Caustic Soda Lye

Material Safety Data Sheet | CAS 1310-73-2 | UN 1824

Section 1. Identification of the Substance and Company

Item	Detail
Product name	Caustic Soda Lye (sodium hydroxide solution 48–50 %)
CAS number	1310-73-2
Chemical name	Sodium hydroxide (NaOH)
Recommended use	Industrial chemical for alkali use in chemical, textile, paper, detergent and water treatment processes
Supplier	Ochnology Solution Private Limited, B-153, Sector-4, Defence Colony, Dehradun 248001, India
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Section 2. Hazards Identification

Item	Detail
GHS classification	Corrosive to metals, Category 1. Skin corrosion, Category 1A. Serious eye damage, Category 1
Signal word	Danger
Pictogram	GHS05 (corrosion)
Hazard statements	H290 May be corrosive to metals. H314 Causes severe skin burns and eye damage. H318 Causes serious eye damage
Precautionary statements	P234 Keep only in original packaging. P260 Do not breathe dust or mist. P264 Wash hands thoroughly after handling. P280 Wear protective gloves, protective clothing, eye protection and face protection. P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting. P303+P361+P353 IF ON SKIN (or hair): remove immediately all contaminated clothing and rinse skin with water. P304+P340 IF INHALED: remove person to fresh air. P305+P351+P338 IF IN EYES: rinse cautiously with water for several minutes, remove contact lenses if easy to do and continue rinsing. P310 Immediately call a poison centre or doctor. P390 Absorb spillage to prevent material damage. P406 Store in a corrosion-resistant container. P501 Dispose of contents and container in accordance with local regulations

Section 3. Composition and Information on Ingredients

Component	CAS number	Typical range (%)
Sodium hydroxide	1310-73-2	48–50
Sodium carbonate	497-19-8	0.2 max
Sodium chloride	7647-14-5	0.05 max
Water	7732-18-5	Balance

Section 4. First Aid Measures

Item	Detail
Inhalation	Move the person to fresh air. Keep at rest. Get medical attention if breathing is difficult or irritation persists.
Skin contact	Remove contaminated clothing immediately. Rinse skin with plenty of water for at least 15 minutes. Get medical attention.
Eye contact	Rinse immediately with plenty of water for at least 15 minutes, holding the eyelids open. Remove contact lenses if easy to do. Get urgent medical attention.
Ingestion	Rinse mouth. Do not induce vomiting. Give water to drink if the person is conscious. Get urgent medical attention.

Section 5. Fire-Fighting Measures

Item	Detail
Suitable extinguishing media	Not combustible. Use media suitable for the surrounding fire.
Specific hazards	Contact with some metals (aluminium, zinc, tin) releases flammable hydrogen gas. Dissolving in water releases strong heat.
Hazardous combustion products	None specific; heating may release sodium oxide fumes
Protective equipment	Self-contained breathing apparatus and chemical-resistant clothing

Section 6. Accidental Release Measures

Item	Detail
Personal precautions	Keep unprotected persons away. Wear chemical goggles, face shield, gloves, boots and protective clothing. Avoid dust and mist.
Environmental precautions	Prevent entry into drains and water courses. Neutralise only under controlled conditions.
Clean-up	Solid: sweep or shovel into closed, labelled containers without creating dust. Liquid: contain with sand or inert absorbent, collect into closed containers and rinse the area with water.

Section 7. Handling and Storage

Item	Detail
Handling	Use in a well-ventilated area. Always add the product to water slowly, never water to the product. Avoid contact with skin, eyes and clothing. Do not eat, drink or smoke while handling.
Storage	Store in tightly closed, corrosion-resistant containers in a cool, dry place away from acids and metals such as aluminium, zinc and tin.
Packing	As stated on the Technical Data Sheet

Section 8. Exposure Controls and Personal Protection

Item	Detail
Exposure limit (sodium hydroxide, ACGIH)	Ceiling 2 mg/m^3
Engineering controls	Closed systems or local exhaust ventilation; eyewash station and safety shower nearby
Eye and face	Chemical splash goggles and face shield
Skin and hands	Rubber, neoprene or PVC gloves; chemical-resistant apron and boots
Respiratory	Particulate or alkaline mist respirator where dust or mist may be present

Section 9. Physical and Chemical Properties

Item	Detail
Appearance	Colourless to slightly turbid, viscous liquid
Odour	Odourless
pH	14
Density at 20 °C	About 1.50–1.53 g/cm^3
Crystallisation point (50 %)	About 12 °C
Solubility in water	Completely miscible; dilution releases strong heat
Flash point	Not applicable (not combustible)

Section 10. Stability and Reactivity

Item	Detail
Stability	Stable under normal conditions of use and storage
Conditions to avoid	Moisture and carbon dioxide (solid), contact with incompatible metals, uncontrolled dilution
Incompatible materials	Acids (violent reaction), aluminium, zinc, tin and their alloys (hydrogen gas), ammonium salts, halogenated organic compounds, nitro compounds
Hazardous decomposition	None under normal conditions

Section 11. Toxicological Information

Item	Detail
Inhalation	Dust or mist is corrosive to the nose, throat and lungs and may cause coughing and breathing difficulty.
Skin	Causes severe burns.
Eyes	Causes severe burns and serious eye damage, which may lead to permanent injury.
Ingestion	Corrosive to the mouth, throat and stomach. May cause severe burns and perforation.
Chronic	No carcinogenic, mutagenic or reproductive classification.

Section 12. Ecological Information

Item	Detail
Aquatic effects	Raises the pH of water and is harmful to aquatic life at high concentrations.
Persistence	Inorganic; neutralised in the environment.
Bioaccumulation	No bioaccumulation expected.

Section 13. Disposal Considerations

Item	Detail
Waste disposal	Neutralise under controlled conditions and dispose of through a licensed facility in accordance with local, state and national regulations. Empty containers may retain residue and must be handled as hazardous.

Section 14. Transport Information

Item	Detail
UN number	1824
Proper shipping name	Sodium hydroxide solution
Class	8 (corrosive)
Packing group	II
Marine pollutant	No

Section 15. Regulatory Information

Item	Detail
Classification	Classified as corrosive under GHS. Handle in accordance with the applicable Indian regulations for hazardous chemicals.
Labelling	GHS05; signal word Danger

Section 16. Other Information

Item	Detail
Issue date	03 November 2026
Prepared by	Ochnology Solution Private Limited