SAFETY DATA SHEET

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)

Sultan 50 SC

Revision date 09-Feb-2022 **Version** 3 **Supersedes Date:** 02-Mar-2015 **Product Code(s)** HRB00823-44/1

Print Date 09-Feb-2022 AG-M5-500 SC1 22022

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Sultan 50 SC

Other means of identification

Synonyms Metazachlor 500 SC

Pure substance/mixture Mixture

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

Recommended use Herbicide; Professional use

Uses advised against No information available

1.3. Details of the supplier of the safety data sheet

Supplier

ADAMA Agricultural Solutions UK Ltd
Third Floor East
1410 Arlington Business Park
Theale
READING
RG7 4SA
Tel: 01635 860555
Fax: 01635 861555

For further information, please contact

E-mail address ukenquiries@adama.com

1.4. Emergency telephone number

Emergency Telephone National Chemical Emergency Centre (UK):
Tel: 01865 407333 (24 hours)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

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)

2.2. Label elements

Labeling according to Regulation (EC) No. 1272/2008 [CLP]
Contains Metazachlor (ISO), 1,2-Benzisothiazolin-3-one

Hazard pictograms



Signal word	Warning
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 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 P302 + P352 - IF ON SKIN: Wash with plenty of soap and water P501 - Dispose of contents/ container to an approved waste disposal plant
EU Specific Hazard Statements	EUH401 - To avoid risks to human health and the environment, comply with the instructions for use
Additional phrases for PPP	SP1 - Do not contaminate water with the product or its container (Do not clean application equipment near surface water/Avoid contamination via drains from farmyards and roads).

2.3. Other hazards

PBT & vPvB	The product does not contain any substance(s) classified as PBT or vPvB.
Endocrine Disruptor Information	None known.
Persistent Organic Pollutants	Not applicable.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable

3.2 Mixtures

Chemical name	CAS No	EC No	Index No	Weight-%	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Specific concentration limit (SCL)	M-Factor	REACH Registration Number
Metazachlor (ISO)	67129-08-2	266-583-0	616-205-00-9	42 - 47	Skin Sens. 1B (H317)			No data available

					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]-.omega.-hydroxy-	99734-09-5	-		1 - 3	Aquatic Chronic 3 (H412)			No data available
1,2-Benzisothiazolin-3-one	2634-33-5	220-120-9	613-088-00-6	< 0.05	Skin Irrit. 2 (H315) Eye Dam. 1 (H318) Skin Sens. 1 (H317) Acute Tox. 4 (H302) Aquatic Acute 1 (H400)	Skin Sens. 1 :: C>=0.05%		01-2120761540-60-XXXX

Acute toxicity estimates (ATEs) according to Part 3 of Annex VI to Regulation (EC) No 1272/2008 are indicated in this table, if available.

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

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice Show this safety data sheet to the doctor in attendance. IF exposed or concerned: Get medical advice/attention.

Inhalation Remove to fresh air.

Eye contact Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

Skin contact Wash with soap and water. May cause an allergic skin reaction. In the case of skin irritation or allergic reactions see a physician.

Ingestion Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Call a physician.

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

Symptoms Itching. Rashes. Hives.

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

Note to physicians May cause sensitization in susceptible persons. Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Small Fire	Dry chemical, CO2, water spray or regular foam
Large Fire	Do not scatter spilled material with high pressure water streams Dike fire-control water for later disposal Water spray, fog or regular foam Move containers from fire area if you can do it without risk
Unsuitable extinguishing media	Do not scatter spilled material with high pressure water streams.

5.2. Special hazards arising from the substance or mixture

A fire or explosion	Some may burn but none ignite readily Containers may explode when heated Some may be transported hot
Specific hazards arising from the chemical	Product is or contains a sensitizer. May cause sensitization by skin contact.

5.3. Advice for firefighters

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

SECTION 6: Accidental release measures

6.1. 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.
Health risk	Contact may cause burns to skin and eyes Runoff from fire control may cause pollution Fire may produce irritating, corrosive and/or toxic gases Inhalation of material may be harmful Inhalation of Asbestos dust may have a damaging effect on the lungs Some liquids produce vapors that may cause dizziness or suffocation
Spill or leak statements	Avoid inhalation of asbestos dust Do not touch or walk through spilled material Prevent dust cloud Stop leak if you can do it without risk
Other information	Refer to protective measures listed in Sections 7 and 8.
For emergency responders	Use personal protection recommended in Section 8.

6.2. Environmental precautions

Environmental precautions	See Section 12 for additional Ecological Information.
Incineration	If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions
Spill	Increase, in the downwind direction, as necessary, the isolation distance shown under “Public safety”

6.3. 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	Take up mechanically, placing in appropriate containers for disposal.

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

6.4. Reference to other sections

Reference to other sections See section 8 for more information. See section 13 for more information.

SECTION 7: Handling and storage

7.1. Precautions 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.

General hygiene considerations Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product.

7.2. 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.

7.3. Specific end use(s)

Identified uses
Risk Management Methods (RMM) The information required is contained in this Safety Data Sheet.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters
Exposure Limits This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies

Derived No Effect Level (DNEL) No information available.
Predicted No Effect Concentration (PNEC) No information available.

8.2. 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).

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.

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

General hygiene considerations Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product.

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

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Property		Values	Method	Remarks
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 mm2/s 40 °C	:	755	CIPAC MT 192	
Surface tension	:	32.7		25°C 1%
Particle Size	:	Not applicable		

9.2. Other information

Bulk density g/ml : ----

9.2.1. Information with regard to physical hazard classes
Explosive properties : Not an explosive
Oxidizing properties : Not oxidizing

9.2.2. Other safety characteristics
No information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity No information available.

10.2. Chemical stability

Stability Stable under normal conditions.

Explosion data
Sensitivity to mechanical impact None.
Sensitivity to static discharge None.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

10.4. Conditions to avoid

Conditions to avoid None known based on information supplied.

10.5. Incompatible materials

Incompatible materials None known based on information supplied.

10.6. Hazardous decomposition products

Hazardous decomposition products None known based on information supplied.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

		Values	Species	Method	Remarks
Oral LD50 mg/kg	:	1234	Rat	OECD 401	
Dermal LD50 mg/kg	:	> 4000	Rat	OECD 402	
Inhalation LC50 mg/l	:	> 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 toxicity

Germ 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

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties
Endocrine disrupting properties No information available.

11.2.2. Other information
Other adverse effects No information available.

SECTION 12: Ecological information

12.1. Toxicity

Acute toxicity		Values	Species	Method	Remarks
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	7 days

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	:	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

12.2. Persistence and degradability
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

12.3. Bioaccumulative potential

Partition Coefficient (n-octanol/water) Log Pow	Values	Method	Remarks
Chemical name			
Metazachlor (ISO) :	2.5		

Bioconcentration factor (BCF)

Chemical name			
Metazachlor (ISO)	:		Low

12.4. Mobility in soil

Adsorption/Desorption	Values	Method	Remarks
Chemical name			

Metazachlor (ISO)	: 110	OECD 106	KOC

12.5. Results of PBT and vPvB assessment

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

12.6. Endocrine disrupting properties

Endocrine disrupting properties No information available.

12.7. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

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

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: 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
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
14.4 Packing group	III
Description	UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Metazachlor (ISO)), 9, III
Environmental hazard	Yes
Special Precautions for Users	
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 Transport hazard class(es)	9
14.4 Packing group	III
Description	UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Metazachlor (ISO)), 9, III, Marine pollutant
14.5 Environmental hazard	Yes

14.6 Special Precautions for Users	
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 No information available
14.7 Maritime transport in bulk according to IMO instruments	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



SECTION 15: Regulatory information

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

Trade name / designation	Registration Number(s)	Date
Not Applicable	Not Applicable	Not Applicable

European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

Authorizations and/or restrictions on use:

This product does not contain substances subject to authorization (Regulation (EC) No. 1907/2006 (REACH), Annex XIV) This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

Persistent Organic Pollutants

Not applicable

15.2. Chemical safety assessment

Chemical Safety Report	A risk assessment was performed according to directive (EC) No. 91/414 or according to regulation (EC) No. 1107/2009

SECTION 16: Other information

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

Full text of H-Statements referred to under section 3
H302 - Harmful if swallowed
H315 - Causes skin irritation
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

Legend
SVHC: Substances of Very High Concern for Authorization:

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

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

Revision date 09-Feb-2022

Reason for revision Changes made to the last version are labeled with this sign ***

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

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Classification of the mixture	Classification procedure
H302 - Harmful if swallowed	Classification based on test data
H317 - May cause an allergic skin reaction	Classification based on test data
H351 - Suspected of causing cancer	Classification based on Calculation method
H400 - Very toxic to aquatic life	Classification based on test data
H410 - Very toxic to aquatic life with long lasting effects	Classification based on test data

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

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