



SAFETY DATA SHEET

The Globally Harmonized System of Classification and Labeling of Chemicals (GHS)

Sultan 50 SC

Revision date 11-Oct-2022

Version 2 Supersedes Date: 15-Dec-2019

Product Code(s)

HRB00823-27

Print Date 11-Oct-2022

ADM.04750.H.1.A (old: AG-M5-500 SC1) 22022

1. Identification

Product identifier

Sultan 50 SC

Other means of identification

Synonyms	Metazachlor 500 SC
Formulation type	SC
Registration Number(s)	L6892
Pure substance/mixture	Mixture

Recommended use of the chemical and restrictions on use

Recommended use	Herbicide; Professional use
Uses advised against	No information available

Detailed information about the manufacturer, supplier, and/or importer

Supplier	ADAMA SOUTH AFRICA (PTY) LTD Ground Floor, Simeka House The Vineyards Office Estate 99 Jip de Jager Drive Bellville 7530
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Emergency telephone number

Emergency Telephone	+27 82 446 8946 (Griffon Poison Centre) +27 86 155 5777 (Tygerberg Poison Information Centre) +27 86 100 6366 and +27 83 253 6618 (SPILL TECH)
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E-mail address	SDS@ADAMA.COM
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2. Hazard(s) identification

Classification of the substance or mixture

Acute toxicity - Oral	Category 4 - (H302)
Skin sensitization	Category 1 - (H317)
Carcinogenicity	Category 2 - (H351)
Acute aquatic toxicity	Category 1 - (H400)
Chronic aquatic toxicity	Category 1 - (H410)

Label elements**Signal word**

Warning

Hazard pictograms**Hazard statements**

H302 - Harmful if swallowed
 H317 - May cause an allergic skin reaction
 H351 - Suspected of causing cancer
 H410 - Very toxic to aquatic life with long lasting effects

Precautionary statements

P102 - Keep out of reach of children
 P203 - Obtain, read and follow all safety instructions before reuse
 P261 - Avoid breathing dust/fume/gas/mist/vapors/spray
 P264 - Wash face, hands and any exposed skin thoroughly after handling
 P270 - Do not eat, drink or smoke when using this product
 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
 P301+317 - IF SWALLOWED: Get medical help
 P302 + P352 - IF ON SKIN: Wash with plenty of soap and water
 P318 - If exposed or concerned get medical advice.
 P321 - Specific treatment (see supplemental first aid instructions on this label)
 P330 - Rinse mouth
 P333+317 - If skin irritation or rash occurs get medical help
 P362+364 - Take off contaminated clothing and wash it before reuse
 P391 - Collect spillage
 P405 - Store locked up
 P501 - Dispose of contents/ container to an approved waste disposal plant

Additional information

This product is classified as hazardous according to the criteria in South Africa - GHS classification and labelling of chemicals – SANS10234 and the Regulations for Hazardous Chemical Agents - 2021.

Other hazards

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

3. Composition/information on ingredients**Substance**

Not applicable

Mixture**Synonyms**

Metazachlor 500 SC

Chemical name	CAS No	Weight-%	EC No	INTERNATIONAL GHS CLASSIFICATION	M-Factor
Metazachlor (ISO)	67129-08-2	42 - 47	266-583-0	Skin Sens. 1B (H317)	

				Carc. 2 (H351) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	M=100 M=100
Poly(oxy-1,2-ethanediyl), .alpha.-[tris(1-phenylethyl)phenyl]-.om ega.-hydroxy-	99734-09-5	1 - 3	-	Aquatic Chronic 3 (H412)	

Full text of H- and EUH-phrases: see section 16

Additional information

Note: The other ingredients do not cause or contribute towards the correct GHS classification of Sultan 50 SC and are therefore, in terms of the South African Regulations for Hazardous Chemical Agents - 2021. Regulation 14(b), not listed in the table above.

4. First-aid measures

Description of necessary first aid measures

General advice	In case of accident or if you feel unwell, seek medical advice immediately (show the label where 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. If symptoms persist, call a physician.
Ingestion	Rinse mouth. Drink plenty of water. Get medical attention immediately if symptoms occur.

For emergency responders

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

Most important symptoms/effects, acute and delayed

Symptoms None known.

Indication of immediate medical attention and special treatment needed, if necessary

Note to physicians Treat symptomatically.

5. Fire-fighting measures

Suitable Extinguishing Media

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

Unsuitable extinguishing media Do not scatter spilled material with high pressure water streams.

Specific hazards arising from the chemical

Specific hazards arising from the chemical Product is or contains a sensitizer. May cause sensitization by skin contact.

Specific/special fire-fighting measures

Specific/special fire-fighting measures No information available.

Special protective equipment and precautions for fire-fighters

Special protective equipment for fire-fighters Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6. Accidental release measures**Personal precautions, protective equipment and emergency procedures**

Personal precautions Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

Environmental precautions

Environmental precautions See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Pick up and transfer to properly labeled containers.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

Other information Refer to protective measures listed in Sections 7 and 8.

7. Handling and storage**Preventive measures for safe handling**

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse.

Precautions for safe handling

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Store locked up.

8. Exposure controls/personal protection**Control parameters**

Exposure guidelines This product, as supplied, does not contain any hazardous materials with occupational

exposure limits established by the region specific regulatory bodies

Appropriate engineering controls

Engineering controls Ensure adequate ventilation, especially in confined areas.

Individual protection measures, such as personal protective equipment

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment.

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).

Eye/face protection Tight sealing safety goggles.

Skin and body protection Use suitable protective clothing and equipment if required, such as safety goggles certified to EN 166, gloves certified to EN 374, protective boots certified to EN 13832, and/or a water repellent woven coverall with 65% polyester and 35 % cotton.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice.

Environmental exposure controls Local authorities should be advised if significant spillages cannot be contained.

9. Physical and chemical properties

Information on basic physical and chemical properties

<u>Property</u>	<u>Values</u>	<u>Method</u>	<u>Remarks</u>
Appearance			
Physical state	: Liquid		
Color	: white		
Odor	: Faint characteristic		
Odor threshold	: No data available		
pH	: 6.7 - 7.7	CIPAC MT 75.3	solution (1%)
Melting point / freezing point °C	: ----		Not applicable
Boiling point / boiling range °C	: No data available		
Flash point °C	: > 100	CIPAC MT 12	
Evaporation rate	: No data available		
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	: 1.11 - 1.15	CIPAC MT 3.3	20 °C
Solubility(ies) mg/l	: ----		Not applicable
Partition coefficient Log Pow	:		See Section 12 for additional Ecological Information
Autoignition temperature °C	: > 600	EEC A.15	
Decomposition temperature °C	: No data available		
Kinematic viscosity mm ² /s 40 °C	: 755	CIPAC MT 192	
Explosive properties	: Not an explosive		
Oxidizing properties	: Not oxidizing		
Surface tension	: 32.7		25°C 1%
Particle Size	: Not applicable		

Other information

Bulk density g/ml : ---

10. Stability and reactivityReactivity

Reactivity No information available.

Chemical stability

Stability Stable under normal conditions.

Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

Conditions to avoid

Conditions to avoid None known based on information supplied.

Incompatible materials

Incompatible materials None known based on information supplied.

Hazardous decomposition products

Hazardous decomposition products None known based on information supplied.

11. Toxicological informationInformation on toxicological effectsAcute toxicity

	<u>Values</u>	<u>Species</u>	<u>Method</u>	<u>Remarks</u>
Oral LD50 mg/kg	: 1234	Rat	OECD 401	
Dermal LD50 mg/kg	: > 4000	Rat	OECD 402	
Inhalation LC50 LC50	: > 3.99	Rat	OECD 403	Maximum attainable concentration
Skin corrosion/irritation	: Non-irritating to the skin	Rabbit	OECD 404	
Serious eye damage/eye irritation	: Not irritating to eyes	Rabbit	OECD 405	
Sensitization	: Skin sensitizer	Guinea pig	OECD 406	

Chronic toxicityGerm cell mutagenicity

Chemical name

Metazachlor (ISO) : Not classified

Carcinogenicity

Chemical name

Metazachlor (ISO) : Suspected of causing cancer

Reproductive toxicity

Chemical name

Metazachlor (ISO) : Not toxic for the reproductive system

STOT - Single Exposure**Chemical name**

Metazachlor (ISO) : No data available

STOT - Repeated Exposure**Chemical name**

Metazachlor (ISO) : No data available

Aspiration hazard**Chemical name**

Metazachlor (ISO) : No data available

12. Ecological information

Ecotoxicity**Aquatic toxicity****Acute toxicity**

	<u>Values</u>	<u>Species</u>	<u>Method</u>	<u>Remarks</u>
Fish 96-hour LC50 mg/l	: 7.34	Oncorhynchus mykiss	OECD 203	
Crustacea 48-hour EC50 mg/l	: 67.8	Daphnia magna	OECD 202	
Algae 72-hour EC50 mg/l	: 0.0437	D. Subspicatus	OECD 201	
Other plants EC50 mg/l	: 0.0203	Lemna gibba	OECD 221	days 7

Chronic aquatic toxicity

	<u>Values</u>	<u>Species</u>	<u>Method</u>	<u>Remarks</u>
Fish NOEC mg/l	: No data available			
Crustacea NOEC mg/l	: No data available			
Algae NOEC mg/l	: 0.0145	D. Subspicatus	OECD 201	
Other plants NOEC mg/l	: 0.0068	Lemna gibba	OECD 221	

Terrestrial Toxicity**Birds Oral LD50 mg/kg****Chemical name**

Metazachlor (ISO) : > 2000

Bees Oral LD50 µg/bee**Chemical name**

Metazachlor (ISO) : > 72 EPPO 170

Abiotic Degradation**Water DT50 days****Chemical name**

Metazachlor (ISO) : 137.6 BBA IV 4-1 pH 5.5-7.1

Soil DT50 days**Chemical name**

Metazachlor (ISO) : 10.8 BBA IV: 5-1 pH 5.7-7.2

Biodegradation**Chemical name**

Metazachlor (ISO) : Not readily biodegradable

Log Pow**Chemical name**

	<u>Values</u>	<u>Method</u>	<u>Remarks</u>
Metazachlor (ISO)	: 2.5		

Bioconcentration factor (BCF)

Chemical name
Metazachlor (ISO) : Low

Adsorption/Desorption Chemical name	Values	Method	Remarks
Metazachlor (ISO)	: 110	OECD 106	KOC

13. Disposal considerations

Disposal methods

Waste from residues/unused products Dispose of waste in accordance with environmental legislation. Dispose of in accordance with local regulations.

Contaminated packaging Improper disposal or reuse of this container may be dangerous and illegal.

14. Transport information

ADR

14.1 UN number UN3082
14.2 UN proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Metazachlor (ISO))
14.3 Transport hazard class(es) 9
Labels 9
14.4 Packing group III
Description UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Metazachlor (ISO)), 9, III
14.5 Environmental hazard Yes
14.6 Special Precautions for Users
Special Provisions 274, 335, 601, 375
Classification code M6

RID

14.1 UN number UN3082
14.2 UN proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Metazachlor (ISO))
14.3 Transport hazard class(es) 9
Labels 9
14.4 Packing group III
Description UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Metazachlor (ISO)), 9, III
14.5 Environmental hazard Yes
14.6 Special Precautions for Users
Special Provisions 274, 335, 375, 601
Classification code M6

IMDG

14.1 UN number UN3082
14.2 UN proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Metazachlor (ISO))
14.3 Hazard Class 9
14.4 Packing group III
Description UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Metazachlor (ISO)), 9, III, Marine pollutant
14.5 Marine pollutant P
Environmental hazard Yes
14.6 Special Precautions for Users
Special Provisions 274, 335, 969
EmS-No F-A, S-F
IMDG Stowage and segregation Category A

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code No information available

IATA

14.1 UN number	UN3082
14.2 UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Metazachlor (ISO))
14.3 Transport hazard class(es)	9
14.4 Packing group	III
Description	UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Metazachlor (ISO)), 9, III
14.5 Environmental hazard	Yes
14.6 Special Precautions for Users	
Special Provisions	A97, A158, A197
ERG Code	9L



* 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

15. Regulatory information

Safety, health and environmental regulations specific for the product in question

16. Other information

Full text of H-Statements referred to under section 3

H302 - Harmful if swallowed
H317 - May cause an allergic skin reaction
H318 - Causes serious eye damage
H351 - Suspected of causing cancer
H400 - Very toxic to aquatic life
H410 - Very toxic to aquatic life with long lasting effects
H412 - Harmful to aquatic life with long lasting effects

Date of preparation of the SDS No data available

Revision date 11-Oct-2022

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

Key or legend to abbreviations and acronyms used in the safety data sheet

IMDG	International Maritime Dangerous Goods (IMDG)
IATA	International Air Transport Association (IATA)
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation

Abbreviations and 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

The Globally Harmonized System of Classification and Labeling of Chemicals (GHS)**Classification of the mixture**

H302 - Harmful if swallowed
H317 - May cause an allergic skin reaction
H351 - Suspected of causing cancer
H400 - Very toxic to aquatic life
H410 - Very toxic to aquatic life with long lasting effects

Classification procedure

Classification based on test data
Classification based on test data
Classification based on Calculation method
Classification based on test data
Classification based on test data

Disclaimer

The information provided in this 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