

## SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:  
Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

### Calcium Hardness No.2

Revision date 01-02-2025

Revision Number 1

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

### 1.1. Product identifier

**Product Code(s)** POL20CH2  
**Product Name** Calcium Hardness No.2  
**Pure substance/mixture** Mixture

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

**Recommended use** Reagent for water analysis  
**Uses advised against** Others

### 1.3. Details of the supplier of the safety data sheet

#### **Manufacturer**

Water-i.d. GmbH  
Daimlerstr. 20  
76344 Eggenstein, Germany  
Tel.: +49 (0) 721 78 20 29 0, Fax: +49 (0) 721 78 20 29 11  
Website: [www.water-id.com](http://www.water-id.com)  
EHS / Compliance: [lab@water-id.com](mailto:lab@water-id.com)

### 1.4. Emergency telephone number

**Emergency Telephone** +44 1235 239670  
English, Albanian, Bosnian, Bulgarian, Croatian, Czech, Danish, Dutch, Finnish, French, German, Greek, Hungarian, Italian, Latvian, Lithuanian, Norwegian, Polish, Portuguese, Romanian, Russian, Serbian, Slovak, Spanish, Swedish, Turkish and Ukrainian.

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008  
This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP]

### 2.2. Label elements

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP]

#### **Hazard statements**

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP]  
EUH210 - Safety data sheet available on request

### 2.3. Other hazards

No information available.

**SECTION 3: Composition/information on ingredients****3.1 Substances**

Not applicable

**3.2 Mixtures**

| Chemical name                                  | Weight-% | REACH registration number | EC No (EU Index No) | Classification according to Regulation (EC) No. 1272/2008 [CLP] | Specific concentration limit (SCL) | M-Factor | M-Factor (long-term) |
|--|----------|---------------------------|---------------------|---|------------------------------------|----------|----------------------|
| Ethanedioic acid, diammonium salt<br>1113-38-8 | 1-5      | No data available         | 214-202-3           | Acute Tox. 4 (H302)<br>Acute Tox. 4 (H312)                      |                                    |          |                      |

**Full text of H- and EUH-phrases: see section 16**Acute Toxicity Estimate

No information available

This product does not contain candidate substances of very high concern at a concentration  $\geq 0.1\%$  (Regulation (EC) No. 1907/2006 (REACH), Article 59)

**SECTION 4: First aid measures****4.1. Description of first aid measures**

|                     |   |
|---------------------|---|
| <b>Inhalation</b>   | Remove to fresh air.  |
| <b>Eye contact</b>  | Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a doctor. |
| <b>Skin contact</b> | Wash skin with soap and water. In the case of skin irritation or allergic reactions see a doctor.                 |
| <b>Ingestion</b>    | Rinse mouth.  |

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

**Symptoms** No information available.

**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.

**Large Fire** CAUTION: Use of water spray when fighting fire may be inefficient.

**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 and precautions 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.

**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** Ensure adequate ventilation.

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

### 7.2. Conditions for safe storage, including any incompatibilities

**Storage Conditions**

### 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**

| Chemical name     | Cyprus | Czech Republic | Denmark | Estonia | Finland                  |
|-------------------|--------|----------------|---------|---------|--------------------------|
| Ethanedioic acid, | -      | -              | -       | -       | TWA: 1 mg/m <sup>3</sup> |

|                              |  |  |  |  |                                   |
|------------------------------|--|--|--|--|-----------------------------------|
| diammonium salt<br>1113-38-8 |  |  |  |  | STEL: 3 mg/m <sup>3</sup><br>iho* |
|------------------------------|--|--|--|--|-----------------------------------|

**Biological occupational exposure limits**

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies

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

**8.2. Exposure controls****Personal protective equipment**

**Eye/face protection** No special protective equipment required.

**Skin and body protection** No special protective equipment required.

**Respiratory protection** No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

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

**Environmental exposure controls** No information available.

**SECTION 9: Physical and chemical properties****9.1. Information on basic physical and chemical properties**

**Physical state** Liquid  
**Appearance** aqueous solution  
**Colour** colourless  
**Odour** Odourless.  
**Odour threshold**

| <b>Property</b>                               | <b>Values</b>     | <b>Remarks • Method</b>  |
|---|-------------------|--------------------------|
| <b>Melting point / freezing point</b>         | No data available | None known               |
| <b>Boiling point / boiling range</b>          | No data available | None known               |
| <b>Flammability (solid, gas)</b>              | No data available | None known               |
| <b>Flammability Limit in Air</b>              |                   | None known               |
| <b>Upper flammability or explosive limits</b> | No data available |                          |
| <b>Lower flammability or explosive limits</b> | No data available |                          |
| <b>Flash point</b>                            | No data available | None known               |
| <b>Autoignition temperature</b>               | No data available | None known               |
| <b>Decomposition temperature</b>              |                   | None known               |
| <b>pH</b>                                     | 6.0               | None known               |
| <b>pH (as aqueous solution)</b>               | No data available | No information available |
| <b>Kinematic viscosity</b>                    | No data available | None known               |
| <b>Dynamic viscosity</b>                      | No data available | None known               |
| <b>Water solubility</b>                       | No data available | None known               |
| <b>Solubility(ies)</b>                        | No data available | None known               |
| <b>Partition coefficient</b>                  | No data available | None known               |
| <b>Vapour pressure</b>                        | No data available | None known               |
| <b>Relative density</b>                       | No data available | None known               |
| <b>Bulk density</b>                           | No data available |                          |

|                            |                   |            |
|----------------------------|-------------------|------------|
| Liquid Density             | No data available |            |
| Relative vapour density    | No data available | None known |
| Particle characteristics   |                   |            |
| Particle Size              |                   |            |
| Particle Size Distribution |                   |            |

**9.2. Other information**

9.2.1. Information with regards to physical hazard classes  
Not applicable

9.2.2. Other safety characteristics

**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****Information on likely routes of exposure****Product Information**

Inhalation Specific test data for the substance or mixture is not available.

Eye contact Specific test data for the substance or mixture is not available.

Skin contact Specific test data for the substance or mixture is not available.

Ingestion Specific test data for the substance or mixture is not available.

**Symptoms related to the physical, chemical and toxicological characteristics**

Symptoms No information available.

**Numerical measures of toxicity****Acute toxicity**

The following values are calculated based on chapter 3.1 of the GHS document

|                 |                 |
|-----------------|-----------------|
| ATEmix (oral)   | 10,504.20 mg/kg |
| ATEmix (dermal) | 23,109.20 mg/kg |

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Skin corrosion/irritation** No information available.

**Serious eye damage/eye irritation** No information available.

**Respiratory or skin sensitisation** No information available.

**Germ cell mutagenicity** No information available.

**Carcinogenicity** No information available.

**Reproductive toxicity** No information available.

**STOT - single exposure** No information available.

**STOT - repeated exposure** No information available.

**Aspiration hazard** No information available.

**11.2. Information on other hazards****11.2.1. Endocrine disrupting properties**

**Endocrine disrupting properties**

**11.2.2. Other information**

**Other adverse effects**

**SECTION 12: Ecological information****12.1. Toxicity**

**Ecotoxicity** The environmental impact of this product has not been fully investigated.

**Unknown aquatic toxicity** Contains 0 % of components with unknown hazards to the aquatic environment.

**12.2. Persistence and degradability**

Persistence and degradability

**12.3. Bioaccumulative potential**

Bioaccumulation No information available.

**12.4. Mobility in soil**

Mobility in soil

**12.5. Results of PBT and vPvB assessment**

PBT and vPvB assessment

| Chemical name                     | PBT and vPvB assessment         |
|-----------------------------------|---------------------------------|
| Ethanedioic acid, diammonium salt | The substance is not PBT / vPvB |

**12.6. Endocrine disrupting properties**

Endocrine disrupting properties

**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** Do not reuse empty containers.

**SECTION 14: Transport information****IATA**

14.1 UN number or ID number Not regulated

14.2

14.3 Transport hazard class(es) Not regulated

14.4 Packing group Not regulated

14.5 Environmental hazards Not applicable

14.6 Special precautions for user  
Special Provisions None

**IMDG**

14.1 UN number or ID number Not regulated

14.2

14.3 Transport hazard class(es) Not regulated

14.4 Packing group Not regulated

14.5 Marine pollutant Not applicable

14.6 Special precautions for user  
Special Provisions None

14.7 Maritime transport in bulk  
according to IMO instruments

**RID**

|                                   |                |
|-----------------------------------|----------------|
| 14.1 UN number or ID number       | Not regulated  |
| 14.2                              |                |
| 14.3 Transport hazard class(es)   | Not regulated  |
| 14.4 Packing group                | Not regulated  |
| 14.5 Environmental hazards        | Not applicable |
| 14.6 Special precautions for user |                |
| Special Provisions                | None           |

**ADR**

|                                   |                |
|-----------------------------------|----------------|
| 14.1 UN number or ID number       | Not regulated  |
| 14.2                              |                |
| 14.3 Transport hazard class(es)   | Not regulated  |
| 14.4 Packing group                | Not regulated  |
| 14.5 Environmental hazards        | Not applicable |
| 14.6 Special precautions for user |                |
| Special Provisions                | None           |

**SECTION 15: Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

**Water hazard class (WGK)** slightly hazardous to water (WGK 1)

**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

**Ozone-depleting substances (ODS) Regulation (EU) 2024/590**

Not applicable

**International Inventories**

|                      |                 |
|----------------------|-----------------|
| <b>TSCA</b>          | Complies        |
| <b>DSL/NDSL</b>      | Complies        |
| <b>EINECS/ELINCS</b> | Complies        |
| <b>ENCS</b>          | Does not comply |
| <b>IECSC</b>         | Complies        |
| <b>KECL</b>          | Complies        |
| <b>PICCS</b>         | Complies        |
| <b>AICS</b>          | Complies        |

**Legend:**

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List  
**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
**ENCS** - Japan Existing and New Chemical Substances  
**IECSC** - China Inventory of Existing Chemical Substances  
**KECL** - Korean Existing and Evaluated Chemical Substances



**PICCS** - Philippines Inventory of Chemicals and Chemical Substances  
**AICS** - Australian Inventory of Chemical Substances

## 15.2. Chemical safety assessment

### Chemical Safety Report

## SECTION 16: Other information

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

#### Full text of any hazard and/or precautionary statements referred to under Sections 2-15

H302 - Harmful if swallowed  
H312 - Harmful in contact with skin

#### 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

| Classification procedure  |                    |
|---|--------------------|
| Classification according to Regulation (EC) No. 1272/2008 [CLP] | Method Used        |
| Acute oral toxicity   | Calculation method |
| Acute dermal toxicity   | Calculation method |
| Acute inhalation toxicity - gas                                 | Calculation method |
| Acute inhalation toxicity - Vapour                              | Calculation method |
| Acute inhalation toxicity - dust/mist                           | Calculation method |
| Skin corrosion/irritation                                       | Calculation method |
| Serious eye damage/eye irritation                               | Calculation method |
| Respiratory sensitisation                                       | Calculation method |
| Skin sensitisation  | Calculation method |
| Mutagenicity  | Calculation method |
| Carcinogenicity   | Calculation method |
| Reproductive toxicity   | Calculation method |
| STOT - single exposure  | Calculation method |
| STOT - repeated exposure  | Calculation method |
| Acute aquatic toxicity  | Calculation method |
| Chronic aquatic toxicity  | Calculation method |
| Aspiration hazard   | Calculation method |
| Ozone   | Calculation method |

#### Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)  
U.S. Environmental Protection Agency ChemView Database  
European Food Safety Authority (EFSA)  
EPA (Environmental Protection Agency)  
Acute Exposure Guideline Level(s) (AEGl(s))  
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act  
U.S. Environmental Protection Agency High Production Volume Chemicals  
Food Research Journal  
Hazardous Substance Database  
International Uniform Chemical Information Database (IUCLID)  
Japan GHS Classification  
Australian National Industrial Chemicals Notification and Assessment Scheme (NICNAS)  
NIOSH (National Institute for Occupational Safety and Health)  
National Library of Medicine's ChemID Plus (NLM CIP)  
National Library of Medicine's PubMed database (NLM PUBMED)  
National Toxicology Program (NTP)

New Zealand's Chemical Classification and Information Database (CCID)  
Organisation for Economic Co-operation and Development Environment, Health, and Safety Publications  
Organisation for Economic Co-operation and Development High Production Volume Chemicals Programme  
Organisation for Economic Co-operation and Development Screening Information Data Set  
World Health Organization

**Revision date** 01-02-2025

**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**