



SAFETY DATA SHEET

Sulcozine SC

Revision Date 31-Oct-2019

Version 2

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Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product identifier

Sulcozine SC

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

Recommended Use Herbicide
Uses advised against No information available

Details of the supplier of the safety data sheet

Supplier Address ADAMA SOUTH AFRICA (PTY) LTD
Ground Floor, Simeka House
The Vineyards Office Estate
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Emergency Telephone

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Section 2: HAZARDS IDENTIFICATION

Classification of the substance or mixture

Skin sensitization Category 1 - (H317)
Reproductive toxicity Category 2 - (H361)
Specific target organ toxicity (repeated exposure) Category 2 - (H373)
Acute aquatic toxicity Category 1 - (H400)
Chronic aquatic toxicity Category 1 - (H410)

Label Elements

Hazard pictograms



Signal word

Warning

Hazard Statements

H317 - May cause an allergic skin reaction
 H361 - Suspected of damaging fertility or the unborn child
 H373 - May cause damage to organs through prolonged or repeated exposure
 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
 P260 - Do not breathe dust/fume/gas/mist/vapors/spray
 P280 - Wear protective gloves/protective clothing/eye protection/face protection
 P302 + P352 - IF ON SKIN: Wash with plenty of soap and water
 P501 - Dispose of contents/ container to an approved waste disposal plant

Other Hazards

No information available

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	Weight-%	CAS No	EC No	GHS Classification	M-Factor
Atrazine	26-29	1912-24-9	217-617-8	Skin Sens. 1 (H317) STOT RE 2 (H373) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	
Sulcotrione	10-13	99105-77-8		STOT RE 2 (H373) Skin Sens. 1A (H317) Repr. 2 (H361) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	M=1 M=10

Section 4: FIRST AID MEASURES

First aid measures

General advice

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). First aider: Pay attention to self-protection!.

Inhalation

Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration. Call a physician.

Skin Contact

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Consult a physician if necessary.

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. Seek immediate medical attention/advice.

Ingestion

Rinse mouth. Drink plenty of water. If symptoms persist, call a physician.

Self-protection of the first aider Use personal protective equipment as required.

Most important symptoms and effects, both acute and delayed

Symptoms None known.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

Section 5: FIRE-FIGHTING MEASURES

Extinguishing media

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media

No information available.

Special hazards arising from the substance or mixture

No specific hazard known.

Advice for firefighters

In the event of fire, wear self-contained breathing apparatus
In the event of fire and/or explosion do not breathe fumes.

Section 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions

Avoid contact with skin, eyes or clothing. Use personal protective equipment as required.

For emergency responders

Use personal protection recommended in Section 8.

Environmental precautions

Prevent entry into waterways, sewers, basements or confined areas. Do not flush into surface water or sanitary sewer system.

Methods and material for containment and cleaning up

Methods for cleaning up

Take up mechanically, placing in appropriate containers for disposal.

Reference to other sections

Other Information

See also section 8,13

Section 7: HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling

Avoid contact with skin, eyes or clothing. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Use personal protective equipment as required. Do not breathe dust/fume/gas/mist/vapors/spray.

General Hygiene Considerations

When using do not eat, drink or smoke. Wash contaminated clothing before reuse.

Conditions for safe storage, including any incompatibilities

Storage Conditions

Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children. Keep containers tightly closed in a cool, well-ventilated place.

Specific end use(s)

Risk Management Methods (RMM)

The information required is contained in this Material Safety Data Sheet.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

National occupational exposure limits

Chemical Name	European Union	United Kingdom	France	Spain	Germany
Atrazine 1912-24-9			TWA: 5 mg/m ³	TWA: 5 mg/m ³	TWA: 2 mg/m ³ Ceiling / Peak: 16 mg/m ³
Chemical Name	Italy	Portugal	Netherlands	Finland	Denmark
Atrazine 1912-24-9		TWA: 5 mg/m ³		TWA: 10 mg/m ³ STEL: 20 mg/m ³	TWA: 2 mg/m ³
Chemical Name	Austria	Switzerland	Poland	Norway	Ireland
Atrazine 1912-24-9	TWA: 2 mg/m ³	TWA: 2 mg/m ³	TWA: 5 mg/m ³	TWA: 5 mg/m ³ STEL: 10 mg/m ³	TWA: 10 mg/m ³

Exposure controls

Engineering Controls Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

Eye/face protection Tight sealing safety goggles.

Hand Protection Suitable chemical resistant gloves (EN 374) also with prolonged, direct contact (recommendation: protection index 6, corresponding > 480 minutes Permeability time (permeation) according to EN 374): e.g. nitrile rubber (0.4 mm), chloroprene rubber (0.5 mm), butyl rubber (0.7 mm).

Body Protection Suitable protective clothing.

Respiratory protection Use only with adequate ventilation.

General Hygiene Considerations When using do not eat, drink or smoke. Wash contaminated clothing before reuse.

Environmental exposure controls Do not allow into any sewer, on the ground or into any body of water.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

Property	Values	Method	Remarks
Appearance			
Physical state	: Liquid		
Color	: white		

Odor	:	characteristic	
Odor threshold	:	No data available	
pH	:	3 - 5	
Melting point/freezing point °C	:	----	Not Applicable
Boiling point/boiling range °C	:	----	Not Applicable
Flash point °C	:	> 100	
Evaporation rate	:	Not Applicable	
Flammability (solid, gas)	:	Not applicable for liquids	
Upper/lower flammability or explosive limits	:	No data available	
Vapor pressure kPa	:	----	Not Applicable
Vapor density	:	No data available	
Relative density	:	1.05 - 1.15	
Solubility(ies) mg/l	:	----	Not Applicable
Partition Coefficient (n-octanol/water) Log Pow	:		See Section 12 for more information
Autoignition temperature °C	:	----	No data available
Decomposition temperature °C	:	----	No data available
Kinematic viscosity mm²/s 40 °C	:	----	No data available
Explosive properties	:	Not an explosive	
Oxidizing properties	:	Not oxidizing	
<u>Other Information</u>			
Bulk density g/ml	:		
Surface tension mN/m	:	----	No data available

Section 10: STABILITY AND REACTIVITY

Reactivity

Not available.

Chemical stability

Stable under normal conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to avoid

Heat, flames and sparks.

Incompatible Materials

No information available

Hazardous Decomposition Products

None under normal use conditions.

Section 11: TOXICOLOGY INFORMATION

Information on toxicological effects

Acute toxicity

	<u>Values</u>	<u>Species</u>	<u>Method</u>	<u>Remarks</u>
Oral LD50 mg/kg	: ----			No data available
Dermal LD50 mg/kg	: ----			No data available

Inhalation LC50 mg/l/4h	: ----	No data available
Skin corrosion/irritation	:	No data available
Serious eye damage/eye irritation	:	No data available
Respiratory/skin sensitization	:	No data available

Chronic toxicity

Germ cell mutagenicity

Chemical Name	
Atrazine	: Not classified
Sulcotrione	: Not classified

Carcinogenicity

Chemical Name	
Atrazine	: Not Carcinogenic
Sulcotrione	: Not Carcinogenic

Reproductive toxicity

Chemical Name	
Atrazine	: Not toxic for the reproductive system
Sulcotrione	: H361d - Suspected of damaging the unborn child

STOT - single exposure

Chemical Name	
Atrazine	: Not available
Sulcotrione	: No data available

STOT - repeated exposure

Chemical Name	
Atrazine	: H373 - May cause damage to organs through prolonged or repeated exposure
Sulcotrione	: H373 - May cause damage to organs through prolonged or repeated exposure

Aspiration hazard

Chemical Name	
Atrazine	: Not available
Sulcotrione	: No data available

Section 12: ECOLOGICAL INFORMATION

Toxicity

Aquatic toxicity

Acute toxicity	Values	Species	Method	Remarks
Fish 96-hour LC50 mg/l	: ----			No data available
Crustacea 48-hour EC50 mg/l	: ----			No data available
Algae 72-hour EC50 mg/l	: ----			No data available
Other plants EC50 mg/l	: ----			No data available

Chronic aquatic toxicity	Values	Species	Method	Remarks
Fish NOEC mg/l	: No data available			
Crustacea NOEC mg/l	: No data available			
Algae NOEC mg/l	: No data available			
Other plants NOEC mg/l	: No data available			

Terrestrial Toxicity

Birds Oral LD50 mg/kg			
Chemical Name			
Atrazine	: 940	Bobwhite quail	
Sulcotrione	: > 1350	Mallard duck	EPA-FIFRA 71-1

Bees Oral LD50 µg/bee

Chemical Name

Atrazine : > 97
 Sulcotrione : 50

Persistence and degradability

Abiotic Degradation

Water DT50 days

Chemical Name

Atrazine : 14 - 105
 Sulcotrione : 6 - 15

Soil DT50 days

Chemical Name

Atrazine : 16 - 117
 Sulcotrione : 4.3 20 °C

Biodegradation

Chemical Name

Atrazine : Not available
 Sulcotrione : Not readily biodegradable

Bioaccumulative potential

Partition Coefficient

(n-octanol/water) Partition Coefficient (n-octanol/water) Log Pow

Chemical Name

Atrazine : 2.5
 Sulcotrione : - 1.7

OECD 107 25 °C
 pH 7, 20 ° C

Bioconcentration factor (BCF)

Chemical Name

Atrazine :
 Sulcotrione : No data available
 Low

Mobility in soil

Adsorption/Desorption

Chemical Name

Atrazine : 39 - 173
 Sulcotrione : 36

Koc
 Koc

Results of PBT and vPvB assessment

The components in this formulation do not meet the criteria for classification as PBT or vPvB

Other adverse effects

No information available.

Section 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste from residues/unused products

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging	Improper disposal or reuse of this container may be dangerous and illegal.
Other Information	Waste codes should be assigned by the user based on the application for which the product was used.

Section 14: TRANSPORTATION INFORMATION

IMDG/IMO

UN/ID No *	3082
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Atrazine Sulcotrione)
Hazard Class	9
Packing Group	III
Marine pollutant	Yes
Special precautions for user	

RID/ADR

UN/ID No *	3082
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Atrazine Sulcotrione)
Hazard Class	9
Packing Group	III
Environmental hazard	Yes
Special precautions for user	

ICAO/IATA

UN/ID No *	3082
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Atrazine Sulcotrione)
Hazard Class	9
Packing Group	III
Environmental hazard	Yes
Special precautions for user	
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not Applicable



* Note: UN3077 & UN3082 – These products may be transported as non-dangerous goods under the special provisions of IMDG Code 2.10.2.7; ADR SP375 and ICAO/IATA A197 when packed in single or inner packaging of up to 5L for liquids or 5 kg or less for solids.

Section 15: REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

Section 16: OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3
H317 - May cause an allergic skin reaction

H373 - May cause damage to organs through prolonged or repeated exposure if inhaled
H400 - Very toxic to aquatic life
H410 - Very toxic to aquatic life with long lasting effects
H302 - Harmful if swallowed
H315 - Causes skin irritation
H318 - Causes serious eye damage
H361d - Suspected of damaging the unborn child

Revision Note Changes made to the last version are labeled with this sign ***.

List of Acronyms

ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road
ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
CAS Number - Chemical Abstracts Service number
EC Number - EINECS and ELINCS Number
EINECS - European Inventory of Existing Commercial Substances
ELINCS - European List of notified Chemical Substances
IATA - International Air Transport Association
ICAO-TI - Technical Instructions for the Safe Transport of Dangerous Goods by Air
IMDG - International Maritime Dangerous Goods
LC50 - Lethal Concentration to 50 % of a test population
LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose)
OECD - Organization for Economic Co-operation and Development
PBT - Persistent, Bioaccumulative and Toxic substance
RID - Regulations concerning the International Carriage of Dangerous Goods by Rail
STOT - Specific Target Organ Toxicity
vPvB - Very Persistent and Very Bioaccumulative

Disclaimer

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet