



SAFETY DATA SHEET

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH), as amended by UK REACH Regulations SI 2019/758

Legion

Revision date 11-Sep-2025

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Product Code(s)

HRB00824-44

Print Date 11-Sep-2025

ADM.06952.H.1.A (AG-QM2-500 SC)

22024

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

1.1. Product identifier

Legion

Other means of identification

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

UK: National Chemical Emergency Centre:

Tel: 01856 407333 (24 hours, 7 days a week)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to GB-CLP Regulations UK SI 2019/720 and UK SI 2020/1567

Carcinogenicity	Category 2 - (H351)
Acute aquatic toxicity	Category 1 - (H400)
Chronic aquatic toxicity	Category 1 - (H410)

2.2. Label elements

Labelling according to GB-CLP Regulations UK SI 2019/720 and UK SI 2020/1567

Contains Metazachlor (ISO)

Hazard pictograms**Signal word**

Warning

Hazard statements

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
 P280 - Wear protective gloves/protective clothing/eye protection/face protection
 P501 - Dispose of contents/ container to an approved waste disposal plant

EU Specific Hazard Statements

EUH208 - Contains (Metazachlor, 1,2-Benzisothiazolin-3-one). May produce an allergic reaction
 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 GB-CLP Regulations UK SI 2019/720 and UK SI 2020/1567	Specific concentration limit (SCL)	M-Factor	REACH Registration Number
Metazachlor (ISO)	67129-08-2	266-583-0	616-205-00-9	31 - 35	Skin Sens. 1B			No data

					(H317) Carc. 2 (H351) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)		M=100 M=100	available
Quinmerac (ISO)	90717-03-6	402-790-6		9 - 13	Aquatic Chronic 3 (H412)			No data available
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	< 0.036	Acute Tox. 4 (H302) Acute Tox. 2 (H330) Skin Irrit. 2 (H315) Eye Dam. 1 (H318) Skin Sens. 1A (H317) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	Skin Sens. 1A :: C>=0.036%	inhalation: ATE = 0,21 mg/L (dusts or mists) oral: ATE = 450 mg/kg bw M=1 M=1	01-212076154 0-60-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	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 doctor.
Skin contact	Wash skin with soap and water. In the case of skin irritation or allergic reactions see a doctor.
Ingestion	Clean mouth with water and drink afterwards plenty of water.

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

Symptoms	None known.
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4.3. Indication of any immediate medical attention and special treatment needed

Note to doctors 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.

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

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the chemical No information available.

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 Ensure adequate ventilation.

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.

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.

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 container tightly closed in a dry and well-ventilated place.

7.3. Specific end use(s)

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

Chemical name	United Kingdom
Propylene Glycol 57-55-6	TWA: 150 ppm TWA: 474 mg/m ³ TWA: 10 mg/m ³ STEL: 450 ppm STEL: 1422 mg/m ³ STEL: 30 mg/m ³
Sodium hydroxide 1310-73-2	STEL: 2 mg/m ³

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

<u>Property</u>	<u>Values</u>	<u>Method</u>	<u>Remarks</u>
Appearance			
Physical state	: Liquid		
Colour	: beige		
Odour	: characteristic		
Odour threshold	: No data available		
pH	: 3.3 - 4.3	CIPAC MT 75.3	solution (1%)
Melting point / freezing point °C	: ----		Not applicable
Boiling point / boiling range °C	: No data available		
Flash point °C	: > 230	EEC A.9	Maximum limit value
Evaporation rate	: No data available		
Flammability (solid, gas)	: Not applicable for liquids		
Upper/lower flammability or explosive limits	: No data available		
Vapour pressure kPa	: ----		Not applicable
Vapour density	: No data available		
Relative density	: 1.09 - 1.19	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	: 605	EEC A.15	
Decomposition temperature °C	: No data available		
Kinematic viscosity mm ² /s 40 °C	: 83.4	OECD 114	
Surface tension	: 40.3	OECD 115	20°C
Particle Size	: Not applicable		

9.2. Other information

Bulk density g/ml : ----

9.2.1. Information with regards to physical hazard classes

Explosive properties : Not an explosive
 Oxidising 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**

	<u>Values</u>	<u>Species</u>	<u>Method</u>	<u>Remarks</u>
Oral LD50 mg/kg	: > 2000	Rat	OECD 423	Maximum attainable concentration
Dermal LD50 mg/kg	: > 2000	Rat	OECD 402	
Inhalation LC50 mg/l	: >1.48	Rat	OECD 403	
Skin corrosion/irritation	: Non-irritating to the skin	Rabbit	OECD 404	
Serious eye damage/eye irritation	: Not irritating to eyes	Rabbit	OECD 405	
Sensitisation	: Not a skin sensitiser	Guinea pig	OECD 406	

Chronic toxicity**Germ cell mutagenicity****Chemical name**

Metazachlor (ISO) : Not classified
Quinmerac (ISO) : Not classified

Carcinogenicity**Chemical name**

Metazachlor (ISO) : Suspected of causing cancer
Quinmerac (ISO) : Not Carcinogenic

Reproductive toxicity**Chemical name**

Metazachlor (ISO) : Not toxic for the reproductive system
Quinmerac (ISO) : Not toxic for the reproductive system

STOT - Single Exposure**Chemical name**

Metazachlor (ISO) : No data available
Quinmerac (ISO) : No data available

STOT - Repeated Exposure**Chemical name**

Metazachlor (ISO) : No data available
Quinmerac (ISO) : No data available

Aspiration hazard**Chemical name**

Metazachlor (ISO) : No data available

Quinmerac (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

<u>Acute toxicity</u>	<u>Values</u>	<u>Species</u>	<u>Method</u>	<u>Remarks</u>
Fish 96-hour LC50 mg/l	: 12.7	Oncorhynchus mykiss	OECD 203	
Crustacea 48-hour EC50 mg/l	: 83	Daphnia magna	OECD 202	
Algae 72-hour EC50 mg/l	: 0.0767	P. subcapitata	OECD 201	
Other plants EC50 mg/l	: 0.0561	Lemna gibba	OECD 221	7 days

<u>Chronic aquatic toxicity</u>	<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	: 0.00972	Navicula pelliculosa	OECD 201	
Other plants NOEC mg/l	: 0.0032	Lemna	OECD 221	7 days

Terrestrial Toxicity

Birds Oral LD50 mg/kg

Chemical name

Metazachlor (ISO) : > 2000

Quinmerac (ISO) : > 2000

Bobwhite quail

Bees Oral LD50 µg/bee

Chemical name

Metazachlor (ISO) : > 72

Quinmerac (ISO) : > 108.51

EPPO 170

12.2. Persistence and degradability

Abiotic Degradation

Water DT50 days

Chemical name

Metazachlor (ISO) : 137.6

Quinmerac (ISO) : ----

BBA IV 4-1

OECD 111

pH 5.5-7.1

Stable pH 4,7,9

Soil DT50 days

Chemical name

Metazachlor (ISO) : 10.8

Quinmerac (ISO) : 10.4

BBA IV: 5-1

pH 5.7-7.2

Field

Biodegradation

Chemical name

Metazachlor (ISO) : Not readily biodegradable

Quinmerac (ISO) : Not readily biodegradable

12.3. Bioaccumulative potential

Partition Coefficient

(n-octanol/water) Log Pow

Values

Method

Remarks

Chemical name

Metazachlor (ISO)	: 2.5		
Quinmerac (ISO)	: <= -0.2	OECD 117	pH 7

Bioconcentration factor (BCF)**Chemical name**

Metazachlor (ISO)	:		Low
Quinmerac (ISO)	: ----		No data available

12.4. Mobility in soil**Adsorption/Desorption**

Chemical name	Values	Method	Remarks
Metazachlor (ISO)	: 110	OECD 106	KOC
Quinmerac (ISO)	: 0.82		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



* 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

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

Authorisations and/or restrictions on use:

This product does not contain substances subject to authorisation (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 Authorisation:

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 11-Sep-2025

Reason for revision General revision

Further information This material safety data sheet complies with the provisions of Regulation (EC) No 1907/2006, as amended by Regulation (EU) 2020/878.

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 GB-CLP Regulations UK SI 2019/720 and UK SI 2020/1567**Classification of the mixture**

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 Calculation method
Classification based on test data
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