethylsiloxane) (9016-00-6)	
BCF - Fish [1]	2.9 – 1250 (3 day(s), Hypophthalmichthys molitrix, Literature study)
Bioaccumulative potential	No straightforward conclusion can be drawn based upon the available numerical values.

Avicel CL 6111 (9004-34-6)	
Bioaccumulative potential	Bioaccumulation: not applicable.

1,2-Benzisothiazolin-3-one (2634-33-5)	
BCF - Fish [1]	6.62 (Equivalent or similar to OECD 305, 56 day(s), Lepomis macrochirus, Experimental value, Fresh weight)
Partition coefficient n-octanol/water (Log Pow)	-0.9 – 0.99 (Experimental value, EU Method A.8: Partition Coefficient, 20 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0.97 (log Koc, OECD 121: Estimation of the Adsorption Coefficient (Koc) on Soil and on Sewage Sludge using High Performance Liquid Chromatography (HPLC), Experimental value, GLP)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

Water (7732-18-5)	
Partition coefficient n-octanol/water (Log Pow)	-1.38

12.4. Mobility in soil

Sulcoron (Sulcotrione 150 g/l + diuron 300 g/l) ([99105-77-8] [330-54-1])	
Mobility in soil	No additional information available

Sulcotrione 97% TC (99105-77-8)	
Surface tension	69 mN/m (20 °C)

Sulcotrione 97% TC (99105-77-8)	
Partition coefficient n-octanol/water (Log Pow)	-1.7 (20 °C)
Partition coefficient n-octanol/water (Log Kow)	< 0 pH 7, 9)
Ecology - soil	Highly mobile in soil.

Diuron 97% TC (330-54-1)	
Surface tension	72.1 mN/m (20 °C, Aqueous solution, OECD 115: Surface Tension of Aqueous Solutions)
Partition coefficient n-octanol/water (Log Pow)	2.68 – 2.96
Partition coefficient n-octanol/water (Log Kow)	2.85
Ecology - soil	Low potential for adsorption in soil.

Monoethylene glycol (107-21-1)	
Surface tension	48.4 mN/m (20 °C)
Partition coefficient n-octanol/water (Log Pow)	-1.36 (Experimental value)
Ecology - soil	Highly mobile in soil.

poly(dimethylsiloxane) (9016-00-6)	
Ecology - soil	Adsorbs into the soil. Low potential for mobility in soil. Not toxic to plants.

1,2-Benzisothiazolin-3-one (2634-33-5)	
Surface tension	72.6 mN/m (20 °C, 0.1 %, EU Method A.5: Surface tension)
Partition coefficient n-octanol/water (Log Pow)	-0.9 – 0.99 (Experimental value, EU Method A.8: Partition Coefficient, 20 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0.97 (log Koc, OECD 121: Estimation of the Adsorption Coefficient (Koc) on Soil and on Sewage Sludge using High Performance Liquid Chromatography (HPLC), Experimental value, GLP)
Ecology - soil	Highly mobile in soil.

Water (7732-18-5)	
Partition coefficient n-octanol/water (Log Pow)	-1.38

12.5. Other adverse effects

Ozone : Not classified
Other adverse effects : No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

In accordance with SANS / IMDG / IATA

SANS	IMDG	IATA
14.1. UN number		
3082	3082	3082
14.2. Proper Shipping Name		
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains sulcotrione 150 g/l, diuron 300 g/l)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains sulcotrione 150 g/l, diuron 300 g/l)	Environmentally hazardous substance, liquid, n.o.s. (contains sulcotrione 150 g/l, diuron 300 g/l)

SANS	IMDG	IATA
14.3. Transport hazard class(es)		
9	9	9
		
14.4. Packing group		
III	III	III
14.5. Environmental hazards		
Dangerous for the environment : Yes	Dangerous for the environment : Yes Marine pollutant : Yes	Dangerous for the environment : Yes
No supplementary information available		

14.6. Special precautions for user

SANS

Special provisions (SANS)	:	179, 274, 331, 335
Limited quantities (SANS)	:	5 L
Limited quantities (SANS)	:	5 L
Packagings, large packagings and IBCs Packing instructions (SANS)	:	P001, IBC03, LP01
Packagings, large packagings and IBCs Special packing instructions (SANS)	:	PP1
Portable tank and bulk containers instructions (SANS)	:	T4
Portable tank and bulk container special provisions (SANS)	:	TP1, TP29

IMDG

Special provisions (IMDG)	:	274, 335, 969
Limited quantities (IMDG)	:	5 L
Excepted quantities (IMDG)	:	E1
Packing instructions (IMDG)	:	LP01, P001
Special packing provisions (IMDG)	:	PP1
IBC packing instructions (IMDG)	:	IBC03
Tank instructions (IMDG)	:	T4
Tank special provisions (IMDG)	:	TP1, TP29
EmS-No. (Fire)	:	F-A - FIRE SCHEDULE Alfa - GENERAL FIRE SCHEDULE
EmS-No. (Spillage)	:	S-F - SPILLAGE SCHEDULE Foxtrot - WATER-SOLUBLE MARINE POLLUTANTS
Stowage category (IMDG)	:	A

IATA

PCA Excepted quantities (IATA)	:	E1
PCA Limited quantities (IATA)	:	Y964
PCA limited quantity max net quantity (IATA)	:	30kgG
PCA packing instructions (IATA)	:	964
PCA max net quantity (IATA)	:	450L
CAO packing instructions (IATA)	:	964
CAO max net quantity (IATA)	:	450L
Special provisions (IATA)	:	A97, A158, A197, A215
ERG code (IATA)	:	9L

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health, and environmental national regulations specific for the product

No additional information available

SECTION 16: Other information

Issue date : 01/09/2022

Full text of H-statements	
H227	Combustible liquid
H290	May be corrosive to metals.
H302	Harmful if swallowed.
H303	May be harmful if swallowed
H313	May be harmful in contact with skin
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H351	Suspected of causing cancer.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H401	Toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects.

Safety Data Sheet (SDS), South Africa

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.