

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



Caustic Soda Lye 32-33%

Version: 2.2

Revision Date 11.10.2013

Print Date 03.12.2013

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

1.1 Product identifier

Trade name : Caustic Soda Lye 32-33%

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

Use of the Sub-stance/Mixture : Cleaning agent for metal surfaces, Agent for effluent treatment.
Recommended restrictions on use : None known.

1.3 Details of the supplier of the safety data sheet

Company : Chemetall Ltd
Denbigh Road
Bletchley Milton Keynes MK1 1PB
Telephone : 01908 649333
Telefax : 01908 373939

Contact person product safety
Telephone : +32(0)3.450.37.15
E-mail address : ehs.bnl@chemetall.com

1.4 Emergency telephone number

Emergency telephone number : 01908 649333

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Corrosive to metals, Category 1 H290: May be corrosive to metals.
Skin corrosion, Category 1A H314: Causes severe skin burns and eye damage.

Classification (67/548/EEC, 1999/45/EC)

Corrosive R35: Causes severe burns.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

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Hazard pictograms

:



Signal word

:

Danger

Hazard statements

:

H290
H314

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

Precautionary statements

:

Prevention:

P260

Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.

P280

Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:

P301 + P330 + P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ 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.

Hazardous components which must be listed on the label:

- 1310-73-2 Sodium Hydroxide

Labelling according to EC Directives (67/548/EEC)

Hazard pictograms

:



Corrosive

R-phrase(s)

:

R35

Causes severe burns.

S-phrase(s)

:

S26

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S27

Take off immediately all contaminated

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S36/37/39 clothing.
Wear suitable protective clothing, gloves and eye/face protection.

S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Hazardous components which must be listed on the label:

- 1310-73-2 Sodium Hydroxide

2.3 Other hazards

The information required is contained in this Material Safety Data Sheet.

SECTION 3: Composition/information on ingredients

3.1 Substances

not applicable

3.2 Mixtures

Chemical nature : Solution of sodium hydroxide in water.

Hazardous components

Chemical Name	CAS-No. EC-No. Registration number	Classification (67/548/EEC)	Classification (REGULATION (EC) No 1272/2008)	Concentration [%]
Sodium Hydroxide	1310-73-2 215-185-5 01-2119457892-27	C; R35	Met. Corr. 1; H290 Skin Corr. 1A; H314	>= 25 - < 50

For the full text of the R-phrases mentioned in this Section, see Section 16.

For the full text of the H-Statements mentioned in this Section, see Section 16.

For the full text of the Notas mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice : Take off contaminated clothing and shoes immediately.
First-aid crew: Ensure self-protection.
Move out of dangerous area.

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- | | |
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| If inhaled | : Move to fresh air.
If symptoms persist, call a physician. |
| In case of skin contact | : Wash off immediately with plenty of water for at least 15 minutes.
Call a physician immediately. |
| In case of eye contact | : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
Call a physician immediately. |
| If swallowed | : Rinse mouth with water.
Immediately give large quantities of water to drink.
Do NOT induce vomiting.
Call a physician immediately. |

4.2 Most important symptoms and effects, both acute and delayed

- | | |
|-------|---|
| Risks | : If swallowed, severe burns in the oral cavity and throat as well as danger of perforation of the digestive tract and stomach. |
|-------|---|

4.3 Indication of any immediate medical attention and special treatment needed

- | | |
|-----------|--|
| Treatment | : Treat symptomatically.
For specialist advice physicians should contact the Poisons Information Service. |
|-----------|--|

SECTION 5: Firefighting measures

5.1 Extinguishing media

- | | |
|--------------------------------|---|
| Suitable extinguishing media | : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. |
| Unsuitable extinguishing media | : High volume water jet |

5.2 Special hazards arising from the substance or mixture

- | | |
|---------------------------------------|--|
| Specific hazards during fire-fighting | : Hazardous decomposition products formed under fire conditions. |
|---------------------------------------|--|

5.3 Advice for firefighters

- | | |
|---|---|
| Special protective equipment for firefighters | : In the event of fire, wear self-contained breathing apparatus. |
| Further information | : The product itself does not burn.
Collect contaminated fire extinguishing water separately. This must not be discharged into drains. |

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Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Wear personal protective equipment.

6.2 Environmental precautions

Environmental precautions : Do not flush into surface water or sanitary sewer system.
Avoid subsoil penetration.

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up : Ensure adequate ventilation.
Soak up with liquid binder (sand, kieselguhr, acid binder, universal binder).
Sweep up and shovel into suitable containers for disposal.

6.4 Reference to other sections

See chapter 8 and 13

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : Provide sufficient air exchange and/or exhaust in work rooms.
Have eye wash bottle or eye rinse ready at the work place.
Avoid contact with skin and eyes.

Advice on protection against fire and explosion : Normal measures for preventive fire protection.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Store in a place accessible by authorized persons only.
Store at room temperature in the original container.
Keep container tightly closed in a dry and well-ventilated place.

Further information on storage conditions : Avoid contact with amphoteric metals (e.g. aluminium, lead, zinc).

Advice on common storage : Do not store near acids.

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7.3 Specific end uses

Specific use(s) : Cleaning agent for metal surfaces

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Components	CAS-No.	Value	Control parameters	Update	Basis
Sodium Hydroxide	1310-73-2	STEL	2 mg/m3	2005-04-06	GB EH40

DNEL/DMEL

Sodium Hydroxide : End Use: DNEL, Industrial use, Workers
Exposure routes: Inhalation
Potential health effects: Local effects, Long-term exposure
Value: 1 mg/m3

8.2 Exposure controls

Engineering measures

Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment.
Recommended Filter type:
B-P2

Hand protection : Nitrile rubber
Break through time: 480 min
Glove thickness: 0.11 mm

: Protective gloves complying with EN 374.
The data about break through time/strength of material are standard values! The exact break through time/strength of material has to be obtained from the producer of the protective glove.
Protective gloves have to be replaced at the first sign of dete-

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- rioration.
- Eye protection : Tightly fitting safety goggles
Eye protection (EN 166)
- Skin and body protection : Chemical resistant protective clothing according to DIN EN 13034 (Type 6)
- Hygiene measures : Take off contaminated clothing and shoes immediately.
Avoid contact with the skin and the eyes.
Keep away from food, drink and animal feedingstuffs.
Wash hands before breaks and immediately after handling the product.
- Protective measures : Handle in accordance with good industrial hygiene and safety practice.
Facilities storing or utilizing this material should be equipped with an eyewash facility and safety shower.

Environmental exposure controls

- General advice : Do not flush into surface water or sanitary sewer system.
Avoid subsoil penetration.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

- Appearance : liquid
- Colour : colourless
- Odour : odourless
- pH : 13
at 10 g/l
- Melting point/range : ca. 8 °C
- Boiling point/boiling range : ca. 120 °C
- Vapour pressure : no data available
- Density : 1.36 g/cm³

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Water solubility : completely miscible

9.2 Other information

Corrosion : Corrosive to metals

Explosivity : no data available

SECTION 10: Stability and reactivity

10.1 Reactivity

No decomposition if stored and applied as directed.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions : Exothermic reaction with strong acids.

10.4 Conditions to avoid

Conditions to avoid : Avoid contact with amphoteric metals (e.g. aluminium, lead, zinc).

10.5 Incompatible materials

Materials to avoid : Acids
Light metals

10.6 Hazardous decomposition products

Risk of decomposition. : No decomposition if used as directed.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Acute oral toxicity : no data available

Skin corrosion/irritation

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Skin irritation : Causes severe burns.

Serious eye damage/eye irritation

Eye irritation : Causes serious eye damage.

Respiratory or skin sensitisation

Sensitisation : no data available

Toxicology Assessment

Acute effects : If swallowed, severe burns in the oral cavity and throat as well as danger of perforation of the digestive tract and stomach.

SECTION 12: Ecological information

12.1 Toxicity

Ecotoxicology studies for the product are not available.

Toxicity to fish

Sodium Hydroxide : LC50: 125 mg/l
Exposure time: 96 h
Species: Gambusia affinis (Mosquito fish)

LC50: 145 mg/l
Exposure time: 24 h
Species: Poecilia reticulata

Toxicity to daphnia and other aquatic invertebrates

Sodium Hydroxide : EC50: 76 mg/l
Exposure time: 24 h
Species: Daphnia

Toxicity to bacteria

Sodium Hydroxide : EC50: 22 mg/l
Exposure time: 15 min
Species: Photobacterium phosphoreum

12.2 Persistence and degradability

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Biodegradability : not applicable

12.3 Bioaccumulative potential

Bioaccumulation : Bioaccumulation is unlikely.

12.4 Mobility in soil

Mobility : no data available

12.5 Results of PBT and vPvB assessment

This mixture contains no substance considered to be persistent, bioaccumulating nor toxic (PBT).
This mixture contains no substance considered to be very persistent nor very bioaccumulating (vPvB).

12.6 Other adverse effects

Additional ecological information : slightly water endangering
: Do not flush into surface water or sanitary sewer system.
Avoid subsoil penetration.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product : Dispose of as hazardous waste in compliance with local and national regulations.
Contaminated packaging : Dispose of as hazardous waste in compliance with local and national regulations.
Waste Code : Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities.

SECTION 14: Transport information

ADR

UN number : 1824
UN proper shipping name : SODIUM HYDROXIDE SOLUTION
Transport hazard class(es) : 8
Packing group : II
Classification Code : C5

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Hazard Identification Number : 80
Limited Quantity (LQ) Inner : 1.00 L
Packaging
Maximum quantity : 30.00 KG
Labels : 8
Tunnel restriction code : (E)
Environmentally hazardous : no

IATA

UN number : 1824
Description of the goods : Sodium hydroxide solution
Class : 8
Packing group : II
Labels : 8

IATA_C

Packing instruction (cargo aircraft) : 855
Packing instruction (LQ) : Y840
Maximum quantity : 30.00 L
Environmentally hazardous : no

IATA_P

Packing instruction (passenger aircraft) : 851
Packing instruction (LQ) : Y840
Maximum quantity : 1.00 L
Environmentally hazardous : no

IMDG

UN number : 1824
Description of the goods : SODIUM HYDROXIDE SOLUTION
Class : 8
Packing group : II
Labels : 8
EmS Number 1 : F-A
EmS Number 2 : S-B
Marine pollutant : no

RID

UN number : 1824
Description of the goods : SODIUM HYDROXIDE SOLUTION
Transport hazard class(es) : 8
Packing group : II
Classification Code : C5
Hazard Identification Number : 80
Labels : 8
Limited Quantity (LQ) Inner : 1.00 L

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Packaging
Maximum quantity : 30.00 KG

Environmentally hazardous : no

SECTION 15: Regulatory information

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

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59). : This product does not contain substances of very high concern (Regulation (EC) No 1907/2006 (REACH), Article 57).

Water contaminating class (Germany) : WGK 1 slightly water endangering VVWS A4

Other regulations : The product is classified and labelled in accordance with EC directives or respective national laws. Regional or national implementations of GHS may not implement all hazard classes and categories.

15.2 Chemical Safety Assessment

A Chemical Safety Assessment has been carried out for this substance.

SECTION 16: Other information

Full text of R-phrases referred to under sections 2 and 3

R35 Causes severe burns.

Full text of H-Statements referred to under sections 2 and 3.

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

Further information

The information provided is based on our current knowledge and experience and apply to the product as delivered. Regarding the product properties, these are not guaranteed. The delivery of this safety datasheet does not free the recipient of the product from his own responsibility to follow the relevant rules and regulations concerning this product.

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1. Short title of Exposure Scenario: Industrial use

Main User Groups	: SU 3: Industrial uses: Uses of substances as such or in preparations at industrial sites
Process category	: PROC5: Mixing or blending in batch processes for formulation of preparations and articles (multistage and/ or significant contact)
Environmental release category	: ERC1: Manufacture of substances
Further information	: The following PROCs or ERCs are covered by the named PROC / ERC:

2.1 Contributing scenario controlling environmental exposure for: ERC1: Manufacture of substances

Sodium Hydroxide

Note:	: The following PROCs or ERCs are covered by the named PROC / ERC: ERC2, ERC 6a
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Product characteristics

Concentration of the Substance in Mixture/Article (Msafe)	: Information on the concentration may be found in chapter 3 of the MSDS.
Remarks	: M-Safe has not been derived.

Other given operational conditions affecting environmental exposure

Emission to aqueous environment.

Technical conditions and measures / Organizational measures

Conditions and measures related to external treatment of waste for disposal

Waste treatment	: Neutralization is normally necessary before waste water is discharged into water treatment plants.
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2.2 Contributing scenario controlling worker exposure for: PROC5: Mixing or blending in batch processes for formulation of preparations and articles (multistage and/ or significant contact)

Sodium Hydroxide

Note	: The following PROCs or ERCs are covered by the named PROC / ERC: PROC4, PROC8b, PROC9, PROC15
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Product characteristics

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Concentration of the Substance in Mixture/Article

Information on the concentration may be found in chapter 3 of the MSDS.

Physical Form (at time of use)

: Solid, low dustiness, Liquid mixture

Vapour pressure

: < 10 Pa

: M-Safe has not been derived.

Frequency and duration of use

Frequency of use

: 8 hours/day

Technical conditions and measures

Use of "Best Practise" measures to minimise exposure., Local exhaust, Handle substance within a closed system.

Organisational measures to prevent /limit releases, dispersion and exposure

Assumes a good basic standard of occupational hygiene is implemented., Ensure operatives are trained to minimise exposures., Worker shall be trained to control the risks of corrosive substances., If technical measures not practical:

Conditions and measures related to personal protection, hygiene and health evaluation

For personal protection see section 8.

3. Exposure estimation and reference to its source

Workers

Contributing Scenario	Exposure Assessment Method	Specific conditions	Type:	Level of Exposure	Risk characterisation ratio (RCR)
2.2	ECETOC TRA		Calculated inhalation exposure	< 1 mg/m ³	

4. Guidance to Downstream User to evaluate whether he works inside the boundaries set by the Exposure Scenario

no data available