

Safety Data Sheet

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

Revision date: 03.02.2023

Print date: 03.02.2023

Version: 5.3

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

1.1. **Product identifier**

Trade name/designation na 2

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

D-58540 Meinerzhagen

Telephone: +49 2354 7060 0

Telefax: +49 2354 7060 150

E-mail

info-solutions@technotrans.de

1.4. **Emergency telephone number**

Emergency telephone number

Poison Centre 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 1310-73-2 011-002-00-6	01-2119457892-27 sodium hydroxide Skin Corr. 1A H314 / Eye Dam. 1 H318 / Met. Corr. 1 H290 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	25 - 50

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/m³

DNEL acute inhalative (local), Consumer: 1 mg/m³

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

Physical state:	Liquid
Colour:	colourless
Odour:	odourless
Odour threshold:	not applicable
Melting point/freezing point:	not applicable
Initial boiling point and boiling range:	100 °C Source: water
Flammability:	not applicable
Lower and upper explosion limit:	
Lower explosion limit:	not applicable
Upper explosion limit:	not applicable
Flash point:	not applicable
Auto-ignition temperature:	not applicable
Decomposition temperature:	not applicable
pH at 20 °C:	14 / 45,0 weight-%
Cinematic viscosity (40°C):	13,8 mm²/s
Viscosity at 20 °C:	< 20 mPa* s
Solubility(ies):	
Water solubility at 20 °C:	999
Partition coefficient: n-octanol/water:	see section 12
Vapour pressure at 20 °C:	11 mbar
Density and/or relative density:	
Density at 20 °C:	1,48 g/cm³
Relative vapour density:	not applicable
particle characteristics:	not applicable

9.2. Other information

Solid content:	45,00 weight-%
solvent content:	
Organic solvents:	0 weight-%
Water:	0 weight-%

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

Sea transport (IMDG)

EmS-No.

F-A, S-B

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.
Eye Dam. 1 / H318	Serious eye damage/eye irritation	Causes serious eye damage.
Met. Corr. 1 / H290	Corrosive to metals	May be corrosive to metals.

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

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Further information

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

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.