Safety Data Sheet

according to the United Nations GHS (Rev. 10, 2023) Issue date: 10/20/2024 Revision date: 10/19/2027 Version: 1.0



SECTION 1: Identification

1.1. GHS Product identifier

Product form : Mixture

Product name : Caustic Soda 32%

1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

Recommended use : Manufacture

Cleaning

Water treatment chemicals

pH control

1.4. Supplier's details

Supplier

Chemical Marketing and Distribution Co. Ltd.

Dammam 31431, P.O. Box 1053 Saudi Arabia

T +966138217777 - F +966138472648

sales@bci.com.sa

1.5. Emergency phone number

Emergency number : +966138217777

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

Classification according to the United Nations GHS

Skin corrosion/irritation, Category 1A H314

Full text of H-statements: see section 16

Adverse physicochemical, human health and

environmental effects

: Causes severe skin burns and eye damage.

2.2. GHS Label elements, including precautionary statements

Labelling according to the United Nations GHS

Hazard pictograms (GHS UN)



Signal word (GHS UN)

Hazardous ingredients : sodium hydroxide; caustic soda

Hazard statements (GHS UN) : H314 - Causes severe skin burns and eye damage

: Danger

Precautionary statements (GHS UN) : P260 - Do not breathe dusts or mists.

P264 - Wash hands hands, forearms and face thoroughly after handling.

P280 - Wear protective clothing, eye protection, face protection, protective gloves. P301+P330+P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting. P302+P361+P354 - IF ON SKIN: Take off immediately all contaminated clothing.

Immediately rinse with water for several minutes.

P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. P305+P354+P338 - IF IN EYES: Immediately rinse with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

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P316 - Get emergency medical help immediately.

P321 - Specific treatment (see supplemental first aid instruction on this label).

P363 - Wash contaminated clothing before reuse.

P405 - Store locked up.

P501 - Dispose of contents and container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards which do not result in classification

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier		Classification according to the United Nations GHS
sodium hydroxide; caustic soda	CAS-No.: 1310-73-2	32	Skin Corr. 1A, H314

Full text of H-statements: see section 16

SECTION 4: First-aid measures

4.1. Description of necessary first-aid measures

First-aid measures general : Call a physician immediately. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Obtain medical attention if

breathing difficulty persists.

First-aid measures after skin contact

: Remove affected clothing and wash all exposed skin area with mild soap and water,

followed by warm water rinse. Rinse skin with water/shower. Take off immediately all contaminated clothing. Call a physician immediately. Seek medical attention if ill effect or irritation develops.

irritation develops.

First-aid measures after eye contact : Rinse immediately with plenty of water. Rinse immediately with plenty of water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain

medical attention if pain, blinking or redness persists. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately. Seek medical attention if ill effect or irritation develops.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Rinse mouth. Do not induce vomiting. Call a physician immediately.

4.2. Most important symptoms/effects, 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 immediate medical attention and special treatment needed, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable extinguishing media : Do not use a heavy water stream.

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5.2. Specific hazards arising from the chemical

Hazardous decomposition products in case of fire

: Toxic fumes may be released. Thermal decomposition can lead to the release of irritating gases and vapours.

5.3. Special protective actions for fire-fighters

Firefighting instructions

: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.

Protective equipment for firefighters

: Do not enter fire area without proper protective equipment, including respiratory protection. 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

General measures

Personal Precautions, Protective Equipment and

Wear recommended personal protective equipment. For further information refer to section

Emergency Procedures Prevention Measures for Secondary Accidents 8: "Exposure controls/personal protection".

6.1.1. For non-emergency personnel

Protective equipment

Wear personal protective equipment. Wear suitable protective clothing. For further information refer to section 8: "Exposure controls/personal protection".

Emergency procedures

Ventilate spillage area. Avoid contact with skin and eyes. Do not breathe

dust/fume/gas/mist/vapours/spray.

: Evacuate unnecessary personnel.

: Avoid release to the environment.

6.1.2. For emergency responders

Protective equipment

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

6.2. Environmental precautions

Avoid release to the environment. Prevent entry to sewers and public waters.

6.3. Methods and materials for containment and cleaning up

For containment

: Soak up with inert absorbent material (for example sand, sawdust, a universal binder, silica gel). Collect spillage.

Methods for cleaning up

Take up liquid spill into absorbent material. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

Other information

: Dispose of materials or solid residues at an authorized site.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling

: Ensure good ventilation of the work station. Provide good ventilation in process area to prevent formation of vapour. Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapours/spray. Wear personal protective equipment.

Hygiene measures

Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Handle in accordance with good industrial hygiene and safety procedures.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions

: Keep only in the original container in a cool well ventilated place. Keep container closed when not in use. Store locked up. Store in a well-ventilated place. Keep cool.

Packaging materials

: Polyethylene. Steel containers.

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

sodium hydroxide; caustic soda (1310-73-2)		
USA - ACGIH - Occupational Exposure Limits		
Local name	Sodium hydroxide	
ACGIH OEL C	2 mg/m³	
Remark (ACGIH)	TLV® Basis: URT, eye, & skin irr	
Regulatory reference	ACGIH 2024	

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station. Environmental exposure controls : Avoid release to the environment. Other information : Do not eat, drink or smoke during use.

8.3. Individual protection measures, such as personal protective equipment (PPE)

Personal protective equipment:

Wear protective gloves. Wear protective clothing. Wear foot protection. Wear a mask.

Hand protection : Impermeable protective gloves. protective gloves
Eye protection : Chemical goggles or safety glasses. Safety glasses

Skin and body protection : Wear suitable protective clothing

Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment. Wear suitable

respiratory equipment in case of insufficient ventilation

Personal protective equipment symbol(s)











8.4. Exposure limit values for the other components

No additional information available

SECTION 9: Physical and chemical properties

9.1. Basic physical and chemical properties

Physical state : Liquid
Colour : Colourless.
Odour : Odourless.
Odour threshold : Not available
Melting point : Not available

Freezing point : 4 – 12 °C [12°C (32% solution), 4°C (49% solution)]

Boiling point : Decomposes
Flammability : Non flammable
Lower explosion limit : Not available
Upper explosion limit : Not available
Flash point : Not available
Auto-ignition temperature : Not available
Decomposition temperature : Not available

pH : > 12 Strongly alkaline

pH solution : Not available Viscosity, kinematic (calculated value) (40 °C) : Not available

Partition coefficient n-octanol/water (Log Pow) : 1.33 – 1.53 [1.33 (32% solution), 1.53 (49% solution)]

Partition coefficient n-octanol/water (Log Kow) : Not available

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Vapour pressure : Not available
Vapour pressure at 50°C : Not available
Density : Not available
Relative density : Not available
Relative vapour density at 20°C : Not available
Solubility : Soluble in water.
Particle size : Not applicable

9.2. Data relevant with regard to physical hazard classes (supplemental)

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

Moisture, incompatible materials

10.5. Incompatible materials

Acids. ammonium salts. metals. organic halogens.

10.6. Hazardous decomposition products

Sodium oxides (NaOx).

SECTION 11: Toxicological information

44.4	Information			- 66 1 -
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Acute toxicity (oral) : Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (dermal) : Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (inhalation) : Not classified (Based on available data, the classification criteria are not met)

Sodium Hydroxide (Caustic Soda) 32%

Unknown acute toxicity (GHS UN)Unknown acute toxicity (GHS UN)

32% of the mixture consists of ingredient(s) of unknown acute toxicity (Oral) 32% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal) 32% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Dust/Mist))

sodium hydroxide; caustic soda (1310-73-2)

LD50 dermal rabbit 325 mg/kg Source: ECHA

Skin corrosion/irritation : Causes severe skin burns.
pH: > 12 Strongly alkaline

Serious eye damage/irritation : Assumed to cause serious eye damage

pH: > 12 Strongly alkaline

Respiratory or skin sensitization : Not classified (Based on available data, the classification criteria are not met)
Germ cell mutagenicity : Not classified (Based on available data, the classification criteria are not met)
Carcinogenicity : Not classified (Based on available data, the classification criteria are not met)
Reproductive toxicity : Not classified (Based on available data, the classification criteria are not met)
STOT-single exposure : Not classified (Based on available data, the classification criteria are not met)

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STOT-repeated exposure : Not classified (Based on available data, the classification criteria are not met)
Aspiration hazard : Not classified (Based on available data, the classification criteria are not met)

Other information : Likely routes of exposure: ingestion, inhalation, skin and eye.

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short–term

: Not classified (Based on available data, the classification criteria are not met)

(acute)

Hazardous to the aquatic environment, long-term

: Not classified (Based on available data, the classification criteria are not met)

(chronic)

sodium hydroxide; caustic soda (1310-73-2)	
LC50 - Fish [1]	> 35 mg/l
EC50 - Crustacea [1]	40.4 mg/l Test organisms (species): Ceriodaphnia sp.
EC50 - Other aquatic organisms [1]	> 33 mg/l waterflea

12.2. Persistence and degradability

Sodium Hydroxide (Caustic Soda) 32%		
Persistence and degradability	Rapidly degradable	
sodium hydroxide; caustic soda (1310-73-2)		
Persistence and degradability	Not rapidly degradable	

12.3. Bioaccumulative potential

Sodium Hydroxide (Caustic Soda) 32%		
Partition coefficient n-octanol/water (Log Pow)	1.33 – 1.53 1.33 (32% solution)	
Bioaccumulative potential	No additional information available	
sodium hydroxide; caustic soda (1310-73-2)		
Partition coefficient n-octanol/water (Log Pow)	-3.88	

12.4. Mobility in soil

Sodium Hydroxide (Caustic Soda) 32%		
Mobility in soil	No additional information available	

12.5. Other adverse effects

Ozone : Not classified (Based on available data, the classification criteria are not met)

Other adverse effects : No additional information available Effect on the ozone layer : No additional information available. Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Disposal methods

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

Product/Packaging disposal recommendations : Dispose of in a safe manner in accordance with local/national regulations.

Ecological waste information : Avoid release to the environment.

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SECTION 14: Transport information

In accordance with UN RTDG / IMDG / IATA /

UN RTDG	IMDG	IATA		
14.1. UN number				
1824	1824	1824		
14.2. UN Proper Shipping Name				
SODIUM HYDROXIDE SOLUTION	SODIUM HYDROXIDE SOLUTION	Sodium hydroxide solution		
14.3. Transport hazard class(es)	14.3. Transport hazard class(es)			
8	8	8		
8	8	8		
14.4. Packing group	14.4. Packing group			
II	II	II		
14.5. Environmental hazards				
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No		
No supplementary information available				

14.6. Special precautions for user

UN RTDG

Limited quantities (UN RTDG) : 1L Excepted quantities (UN RTDG) : E2

Packing instruction (UN RTDG) : P001, IBC02

Portable tank and bulk container special : T7

instructions (UN RTDG)

Portable tank and bulk container special provisions :

(UN RTDG)

IMDG

Limited quantities (IMDG) : 1 L

Excepted quantities (IMDG) : E2

Packing instructions (IMDG) : P001

IBC packing instructions (IMDG) : IBC02

Tank instructions (IMDG) : T7

Tank special provisions (IMDG) : TP2

EmS-No. (Fire) : F-A - FIRE SCHEDULE Alfa - GENERAL FIRE SCHEDULE

EmS-No. (Spillage) : S-B - SPILLAGE SCHEDULE Bravo - CORROSIVE SUBSTANCES

Stowage category (IMDG) : A

Segregation (IMDG) : SGG18, SG35

Properties and observations (IMDG) : Colourless liquid. Corrosive to aluminium, zinc and tin. Reacts with ammonium salts,

evolving ammonia gas. Causes burns to skin, eyes and mucous membranes. Reacts

violently with acids.

IATA

PCA Excepted quantities (IATA) : E2 PCA Limited quantities (IATA) : Y840 PCA limited quantity max net quantity (IATA) : 0.5L PCA packing instructions (IATA) : 851 PCA max net quantity (IATA) : 1L CAO packing instructions (IATA) 855 CAO max net quantity (IATA) : 30L Special provisions (IATA) : A3, A803

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ERG code (IATA) : 8L

14.7. Transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations specific for the product in question

No additional information available

SECTION 16: Other information

NFPA health hazard : 3 - Materials that, under emergency conditions, can cause serious or

permanent injury.

NFPA fire hazard : 0 - Materials that will not burn under typical fire conditions, including

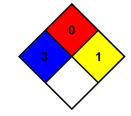
intrinsically noncombustible materials such as concrete, stone, and

sand.

NFPA reactivity : 1 - Materials that in themselves are normally stable but can become

unstable at elevated temperatures and pressures.

NFPA specific hazard : None



Hazard Rating

Health : 3 Serious Hazard - Major injury likely unless prompt action is taken and medical treatment is

given

Flammability : 0 Minimal Hazard - Materials that will not burn

Physical : 1 Slight Hazard - Materials that are normally stable but can become unstable (self-react) at high

temperatures and pressures. Materials may react non-violently with water or undergo hazardous

polymerization in the absence of inhibitors.

Issue date : 10/20/2024 Revision date : 10/19/2027

Other information : None.

Full	text o	f H-s	tatem	ents:

H314 Causes severe skin burns and eye damage

Safety Data Sheet (SDS), UN

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

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