

Total Hardness No. 2

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

1.1 - Product identifier

Trade name/designation Total Hardness No. 2

Chemical name

Product-type Mixture

Product code FN02-0003-000

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

Relevant identified uses - Reagent for water analysis

Uses advised against - Other

1.3 - Details of the supplier of the safety data sheet

MDE GmbH & Co. KG

Benzstr. 20

82178 Puchheim

Telephone : +49 (0)89 800 72 802

Email: msds@finwell-products.com

1.4 - Emergency telephone number

- Poison Control Center Munich

Tel: +49 (0) 89 / 19 24 0

Germany

24 hour service

Languages: German, English

please also call from: United Kingdom

SECTION 2: Hazards identification

2.1 - Classification of the substance or mixture

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

Eye Dam. 1	Serious eye damage, Category 1
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2.2 - Label elements

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

Contains: tetrasodium 2-[2-[bis(2-oxido-2-oxoethyl)amino]ethyl-(2-oxido-2-oxoethyl)amino] acetate dihydrate (CAS No.: 10378-23-1)

Signal word : Danger

Hazard pictograms



Hazard statements

H318	Causes serious eye damage
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Precautionary statements

P280	Wear protective gloves, protective clothing, eye protection.
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P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER, a doctor.
EUH-phrases	: None

2.3 - Other hazards

<u>PBT-substance.</u>	- No information available.
<u>vPvB-substance.</u>	- No information available.
<u>Other hazards which do not result in classification</u>	- No information available.

SECTION 3: Composition / information on ingredients

3.1 - Substances

Not applicable

3.2 - Mixtures

Chemical name	No	%	Class	Spec. concentrations
tetrasodium 2-[2-[bis(2-oxido-2-oxoethyl)amino]ethyl-(2-oxido-2-oxoethyl)amino] acetate dihydrate	CAS No. : 10378-23-1 Index No. : EC No. : 200-573-9	10 - 20	Acute Tox. 4 Inhalation - H332 Acute Tox. 4 Oral - H302 Eye Dam. 1 - H318	Not applicable

SECTION 4: First aid measures

4.1 - Description of first aid measures

<u>Following inhalation</u>	- Provide fresh air. - When in doubt or if symptoms are observed, get medical advice.
<u>Following skin contact</u>	- Wash immediately with: Water - When in doubt or if symptoms are observed, get medical advice.
<u>After eye contact</u>	- In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.
<u>After ingestion</u>	- Rinse mouth thoroughly with water. - Do NOT induce vomiting.

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

<u>Symptoms and effects - Following inhalation</u>	- No information available.
<u>Symptoms and effects - Following skin contact</u>	- No information available.
<u>Symptoms and effects - After eye contact</u>	- Serious eye damage/eye irritation
<u>Symptoms and effects - After ingestion</u>	- No information available.

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

- Treat symptomatically.

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SECTION 5: Firefighting measures

5.1 - Extinguishing media

Suitable extinguishing media

- ABC-powder
- Carbon dioxide (CO₂)
- Foam
- Extinguishing powder

Unsuitable extinguishing media

- Full water jet

5.2 - Special hazards arising from the substance or mixture

Special hazards arising from the substance or mixture

- No information available.

Hazardous decomposition products

- Hydrogen cyanide (hydrocyanic acid)
- Carbon dioxide (CO₂)
- Carbon monoxide
- Nitrogen oxides (NO_x)

5.3 - Advice for firefighters

- Co-ordinate fire-fighting measures to the fire surroundings.

SECTION 6: Accidental release measures

6.1 - Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

- Use personal protection equipment.

For emergency responders

- No information available.

6.2 - Environmental precautions

- No information available.

6.3 - Methods and material for containment and cleaning up

Methods and material for containment

- No information available.

Methods and material for cleaning up

- Take up mechanically.
- Wash with plenty of water.

Inappropriate techniques

- No information available.

6.4 - Reference to other sections

- Disposal: see section 13
- Personal protection equipment: see section 8

SECTION 7: Handling and storage

7.1 - Precautions for safe handling

Recommendation

- Avoid: Eye contact
- Avoid: Generation/formation of dust
- It is recommended to design all work processes always so that the following is excluded: Eye contact

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Advices on general occupational hygiene - No information available.

7.2 - Conditions for safe storage, including any incompatibilities

- No information available.

7.3 - Specific end use(s)

- Reagent for water analysis

SECTION 8: Exposure controls/personal protection

8.1 - Control parameters

8.2 - Exposure controls

Appropriate engineering controls - No information available.

Individual protection measures, such as personal protective equipment - Suitable protective clothing: lab coat



- Suitable eye protection: Eye glasses with side protection



- When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits.



- Suitable material: NBR (Nitrile rubber)

SECTION 9: Physical and chemical properties

9.1 - Information on basic physical and chemical properties

<u>Physical state</u>	Solid	<u>Appearance</u>	Tablets
<u>Colour</u>	White	<u>Odour</u>	odourless
Odour threshold		No data available	
pH		No data available	
Melting point		No data available	
Freezing point		No data available	
Boiling point		No data available	
Flash point		No data available	
Evaporation rate		No data available	
flammability		No data available	
Lower explosion limit		No data available	
Upper explosion limit		No data available	

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Vapour pressure	No data available
Vapour density	No data available
Relative density	No data available
Density	No data available
Solubility (Water)	very soluble
Solubility (Ethanol)	No data available
Solubility (Acetone)	No data available
Solubility (Organic solvents)	No data available
Log KOC	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Kinematic viscosity	No data available
Dynamic viscosity	No data available

9.2 - Other information

VOC content	No data available
Minimum ignition energy	No data available
Conductivity	No data available

SECTION 10: Stability and reactivity

10.1 - Reactivity

- This material is considered to be non-reactive under normal use conditions.

10.2 - Chemical stability

- The product is chemically stable under recommended conditions of storage, use and temperature.

10.3 - Possibility of hazardous reactions

- No hazardous reaction when handled and stored according to provisions.

10.4 - Conditions to avoid

- No information available.

10.5 - Incompatible materials

- No information available.

10.6 - Hazardous decomposition products

- Does not decompose when used for intended uses.

SECTION 11: Toxicological information

11.1 - Information on toxicological effects

Acute toxicity - Not classified

Toxicity : Mixture

LD50 oral (rat)	No data available
LD50 dermal (rat)	No data available
LD50 dermal (rabbit)	No data available

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LC50 inhalation (rat)	No data available
LC50 inhalation dusts and mists (rat)	No data available
LC50 inhalation vapours (rat)	No data available

- Based on available data, the classification criteria are not met.

Toxicity : Substances

tetrasodium 2-[2-[bis(2-oxido-2-oxoethyl)amino]ethyl-(2-oxido-2-oxoethyl)amino]acetate dihydrate (10378-23-1)

LD50 oral (rat)	1913 mg/kg ECHA anhydr.
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Skin corrosion/irritation - Not classified

Serious eye damage/eye irritation - Serious eye damage, Category 1 - Causes serious eye damage

- Risk of serious damage to eyes.
- Causes serious eye irritation.

Respiratory or skin sensitisation - Not classified

Germ cell mutagenicity - Not classified

Carcinogenicity - Not classified

Reproductive toxicity - Not classified

STOT-single exposure - Not classified

STOT-repeated exposure - Not classified

Aspiration hazard - Not classified

SECTION 12: Ecological information

12.1 - Toxicity

Toxicity : Mixture

EC50 48 hr crustacea	No data available
LC50 96 hr fish	No data available
ErC50 algae	No data available
ErC50 other aquatic plants	No data available
NOEC chronic fish	No data available
NOEC chronic crustacea	No data available
NOEC chronic algae	No data available
NOEC chronic other aquatic plants	No data available

- The substance/mixture does not fulfill the criteria of the acute aquatic toxicity according to Regulation (EC) No 1272/2008 [CLP], Annex I.

12.2 - Persistence and degradability

Biochemical oxygen demand (BOD)	No data available
Chemical oxygen demand (COD)	No data available

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% of biodegradation in 28 days	No data available
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- No information available.

12.3 - Bioaccumulative potential

Bioconcentration factor (BCF)	No data available
Log KOC	No data available

- No indication of bioaccumulation potential.

12.4 - Mobility in soil

- No information available.

12.5 - Results of PBT and vPvB assessment

- No information available.

- No information available.

12.6 - Other adverse effects

- No information available.

SECTION 13: Disposal considerations

13.1 - Waste treatment methods

Waste treatment methods - Dispose of waste according to applicable legislation.

Sewage disposal - No information available.

Special precautions for waste treatment - No information available.

Community or national or regional provisions - Dispose according to legislation.

SECTION 14: Transport information

14.1 - UN number

Not applicable

14.2 - UN proper shipping name

14.3 - Transport hazard class(es)

14.4 - Packing group

14.5 - Environmental hazards

Additional information - No dangerous good in sense of these transport regulations.

14.6 - Special precautions for user

14.7 - Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

SECTION 15: Regulatory information

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

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Substances REACH candidates None

Substances Annex XIV None

Substances Annex XVII None

VOC content No data available

15.2 - Chemical Safety Assessment

Chemical safety assessment carried out for the product - No information available.

SECTION 16: Other information

SDS versions

Version	Issue date	Description of the amendments
1	08.04.2019	MSDS creation

Abbreviations and acronyms - See overview table at www.euphrac.eu

Texts of the regulatory sentences

Acute Tox. 4 Inhalation	Acute toxicity (inhalative) - Category 4
Acute Tox. 4 Oral	Acute toxicity (oral) - Category 4
Eye Dam. 1	Serious eye damage, Category 1
H302	Harmful if swallowed
H318	Causes serious eye damage
H332	Harmful if inhaled

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

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