Chelal AZ

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878
Issue date: 8/06/2026 Revision date: 8/06/2026 Supersedes version of: 4/05/2026 Version: 7.0

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

1.1. Product identifier

Product form	:	Mixture
Product name	:	Chelal AZ
Product group	:	Trade product
Other means of identification	:	Solution of zinc (II) and molybdenum (VI) chelated polyaminocarboxilic acid, which is included in the list of chelating agents and chelated oligo-elements (Regulation (EC) No 2019/1009. The product should be considered as a preparation in accordance with EC fertilizer regulations (Regulation (EC) No 2019/1009.

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

Relevant identified uses

Use of the substance/mixture	:	Fertilisers

1.3. Details of the supplier of the safety data sheet

BMS Micro-Nutrients NV
Rijksweg 32
be 2880 Bornem
Belgium
T +32/3 899 10 10
info@chelal.com, www.chelal.com

1.4. Emergency telephone number

No additional information available

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Not classified

Adverse physicochemical, human health and environmental effects

To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice.

2.2. Label elements

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

EUH-statements	:	EUH208 - Contains a mixture of 2-methyl-2H-isothiazol-3-one and 1,2-benzisothiazol-3(2H)-one. May produce an allergic reaction. EUH210 - Safety data sheet available on request.

2.3. Other hazards

Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

Component	
Substance(s) not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605	a mixture of 2-methyl-2H-isothiazol-3-one and 1,2-benzisothiazol-3(2H)-one

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Reaction mass of ZnEDTA, ZnDTPA and ZnHEEDTA	EC Index-No.: 275-554-1 REACH-no: 01-2120773690-49	10 – 20	Aquatic Chronic 3, H412
a mixture of 2-methyl-2H-isothiazol-3-one and 1,2-benzisothiazol-3(2H)-one	-	0,406 – 0,414	Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Chronic 2, H411

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

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : If you feel unwell, seek medical advice.
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact : Wash skin with plenty of water.
First-aid measures after eye contact : Rinse eyes with water as a precaution.
First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell.
Self protection of the first-aider : First aid workers will be equipped with suitable personal protective equipment.

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

Symptoms/effects after inhalation : None under normal conditions.
Symptoms/effects after skin contact : None under normal conditions.
Symptoms/effects after eye contact : None under normal conditions.
Symptoms/effects after ingestion : None under normal conditions.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.
Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard : No fire hazard.
Explosion hazard : No direct explosion hazard.
Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Advice for firefighters

Firefighting instructions : Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection.

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

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material damage.

For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.

Emergency procedures : Ventilate spillage area.

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".

Emergency procedures : Evacuate unnecessary personnel. Stop leak if safe to do so.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Absorb spilled material with sand or earth. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak without risks if possible.

Methods for cleaning up : Take up liquid spill into absorbent material.

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

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Not expected to present a significant hazard under anticipated conditions of normal use.

Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment.

Handling temperature : 5 – 30 °C

Hygiene measures : 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

Technical measures : Keep in a cool, well-ventilated place away from heat.

Storage conditions : Keep cool. Protect from sunlight.

Storage temperature : 5 – 30 °C

Packaging materials : Store always product in container of same material as original container.

Switzerland

Storage class (LK) : LK 10/12 - Liquids

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

National occupational exposure and biological limit values

Chelal AZ	
Belgium - Occupational Exposure Limits	
Molybdenum (soluble compounds) (long term)	0,5 mg/m³
France - Occupational Exposure Limits	
Molybdenum (soluble compounds) (long term; short term)	5; 10 mg/m³
Germany - Occupational Exposure Limits (Generic OEL data)	
zinc and inorganic compounds (long term inhalable & respirable fraction; short term inhalable & respirable fraction)	2 & 0,1; 4 & 0,4 mg/m³
Spain - Occupational Exposure Limits	
Molybdenum (soluble compounds) (long term respirable fraction)	0,5 mg/m³

Reaction mass of ZnEDTA, ZnDTPA and ZnHEEDTA	
Germany - Occupational Exposure Limits (Generic OEL data)	
zinc and inorganic compounds (long term inhalable & respirable fraction; short term inhalable & respirable fraction)	2 & 0,1; 4 & 0,4 mg/m³

8.2. Exposure controls

Appropriate engineering controls

Appropriate engineering controls:
Ensure good ventilation of the work station.

Personal protection equipment

Personal protective equipment:
Wear recommended personal protective equipment.
Personal protective equipment symbol(s):



Eye and face protection

Eye protection:
Safety glasses

Skin protection

Skin and body protection:
Wear suitable protective clothing

Hand protection:
Protective gloves

Respiratory protection

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

Environmental exposure controls

Environmental exposure controls:
Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Colour	:	dark brown.
Odour	:	odourless.
Odour threshold	:	Not available
Melting point	:	Not applicable
Freezing point	:	Not available
Boiling point	:	Not available
Flammability	:	Non flammable
Lower explosion limit	:	Not available
Upper explosion limit	:	Not available
Flash point	:	Not available
Auto-ignition temperature	:	Not available
Decomposition temperature	:	Not available
pH	:	8 – 8,5 (1% solution)
Viscosity, kinematic	:	Not available
Solubility	:	complete.
Partition coefficient n-octanol/water (Log Kow)	:	Not available
Vapour pressure	:	Not available
Vapour pressure at 50°C	:	Not available
Density	:	≈ 1,17 kg/l
Relative density	:	Not available
Relative vapour density at 20°C	:	Not available
Particle characteristics	:	Not applicable

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

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Reaction mass of ZnEDTA, ZnDTPA and ZnHEEDTA	
LD50 oral rat	> 5000 mg/kg bodyweight (OECD 423) result obtained on a similar substance: reaction mass of MnEDTA, MnDTPA and MnHEEDTA
LC50 Inhalation - Rat (Dust/Mist)	> 5 mg/l/4h (OECD 436)

Skin corrosion/irritation : Not classified
pH: 8 – 8,5 (1% solution)

a mixture of 2-methyl-2H-isothiazol-3-one and 1,2-benzisothiazol-3(2H)-one	
pH	(1% solution)

Serious eye damage/irritation : Not classified
pH: 8 – 8,5 (1% solution)

a mixture of 2-methyl-2H-isothiazol-3-one and 1,2-benzisothiazol-3(2H)-one	
pH	(1% solution)

Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified

Reaction mass of ZnEDTA, ZnDTPA and ZnHEEDTA	
NOAEL (animal/female, F0/P)	> 1000 mg/kg bodyweight Wistar rat; 50-60 days; OECD 422, result obtained on a similar substance: reaction mass of MnEDTA, MnDTPA and MnHEEDTA

STOT-single exposure : Not classified
STOT-repeated exposure : Not classified

Reaction mass of ZnEDTA, ZnDTPA and ZnHEEDTA	
NOAEL (subacute, oral, animal/male, 28 days)	> 1000 mg/kg bodyweight Wistar rat; OECD 422, result obtained on a similar substance: reaction mass of MnEDTA, MnDTPA and MnHEEDTA
NOAEL (subacute, oral, animal/female, 28 days)	> 1000 mg/kg bodyweight Wistar rat; 50-60 days; OECD 422, result obtained on a similar substance: reaction mass of MnEDTA, MnDTPA and MnHEEDTA

Aspiration hazard : Not classified

a mixture of 2-methyl-2H-isothiazol-3-one and 1,2-benzisothiazol-3(2H)-one	
Viscosity, kinematic	Not applicable

11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
Hazardous to the aquatic environment, short–term (acute) : Not classified
Hazardous to the aquatic environment, long–term (chronic) : Not classified

Reaction mass of ZnEDTA, ZnDTPA and ZnHEEDTA	
LC50 - Fish [1]	> 1050 mg/l Danio rerio (OECD 203)
EC50 - Crustacea [1]	> 1118 mg/l (24h & 48h OECD 202)
ErC50 algae	20,4 mg/l 72h (OECD 201)

12.2. Persistence and degradability

Chelal AZ	
Persistence and degradability	Rapidly degradable

Reaction mass of ZnEDTA, ZnDTPA and ZnHEEDTA	
Persistence and degradability	Inherently biodegradable.

a mixture of 2-methyl-2H-isothiazol-3-one and 1,2-benzisothiazol-3(2H)-one	
Persistence and degradability	Rapidly degradable

12.3. Bioaccumulative potential

Reaction mass of ZnEDTA, ZnDTPA and ZnHEEDTA	
Partition coefficient n-octanol/water (Log Kow)	< -10
Bioaccumulative potential	A toxicokinetic assessment was performed based on the available data of the substance. Based on the physical/chemical properties of the reaction mixture of ZnEDTA, ZnDTPA and ZnHEEDTA, absorption factors for this substance are derived to be 10% (oral), 10% (inhalation) and 10% (dermal) for risk assessment purposes. No significant bioaccumulation potential is expected.

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste) : Disposal must be done according to official regulations.
Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations : Disposal must be done according to official regulations.
Product/Packaging disposal recommendations : Disposal must be done according to official regulations.
Additional information : Do not re-use empty containers.
Ecological information : The waste of the product should be considered as hazardous as the product itself, with the likelihood of impacting the environment in the same way. Consider the handling and disposal of the waste as defined by the product itself.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

14.1. UN number or ID number

UN-No. (ADR)	:	Not applicable
UN-No. (IMDG)	:	Not applicable
UN-No. (IATA)	:	Not applicable
UN-No. (ADN)	:	Not applicable
UN-No. (RID)	:	Not applicable

14.2. UN proper shipping name

Proper Shipping Name (ADR)	:	Not applicable
Proper Shipping Name (IMDG)	:	Not applicable
Proper Shipping Name (IATA)	:	Not applicable
Proper Shipping Name (ADN)	:	Not applicable
Proper Shipping Name (RID)	:	Not applicable

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : Not applicable

IMDG

Transport hazard class(es) (IMDG) : Not applicable

IATA

Transport hazard class(es) (IATA) : Not applicable

ADN

Transport hazard class(es) (ADN) : Not applicable

RID

Transport hazard class(es) (RID) : Not applicable

14.4. Packing group

Packing group (ADR)	:	Not applicable
Packing group (IMDG)	:	Not applicable
Packing group (IATA)	:	Not applicable
Packing group (ADN)	:	Not applicable
Packing group (RID)	:	Not applicable

14.5. Environmental hazards

Other information : No supplementary information available

14.6. Special precautions for user

Overland transport

Not applicable

Transport by sea

Not applicable

Air transport

Not applicable

Inland waterway transport

Not applicable

Rail transport

Not applicable

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

EU-Regulations

REACH Annex XVII (Restriction List)

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (2024/590)

Not listed on the Ozone Depletion list (Regulation EU 2024/590)
Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 2024/590 on substances that deplete the ozone layer)

Dual-Use Regulation (428/2009)

Contains no substance subject to the COUNCIL REGULATION (EC) No 428/2009 of 5 May 2009 setting up a Community regime for the control of exports, transfer, brokering and transit of dual-use items.

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

National regulations

Germany

Water hazard class (WGK)	:	WGK 3, Highly hazardous to water (Classification according to AwSV, Annex 1).

Netherlands

SZW-lijst van kankerverwekkende stoffen	:	None of the components are listed
SZW-lijst van mutagene stoffen	:	None of the components are listed
SZW-lijst van reprotoxische stoffen – Borstvoeding	:	None of the components are listed
SZW-lijst van reprotoxische stoffen – Vruchtbaarheid	:	None of the components are listed
SZW-lijst van reprotoxische stoffen – Ontwikkeling	:	None of the components are listed

Spain

Royal Decree 665/1997	:	Is not subject to the Royal Decree 665/1997

15.2. Chemical safety assessment

No chemical safety assessment has been carried out
For the following substances of this mixture a chemical safety assessment has been carried out:
Reaction mass of ZnEDTA, ZnDTPA and ZnHEEDTA

SECTION 16: Other information

Abbreviations and acronyms:	
ACGIH	American Conference of Governement Industrial Hygienists
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

Abbreviations and acronyms:	
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
CAS-No.	Chemical Abstract Service number
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
COD	Chemical oxygen demand (COD)
CSA	Chemical safety assessment
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
ED	Endocrine disruptor
EN	European Standard
EWC	European waste catalogue
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
Log Kow	Partition coefficient n-octanol/water (Log Kow)
Log Pow	Partition coefficient n-octanol/water (Log Pow)
MAK	maximum workplace concentration
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
N.O.S.	Not Otherwise Specified
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
OSHA	Occupational Safety Health Administration
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
PPE	Personal protection equipment
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
TF	Technical function

Abbreviations and acronyms:	
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
TWA	Time Weighted Average
VOC	Volatile Organic Compounds
vPvB	Very Persistent and Very Bioaccumulative
UFI	Unique Formula Identifier

Full text of H- and EUH-statements:	
Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard, Category 2
Aquatic Chronic 3	Hazardous to the aquatic environment – Chronic Hazard, Category 3
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Skin Sens. 1	Skin sensitisation, Category 1
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
EUH208	Contains a mixture of 2-methyl-2H-isothiazol-3-one and 1,2-benzisothiazol-3(2H)-one. May produce an allergic reaction.
EUH210	Safety data sheet available on request.

Safety Data Sheet (SDS), EU

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.