

# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 29.04.2016

Revision: 29.04.2016

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

- **1.1 Product identifier**
- **Trade name:**
- **Article number:** 2574
- **Registration number** Mixture
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
- **Sector of Use** SU23 Electricity, steam, gas water supply and sewage treatment
- **Product category** PC37 Water treatment chemicals
- **Application of the substance / the mixture** Water treatment
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
  
  
  
  
  
  
  
  
- **Further information obtainable from:** Product safety department.
- **1.4 Emergency telephone number:**

### SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



GHS05 corrosion

Skin Corr. 1A H314 Causes severe skin burns and eye damage.

Eye Dam. 1 H318 Causes serious eye damage.

- 
- **2.2 Label elements**
  - **Labelling according to Regulation (EC) No 1272/2008**  
The product is classified and labelled according to the CLP regulation.
  - **Hazard pictograms** GHS05
  - **Signal word** Danger
  - **Hazard-determining components of labelling:**  
Sodium hydroxide
  - **Hazard statements**  
H314 Causes severe skin burns and eye damage.
  - **Precautionary statements**
    - P260 Do not breathe dust/fume/gas/mist/vapours/spray.
    - P280 Wear protective gloves/protective clothing/eye protection/face protection.
    - P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
    - P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
    - P302+P352 IF ON SKIN: Wash with plenty of water.
    - P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
  - **2.3 Other hazards**
  - **Results of PBT and vPvB assessment**
  - **PBT:** Not applicable.
  - **vPvB:** Not applicable.

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### SECTION 3: Composition/information on ingredients

- **3.2 Chemical characterisation: Mixtures**
- **Description:** Mixture of substances listed below with nonhazardous additions.

- **Dangerous components:**

|                                     |                  |                                                                                                         |        |
|-------------------------------------|------------------|---------------------------------------------------------------------------------------------------------|--------|
| CAS: 1310-73-2<br>EINECS: 215-185-5 | Sodium hydroxide |  Skin Corr. 1A, H314 | 25-50% |
| CAS: 497-19-8<br>EINECS: 207-838-8  | Sodium carbonate |  Eye Irrit. 2, H319  | 25-50% |

- **Additional information:** For the wording of the listed hazard phrases refer to section 16.

### SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **General information:** Immediately remove any clothing soiled by the product.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:**  
DO NOT DELAY!  
Immediately rinse with water.  
If skin irritation continues, consult a doctor.
- **After eye contact:**  
DO NOT DELAY!  
Check for and remove any contact lenses.  
Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:**  
DO NOT DELAY!  
Drink plenty of water and provide fresh air. Call for a doctor immediately.  
Do not induce vomiting; call for medical help immediately.  
If vomiting occurs spontaneously, keep head below hips to prevent aspiration.
- **4.2 Most important symptoms and effects, both acute and delayed**  
No further relevant information available.
- **Information for doctor:** Treat symptomatically and supportively.
- **4.3 Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

### SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.
- **5.2 Special hazards arising from the substance or mixture** No further relevant information available.
- **5.3 Advice for firefighters**
- **Protective equipment:**  
Do not inhale explosion gases or combustion gases.  
Wear self-contained respiratory protective device.  
Wear fully protective suit.
- **Additional information** Cool endangered receptacles with water spray.

### SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**  
Ensure adequate ventilation  
Wear protective equipment. Keep unprotected persons away.  
Avoid formation of dust.
- **6.2 Environmental precautions:** Do not allow to penetrate the ground/soil.

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- **6.3 Methods and material for containment and cleaning up:**

Pick up mechanically.  
Send for recovery or disposal in suitable receptacles.  
Ensure adequate ventilation.

- **6.4 Reference to other sections**

See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

### SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**

Ensure good ventilation/exhaustion at the workplace.  
Prevent formation of dust.  
Avoid direct contact (skin/eye contact, ingestion and/or inhalation of fume/mist/dust) with the product.  
Safety showers and eye wash facilities should be available at the work area.

- **7.2 Conditions for safe storage, including any incompatibilities**

- **Storage:**

- **Requirements to be met by storerooms and receptacles:**

Prevent any seepage into the ground.  
Do not store in aluminium, copper, zinc containers.

- **Information about storage in one common storage facility:** Store away from foodstuffs.

- **Further information about storage conditions:**

Keep container tightly sealed.  
Store in cool, dry conditions in well sealed receptacles.  
Store in a bonded area.

- **7.3 Specific end use(s)** No further relevant information available.

### SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.

- **8.1 Control parameters**

- **Ingredients with limit values that require monitoring at the workplace:**

|                                   |
|-----------------------------------|
| <b>1310-73-2 Sodium hydroxide</b> |
|-----------------------------------|

|                                             |
|---------------------------------------------|
| WEL   Short-term value: 2 mg/m <sup>3</sup> |
|---------------------------------------------|

- **Additional information:** The lists valid during the making were used as basis.

- **8.2 Exposure controls**

- **Personal protective equipment:**

Select PPE appropriate for the operations taking place taking into account the product properties.

- **General protective and hygienic measures:**

Do not eat, drink, smoke or sniff while working.  
Take note of assigned Workplace Exposure Limits.  
Keep away from foodstuffs, beverages and feed.  
Immediately remove all soiled and contaminated clothing  
Wash hands before breaks and at the end of work.  
Avoid contact with the eyes and skin.  
Do not inhale dust / smoke / mist.

- **Respiratory protection:**

Use suitable respiratory protective device in case of insufficient ventilation.  
Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.  
If respiratory protection is required, institute a complete respiratory protection program including selection, fit testing, training, maintenance and inspection.

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**Trade name:**

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**· Protection of hands:**

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

**· Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

**· Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

**· Eye protection:**

Tightly sealed goggles

**· Body protection:**

Alkaline resistant protective clothing

Body protection must be chosen depending on product properties, activity and possible exposure.

### SECTION 9: Physical and chemical properties

**· 9.1 Information on basic physical and chemical properties****· General Information****· Appearance:**

|                           |                 |
|---------------------------|-----------------|
| <b>Form:</b>              | Solid           |
| <b>Colour:</b>            | White           |
| <b>· Odour:</b>           | Mild            |
| <b>· Odour threshold:</b> | Not determined. |

**· pH-value (40 g/l) at 20 °C:** 12

**· Change in condition**

|                                     |               |
|-------------------------------------|---------------|
| <b>Melting point/Melting range:</b> | Undetermined. |
| <b>Boiling point/Boiling range:</b> | Undetermined. |

**· Flash point:** Not applicable.

**· Flammability (solid, gaseous):** Not determined.

**· Ignition temperature:**

**Decomposition temperature:** Not determined.

**· Self-igniting:** Product is not self-igniting.

**· Danger of explosion:** Product does not present an explosion hazard.

**· Explosion limits:**

|               |                 |
|---------------|-----------------|
| <b>Lower:</b> | Not determined. |
| <b>Upper:</b> | Not determined. |

**· Vapour pressure:** Not applicable.

**· Density at 20 °C:** 1.9 g/cm<sup>3</sup>

**· Relative density** Not determined.

**· Vapour density** Not applicable.

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|                                                   |                                            |
|---------------------------------------------------|--------------------------------------------|
| · <b>Evaporation rate</b>                         | Not applicable.                            |
| · <b>Solubility in / Miscibility with water:</b>  | Soluble.                                   |
| · <b>Partition coefficient (n-octanol/water):</b> | Not determined.                            |
| · <b>Viscosity:</b>                               |                                            |
| <b>Dynamic:</b>                                   | Not applicable.                            |
| <b>Kinematic:</b>                                 | Not applicable.                            |
| · <b>9.2 Other information</b>                    | No further relevant information available. |

### SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**  
No decomposition if used and stored according to specifications.
- **10.3 Possibility of hazardous reactions**  
The product is a strong base, it reacts violently with acid and is corrosive in moist air to metals like zinc, aluminium, tin and lead forming a combustible/explosive gas (hydrogen).  
Reacts with ammonium salts to produce ammonia, causing fire hazard. Attacks some forms of plastics, rubber or coatings.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:**  
Strong acids.  
Substances specifically listed in section 10.3 as incompatible.
- **10.6 Hazardous decomposition products:** Metal oxide.

### SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity** Based on available data, the classification criteria are not met.
- **Primary irritant effect:**
- **Skin corrosion/irritation**  
Causes severe skin burns and eye damage.
- **Serious eye damage/irritation**  
Causes serious eye damage.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **Other information (about experimental toxicology):**  
Inhalation of an aerosol of the product may cause lung oedema. The symptoms of lung oedema often do not become manifest until a few hours have passed and they are aggravated by physical effort. Rest and medical observation are therefore essential.
- **Additional toxicological information:**  
ROUTES OF EXPOSURE: Serious local effects by all routes of exposure.  
EFFECTS OF SHORT-TERM EXPOSURE: The product is corrosive to the eyes, the skin and the respiratory tract. Corrosive on ingestion.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

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### SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** Product is not expected to bioaccumulate.
- **12.4 Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**  
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water  
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.  
Must not reach sewage water or drainage ditch undiluted or unneutralised.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

### SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation**  
Recommended Hierarchy of Controls:
  - Minimise waste;
  - Reuse if not contaminated;
  - Recycle, if possible; or
  - Safe disposal (if all else fails).
 Contact waste processors for recycling information.  
Must not be disposed together with household garbage. Do not allow product to reach sewage system.  
Used, degraded or contaminated product may be classified as hazardous waste. Anyone classifying hazardous waste and determining its fate must be qualified in accordance with state and international legislation.
- **European waste catalogue**  
Waste key numbers in accordance with the European Waste Catalogue (EWC) are origin-referred defined. Since this product is used in several industries, no waste key can be provided by the supplier. The waste key number should be determined in arrangement with your waste disposal partner or the responsible authority.
- **Uncleaned packaging:**
- **Recommendation:**  
Container remains hazardous when empty. Continue to observe all precautions.  
Do not mix with other waste streams.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

### SECTION 14: Transport information

- |                                                                                                               |                                                        |
|---------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|
| <ul style="list-style-type: none"> <li>· <b>14.1 UN-Number</b></li> <li>· <b>ADR, IMDG, IATA</b></li> </ul>   | UN3262                                                 |
| <ul style="list-style-type: none"> <li>· <b>14.2 UN proper shipping name</b></li> <li>· <b>ADR</b></li> </ul> | 3262 CORROSIVE SOLID, BASIC, INORGANIC, N.O.S. mixture |
| <ul style="list-style-type: none"> <li>· <b>IMDG, IATA</b></li> </ul>                                         | CORROSIVE SOLID, BASIC, INORGANIC, N.O.S. mixture      |

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· **14.3 Transport hazard class(es)**

· **ADR, IMDG, IATA**



· **Class** 8 Corrosive substances.  
 · **Label** 8

· **14.4 Packing group**

· **ADR, IMDG, IATA** II

· **14.5 Environmental hazards:** Not applicable.

· **14.6 Special precautions for user**

Warning: Corrosive substances.  
 · **Danger code (Kemler):** 80  
 · **EMS Number:** F-A,S-B  
 · **Segregation groups** Alkalis  
 · **Stowage Category** B  
 · **Segregation Code** SG35 Stow "separated from" acids.

· **14.7 Transport in bulk according to Annex II of Marpol and the IBC Code**

Not applicable.

· **Transport/Additional information:**

· **ADR**

· **Limited quantities (LQ)** 1 kg  
 · **Excepted quantities (EQ)** Code: E2  
 Maximum net quantity per inner packaging: 30 g  
 Maximum net quantity per outer packaging: 500 g  
 · **Transport category** 2  
 · **Tunnel restriction code** E

· **IMDG**

· **Limited quantities (LQ)** 1 kg  
 · **Excepted quantities (EQ)** Code: E2  
 Maximum net quantity per inner packaging: 30 g  
 Maximum net quantity per outer packaging: 500 g

· **UN "Model Regulation":**

UN 3262 CORROSIVE SOLID, BASIC, INORGANIC, N.O.S. MIXTURE, 8, II

### SECTION 15: Regulatory information

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

· **Directive 2012/18/EU**

· **Named dangerous substances - ANNEX I** None of the ingredients is listed.

· **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Relevant phrases**

H314 Causes severe skin burns and eye damage.

H319 Causes serious eye irritation.

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**· Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)  
IMDG: International Maritime Code for Dangerous Goods  
IATA: International Air Transport Association  
GHS: Globally Harmonised System of Classification and Labelling of Chemicals  
EINECS: European Inventory of Existing Commercial Chemical Substances  
ELINCS: European List of Notified Chemical Substances  
CAS: Chemical Abstracts Service (division of the American Chemical Society)  
LD50: Lethal dose, 50 percent  
PBT: Persistent, Bioaccumulative and Toxic  
vPvB: very Persistent and very Bioaccumulative  
LC50: Lethal concentration, 50 percent  
SVHC: Substances of Very High Concern  
Skin Corr. 1A: Skin corrosion/irritation – Category 1A  
Eye Dam. 1: Serious eye damage/eye irritation – Category 1  
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

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