

**Safety Data Sheet**

according to Regulation (EC) No. 1907/2006 (REACH)  
 according to Regulation (EU) Nr. 2020/878  
 na 2

Revision date: 07.01.2025

Print date: 07.01.2025

Version: 5.5

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

**1.1. Product identifier**

Trade name/designation na 2  
 UFI: ED40-Y0Y9-2003-JT4S

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

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

**supplier (manufacturer/importer/downstream user/distributor)**  
 technotrans solutions GmbH  
 Scherl 10 Telephone: +49 2354 7060 0  
 D-58540 Meinerzhagen Telefax: +49 2354 7060 150

**Department responsible for information:**

E-mail [info-solutions@technotrans.de](mailto:info-solutions@technotrans.de)

**1.4. Emergency telephone number**

Emergency telephone number Giftnotruf Berlin +49 (0) 30 30686700

**SECTION 2: Hazards identification**

**2.1. Classification of the substance or mixture**

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

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

Met. Corr. 1 / H290	Corrosive to metals	May be corrosive to metals.
Skin Corr. 1A / H314	Skin corrosion/irritation	Causes severe skin burns and eye damage.

**2.2. Label elements**

The product is classified and labelled according to EC directives or corresponding national laws.

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

**Hazard pictograms**



**Danger**

**Hazard statements**

H314 Causes severe skin burns and eye damage.  
 H290 May be corrosive to metals.

**Precautionary statements**

P280 Wear protective gloves and eye/face protection.  
 P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].  
 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 or doctor/ physician.

**Hazard components for labelling**

Sodium hydroxide

**Supplemental hazard information**

not applicable

**2.3. Other hazards**

No information available.

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

**3.2. Mixtures**

**Description**

**Hazardous ingredients**

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

EC No. REACH No.

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CAS No. Index No.	Designation classification: // Remark	weight-%
215-185-5	01-2119457892-27	
1310-73-2	Sodium hydroxide	25 - 50
011-002-00-6	Skin Corr. 1A H314 Specific concentration limit (SCL): Skin Corr. 1A H314 >= 5 / Skin Corr. 1B H314 >= 2 / Skin Irrit. 2 H315 >= 0,5 / Eye Irrit. 2 H319 >= 0,5	

**Additional information**

Full text of classification: see section 16

**SECTION 4: First aid measures**

**4.1. Description of first aid measures**

**General information**

In all cases of doubt, or when symptoms persist, seek medical advice.  
 In case of unconsciousness give nothing by mouth, place in recovery position and seek medical advice.

**In case of inhalation**

Remove casualty to fresh air and keep warm and at rest.  
 In case of irregular breathing or respiratory arrest provide artificial respiration.

**Following skin contact**

Take off immediately all contaminated clothing.  
 Wash immediately with: Water  
 Medical treatment necessary.

**After eye contact**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 Seek medical advice immediately.

**Following ingestion**

If swallowed, rinse mouth with water (only if the person is conscious).  
 Let water be drunken in little sips (dilution effect). Seek medical advice immediately.  
 Keep victim calm.  
 Do NOT induce vomiting.

**Self-protection of the first aider**

First aider: Pay attention to self-protection!

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

In all cases of doubt, or when symptoms persist, seek medical advice.

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

First Aid, decontamination, treatment of symptoms.

**SECTION 5: Firefighting measures**

**5.1. Extinguishing media**

**Suitable extinguishing media**

carbon dioxide, Powder, spray mist, (water), Foam

**Unsuitable extinguishing media**

strong water jet

**5.2. Special hazards arising from the substance or mixture**

Inhaling hazardous decomposing products can cause serious health damage.

**5.3. Advice for firefighters**

Wear a self-contained breathing apparatus and chemical protective clothing.

**Additional information**

Cool closed containers that are near the source of the fire. Do not allow water used to extinguish fire to enter drains, ground or waterways.

**SECTION 6: Accidental release measures**

**6.1. Personal precautions, protective equipment and emergency procedures**

Use personal protection equipment. Provide adequate ventilation. Do not breathe vapours.

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**6.2. Environmental precautions**

Do not allow to enter into surface water or drains. If the product contaminates lakes, rivers or sewages, inform competent authorities in accordance with local regulations.

**6.3. Methods and material for containment and cleaning up**

Isolate leaked material using non-flammable absorption agent (e.g. sand, earth, vermiculit, diatomaceous earth) and collect it for disposal in appropriate containers in accordance with the local regulations (see section 13).

**6.4. Reference to other sections**

Observe protective provisions (see section 7 and 8).

**SECTION 7: Handling and storage****7.1. Precautions for safe handling****Advices on safe handling**

Avoid contact with eyes and skin. If handled uncovered, arrangements with local exhaust ventilation should be used if possible. Handle and open container with care. When using do not eat, drink or smoke. Avoid the formation of aerosol.

**7.2. Conditions for safe storage, including any incompatibilities****Packaging materials:**

Unsuitable container/equipment material: Metal

**Requirements for storage rooms and vessels**

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

**Hints on joint storage**

Do not store together with: Acid

**Further information on storage conditions**

Take care of instructions on label.

**7.3. Specific end use(s)**

Observe technical data sheet. Observe instructions for use.

**SECTION 8: Exposure controls/personal protection****8.1. Control parameters****Occupational exposure limit values**

not applicable

**DNEL:**

Sodium hydroxide

Index No. 011-002-00-6 / EC No. 215-185-5 / CAS No. 1310-73-2

DNEL long-term inhalative (local), Workers: 1 mg/m<sup>3</sup>

DNEL acute inhalative (local), Consumer: 1 mg/m<sup>3</sup>

**8.2. Exposure controls**

Provide good ventilation. This can be achieved with local or room suction.

**Personal protection equipment****Respiratory protection**

Use only respiratory protection equipment with CE-symbol including four digit test number.

**Hand protection**

For prolonged or repeated handling the following glove material must be used: NBR (Nitrile rubber)

Thickness of the glove material > 0,4 mm ; Breakthrough time: > 480 min.

Observe the instructions and details for use, storage, maintenance and replacement provided by the protective glove manufacturer. Penetration time of glove material depending on intensity and duration of exposure to skin. Recommended glove articles EN ISO 374

Barrier creams can help protecting exposed skin areas. In no case should they be used after contact.

**Eye/face protection**

Wear closely fitting protective glasses in case of splashes.

**Body protection**

Wear suitable protective clothing, gloves and eye/face protection.

**Protective measures**

After contact clean skin thoroughly with water and soap or use appropriate cleanser.

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**Environmental exposure controls**

Do not allow to enter into surface water or drains. See section 7. No additional measures necessary.

**SECTION 9: Physical and chemical properties**

9.1. **Information on basic physical and chemical properties**

<b>Physical state:</b>	<b>Liquid</b>
<b>Colour:</b>	<b>colourless</b>
<b>Odour:</b>	<b>odourless</b>
<b>Odour threshold:</b>	<b>not applicable</b>
<b>Melting point/freezing point:</b>	<b>not applicable</b>
<b>Initial boiling point and boiling range:</b>	<b>100 °C</b> Source: water
<b>Flammability:</b>	<b>not applicable</b>
<b>Lower and upper explosion limit:</b>	
<b>Lower explosion limit:</b>	<b>not applicable</b>
<b>Upper explosion limit:</b>	<b>not applicable</b>
<b>Flash point:</b>	<b>not applicable</b>
<b>Auto-ignition temperature:</b>	<b>not applicable</b>
<b>Decomposition temperature:</b>	<b>not applicable</b>
<b>pH at 20 °C:</b>	<b>14 / 45,0 weight-%</b>
<b>Cinematic viscosity (40°C):</b>	<b>13,8 mm<sup>2</sup>/s</b>
<b>Viscosity at 20 °C:</b>	<b>&lt; 20 mPa* s</b>
<b>Solubility(ies):</b>	
<b>Water solubility at 20 °C:</b>	<b>999</b>
<b>Partition coefficient: n-octanol/water:</b>	<b>see section 12</b>
<b>Vapour pressure at 20 °C:</b>	<b>11 mbar</b>
<b>Density and/or relative density:</b>	
<b>Density at 20 °C:</b>	<b>1,48 g/cm<sup>3</sup></b>
<b>Relative vapour density:</b>	<b>not applicable</b>
<b>particle characteristics:</b>	<b>not applicable</b>

9.2. **Other information**

<b>Solid content:</b>	<b>45,00 weight-%</b>
<b>solvent content:</b>	
<b>Organic solvents:</b>	<b>0 weight-%</b>
<b>Water:</b>	<b>0 weight-%</b>

**SECTION 10: Stability and reactivity**

10.1. **Reactivity**

10.2. **Chemical stability**

Stable when applying the recommended regulations for storage and handling. Further information on correct storage: refer to section 7.

10.3. **Possibility of hazardous reactions**

Keep away from strong acids, strong bases and strong oxidizing agents to avoid exothermic reactions.

10.4. **Conditions to avoid**

Stable when applying the recommended regulations for storage and handling. Further information on correct storage: refer to section 7.

10.5. **Incompatible materials**

No information available.

10.6. **Hazardous decomposition products**

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Hazardous decomposition byproducts may form with exposure to high temperatures. e.g.: Hydrogen

**SECTION 11: Toxicological information**

**11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008**

**Acute toxicity**

Sodium hydroxide  
 oral, LDLo., Rat: 500 mg/kg

**Skin corrosion/irritation; Serious eye damage/eye irritation**

Causes severe skin burns and eye damage.

Sodium hydroxide solution 45%  
 Skin (4 h)

Sodium hydroxide  
 Skin  
 eyes

Causes severe skin burns and eye damage.

**Respiratory or skin sensitisation**

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

**CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**

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

**STOT-single exposure; 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.

**Practical experience/human evidence**

**Overall assessment on CMR properties**

The ingredients in this mixture do not meet the criteria for classification as CMR category 1A or 1B according to CLP.

**Remark**

There is no information available on the preparation itself.

**11.2. Information on other hazards**

**Endocrine disrupting properties**

No information available.

**SECTION 12: Ecological information**

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

Do not allow to enter into surface water or drains.

**12.1. Toxicity**

Sodium hydroxide solution 45%

Fish toxicity, LC50, Gambusia affinis (Mosquito fish): 125 mg/L (96 h)

Acute (short-term) daphnia toxicity, EC50, Daphnia magna (Big water flea): 76 mg/L (24 h)

Sodium hydroxide

Fish toxicity, LC50, Oncorhynchus mykiss (Rainbow trout): 45,4 mg/L (96 h)

Daphnia toxicity, EC50, Daphnia magna (Big water flea): 40,4 mg/L (48 h)

Acute (short-term) fish toxicity, LC50., Lepomis macrochirus (Bluegill): 99 mg/L (48 h)

**Long-term Ecotoxicity**

Toxicological data are not available.

**12.2. Persistence and degradability**

Toxicological data are not available.

**12.3. Bioaccumulative potential**

Sodium hydroxide

Partition coefficient: n-octanol/water:

**Bioconcentration factor (BCF)**

Toxicological data are not available.

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**12.4. Mobility in soil**

Toxicological data are not available.

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

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

**12.6. Endocrine disrupting properties**

No information available.

**12.7. Other adverse effects**

No information available.

**SECTION 13: Disposal considerations**

**13.1. Waste treatment methods**

**Appropriate disposal / Product Recommendation**

Do not allow to enter into surface water or drains. This material and its container must be disposed of in a safe way. Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.

**Appropriate disposal / Package Recommendation**

Non-contaminated packages may be recycled. Vessels not properly emptied are special waste.

**SECTION 14: Transport information**

**14.1. UN number or ID number**

UN 1824

**14.2. UN proper shipping name**

Land transport (ADR/RID):	Sodium hydroxide solution
Sea transport (IMDG):	SODIUM HYDROXIDE SOLUTION
Air transport (ICAO-TI / IATA-DGR):	Sodium hydroxide solution

**14.3. Transport hazard class(es)**

8

**14.4. Packing group**

II

**14.5. Environmental hazards**

Land transport (ADR/RID)	not applicable
Marine pollutant	not applicable

**14.6. Special precautions for user**

Transport always in closed, upright and safe containers. Make sure that persons transporting the product know what to do in case of an accident or leakage.  
 Advices on safe handling: see parts 6 - 8

**Further information**

**Land transport (ADR/RID)**

Tunnel restriction code	E
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**Sea transport (IMDG)**

EmS-No.	F-A, S-B
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**14.7. Maritime transport in bulk according to IMO instruments**

No transport as bulk according IBC - Code.

**SECTION 15: Regulatory information**

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

**EU legislation**

**Directive 2010/75/EU on industrial emissions [Industrial Emissions Directive]**

VOC-value (in g/L): 0

**National regulations**

**Restrictions of occupation**

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Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.  
 Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).

**Substance/product listed in the following inventories:**

- AICS keine Information (AICSK-EN.rtf)
- DSL keine Information (DSLK-EN.rtf)
- EHS no information (EHS-EN.rtf)
- IECSC keine Information (IECSCK-EN.rtf)
- KECI keine Information (KECIK-EN.rtf)
- MITI keine Information (MITIK-EN.rtf)
- NZLoC no information (NZLoCK-EN.rtf)
- PICCS keine Information (PICCSK-EN.rtf)
- TCSI no information (TCSIK-EN.rtf)
- No information of listing in TOXIC SUBSTANCES CONTROL ACT (TSCA)

15.2. **Chemical Safety Assessment**

**For the following substances of this mixture a chemical safety assessment has been carried out:**

EC No. CAS No.	Designation	REACH No.
215-185-5 1310-73-2	Sodium hydroxide	01-2119457892-27

**SECTION 16: Other information**

**Full text of classification in section 3:**

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

**Classification procedure**

Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

Met. Corr. 1                      Corrosive to metals                      On basis of test data.  
 Skin Corr. 1A                      Skin corrosion/irritation                      Calculation method.

**Abbreviations and acronyms**

- ADR                      European Agreement concerning the International Carriage of Dangerous Goods by Road
- OEL                      Occupational Exposure Limit Value
- BLV                      Biological Limit Value
- CAS                      Chemical Abstracts Service
- CLP                      Classification, Labelling and Packaging
- CMR                      Carcinogenic, Mutagenic and Reprotoxic
- DIN                      German Institute for Standardization / German industrial standard
- DNEL                      Derived No-Effect Level
- EAKV                      European Waste Catalogue Directive
- EC                      Effective Concentration
- EC                      European Community
- EN                      European Standard
- IATA-DGR                      International Air Transport Association – Dangerous Goods Regulations
- IBC Code                      International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
- ICAO-TI                      International Civil Aviation Organization Technical Instructions for the Safe Transport of Dangerous Goods by Air
- IMDG Code                      International Maritime Code for Dangerous Goods
- ISO                      International Organization for Standardization
- LC                      Lethal Concentration
- LD                      Lethal Dose
- MARPOL                      Maritime Pollution: The International Convention for the Prevention of Pollution from Ships
- OECD                      Organisation for Economic Cooperation and Development
- PBT                      persistent, bioaccumulative, toxic
- PNEC                      Predicted No Effect Concentration
- REACH                      Registration, Evaluation, Authorisation and Restriction of Chemicals
- RID                      Regulations concerning the International Carriage of Dangerous Goods by Rail
- UN                      United Nations
- VOC                      Volatile Organic Compounds
- vPvB                      very persistent and very bioaccumulative

**Further information**

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

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The information supplied on this safety data sheet complies with our current level of knowledge as well as with national and EU regulations. Without written approval, the product must not be used for purposes different from those mentioned in section 1. It is always the user's duty to take any necessary measures for meeting the requirements laid down by local rules and regulations. The details in this safety data sheet describe the safety requirements of our product and are not to be regarded as guaranteed attributes of the product.