

CAUSTIC LYE

Safety Data Sheet

according to Regulation (EU) 2015/830

Issue date: 11/30/2020

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Version: 1.1

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

1.1. Product identifier

Product form	: Substance
Trade name	: CAUSTIC LYE
Chemical name	: sodium hydroxide; caustic soda
EC Index-No.	: 011-002-00-6
EC-No.	: 215-185-5
CAS-No.	: 1310-73-2
REACH registration No	: 01-2119457892-27
Product code	: CAUSTIC LYE
Type of product	: Bases
Product group	: Raw material

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

1.2.1. Relevant identified uses

Use of the substance/mixture : Water treatment

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

ImproChem(Pty) Ltd T/A AECI Water
1 Wharhirst Road
Umbogintwini - South Africa
T +27(31) 949 8200

1.4. Emergency telephone number

Emergency number : 0800 SPILLS or 0800 774557

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Skin corrosion/irritation, H314
Category 1, Sub-Category
1A

Full text of H statements : see section 16

Specific concentration limits:

(0.5 ≤C < 2)	Eye Irrit. 2, H319
(0.5 ≤C < 2)	Skin Irrit. 2, H315
(2 ≤C < 5)	Skin Corr. 1B, H314
(5 ≤C < 100)	Skin Corr. 1A, H314

Adverse physicochemical, human health and environmental effects

Causes severe skin burns and eye damage.

2.2. Label elements

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

Hazard pictograms (CLP) :



GHS05

Signal word (CLP)	: Danger
Hazard statements (CLP)	: H314 - Causes severe skin burns and eye damage.
Precautionary statements (CLP)	: P280 - Wear goggles, gloves, clothing and respiratory protection P301+P330+P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting. P303+P361+P353 - IF ON SKIN (or hair): 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

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contact lenses, if present and easy to do. Continue rinsing.
P310 - Immediately call a POISON CENTER or doctor.
P321 - Specific treatment (see supplemental first aid instruction on this label).

2.3. Other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

Name : CAUSTIC LYE
CAS-No. : 1310-73-2
EC-No. : 215-185-5
EC Index-No. : 011-002-00-6

Name	Product identifier	%
SODIUM HYDROXIDE LYE	(CAS-No.) 1310-73-2 (EC-No.) 215-185-5 (EC Index-No.) 011-002-00-6 (REACH-no) 01-2119457892-27	22.09 – 25.48

Full text of H-statements: see section 16

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Call a physician immediately.
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact : Rinse skin with water/shower. Take off immediately all contaminated clothing. Call a physician immediately.
First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.
First-aid measures after ingestion : Rinse mouth. Do not induce vomiting. Call a physician immediately.

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

Symptoms/effects after skin contact : Burns.
Symptoms/effects after eye contact : Serious damage to eyes.
Symptoms/effects after ingestion : Burns.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapours/spray.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

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6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : Mechanically recover the product.
Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Ensure good ventilation of the work station. Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapours/spray. Wear personal protective equipment.
Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Store locked up. Store in a well-ventilated place. Keep cool.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

CAUSTIC LYE (1310-73-2)

United Kingdom - Occupational Exposure Limits

Local name	Sodium hydroxide
WEL STEL (mg/m ³)	2 mg/m ³

SODIUM HYDROXIDE LYE (1310-73-2)

United Kingdom - Occupational Exposure Limits

Local name	Sodium hydroxide
WEL STEL (mg/m ³)	2 mg/m ³

DNEL : 1 mg/m³

CAUSTIC LYE (1310-73-2)

United Kingdom	Local name	Sodium hydroxide
United Kingdom	WEL STEL (mg/m ³)	2 mg/m ³

SODIUM HYDROXIDE LYE (1310-73-2)

United Kingdom	Local name	Sodium hydroxide
United Kingdom	WEL STEL (mg/m ³)	2 mg/m ³

DNEL : 1 mg/m³

8.2. Exposure controls

- Appropriate engineering controls : Ensure good ventilation of the work station.
Personal protective equipment : Protective goggles. Face shield. Gloves, shoulder length. Protective clothing. Safety Boots. Insufficient ventilation: wear respiratory protection.
Hand protection : Gloves, shoulder length
Eye protection : Protective goggles
Skin and body protection : Wear suitable protective clothing
Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment



Environmental exposure controls : Avoid release to the environment.

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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Molecular mass	: 39.997 g/mol
Colour	: No data available
Odour	: No data available
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: 323 °C
Freezing point	: Not applicable
Boiling point	: 1388 °C
Flash point	: Not applicable
Auto-ignition temperature	: Not applicable
Decomposition temperature	: No data available
Flammability (solid, gas)	: Non flammable.
Vapour pressure	: 0 Pa
Relative vapour density at 20 °C	: No data available
Relative density	: Not applicable
Solubility	: Water: 420000 mg/l
Partition coefficient n-octanol/water (Log Pow)	: -3.88
Viscosity, kinematic	: Not applicable
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: Not applicable

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity	: Not classified
Skin corrosion/irritation	: Causes severe skin burns.
Serious eye damage/irritation	: Assumed to cause serious eye damage
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified

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STOT-repeated exposure : Not classified
Aspiration hazard : Not classified

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Before neutralisation, the product may represent a danger to aquatic organisms.

CAUSTIC LYE (1310-73-2)	
LC50 fish 1	> 35 mg/l
EC50 other aquatic organisms 1	> 33 mg/l
EC50 other aquatic organisms 2	IC50 algae (72 h) mg/l

SODIUM HYDROXIDE LYE (1310-73-2)	
LC50 fish 1	> 35 mg/l
EC50 other aquatic organisms 1	> 33 mg/l
EC50 other aquatic organisms 2	IC50 algae (72 h) mg/l

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

CAUSTIC LYE (1310-73-2)	
Partition coefficient n-octanol/water (Log Pow)	-3.88

SODIUM HYDROXIDE LYE (1310-73-2)	
Partition coefficient n-octanol/water (Log Pow)	-3.88

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

UN-No. (ADR) : 1824
UN-No. (IMDG) : 1824
UN-No. (IATA) : 1824

14.2. UN proper shipping name

Proper Shipping Name (ADR) : SODIUM HYDROXIDE SOLUTION
Proper Shipping Name (IMDG) : SODIUM HYDROXIDE SOLUTION
Proper Shipping Name (IATA) : Sodium hydroxide solution
Transport document description (ADR) : UN 1824 SODIUM HYDROXIDE SOLUTION, 8, III, (E)
Transport document description (IMDG) : UN 1824 SODIUM HYDROXIDE SOLUTION, 8, III
Transport document description (IATA) : UN 1824 Sodium hydroxide solution, 8, III

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : 8
Danger labels (ADR) : 8



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IMDG

Transport hazard class(es) (IMDG) : 8
Danger labels (IMDG) : 8



IATA

Transport hazard class(es) (IATA) : 8
Danger labels (IATA) : 8



14.4. Packing group

Packing group (ADR) : III
Packing group (IMDG) : III
Packing group (IATA) : III

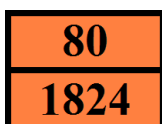
14.5. Environmental hazards

Dangerous for the environment : No
Marine pollutant : No
Other information : No supplementary information available

14.6. Special precautions for user

- Overland transport

Classification code (ADR) : C5
Limited quantities (ADR) : 5I
Excepted quantities (ADR) : E1
Packing instructions (ADR) : P001, IBC03, LP01, R001
Mixed packing provisions (ADR) : MP19
Portable tank and bulk container instructions (ADR) : T4
Portable tank and bulk container special provisions (ADR) : TP1
Tank code (ADR) : L4BN
Vehicle for tank carriage : AT
Transport category (ADR) : 3
Special provisions for carriage - Packages (ADR) : V12
Hazard identification number (Kemler No.) : 80
Orange plates :



Tunnel restriction code (ADR) : E
EAC code : 2R

- Transport by sea

Special provisions (IMDG) : 223
Limited quantities (IMDG) : 5 L
Excepted quantities (IMDG) : E1

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Packing instructions (IMDG)	: P001, LP01
IBC packing instructions (IMDG)	: IBC03
Tank instructions (IMDG)	: T4
Tank special provisions (IMDG)	: TP1
EmS-No. (Fire)	: F-A
EmS-No. (Spillage)	: S-B
Stowage category (IMDG)	: A
Segregation (IMDG)	: SG35
Properties and observations (IMDG)	: Colourless liquid. Colourless liquid. Reacts with ammonium salts, evolving ammonia gas. Causes burns to skin, eyes and mucous membranes. Reacts violently with acids.

- Air transport

PCA Excepted quantities (IATA)	: E1
PCA Limited quantities (IATA)	: Y841
PCA limited quantity max net quantity (IATA)	: 1L
PCA packing instructions (IATA)	: 852
PCA max net quantity (IATA)	: 5L
CAO packing instructions (IATA)	: 856
CAO max net quantity (IATA)	: 60L
Special provisions (IATA)	: A3
ERG code (IATA)	: 8L

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

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

No REACH Annex XVII restrictions

CAUSTIC LYE is not on the REACH Candidate List

CAUSTIC LYE is not on the REACH Annex XIV List

15.1.2. National regulations

Germany

Regulatory reference : WGK 1, Slightly hazardous to water (Classification according to AwSV; ID No. 142)

Hazardous Incident Ordinance (12. BImSchV) : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Full text of H- and EUH-statements:

Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Skin Corr. 1A	Skin corrosion/irritation, Category 1, Sub-Category 1A
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B
Skin Irrit. 2	Skin corrosion/irritation, Category 2
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H319	Causes serious eye irritation.

SDS ImproChem Test

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