Gujarat Alkalies and Chemicals Ltd.
Vadodara

SECTION 1: Product and Company Identification		
Name	**SODIUM HYDROXIDE LYE**	
Company	M/s Gujarat Alkalies and chemicals limited, P.O. Petrochemicals, Dist.: - Vadodara, Gujarat (India), Pin Code: 391346	
Synonyms	Caustic Soda Lye	
Emergency Contact Details	Phone no.	09979897101, 09879604102
	E-mail	headmarketing@gacl.co.in ccr@gacl.co.in

SECTION 2: Hazards Identification

Emergency Overview

DANGER
May be corrosive to metals
Causes severe skin burns and eye damage
May cause respiratory irritation

Potential Health Effects

Inhalation	Can cause severe respiratory irritation. Inhalation of mists or vapors may produce upper airway edema, wheezing, pulmonary edema, pneumonitis and respiratory failure.
Skin	Contact causes severe skin irritation and possible burns.
Eyes	Causes severe eye burns. Corrosive to the eyes and may cause severe damage including blindness.
Ingestion	Ingestion may produce burns to the lips, oral cavity, upper airway, Esophagus and possibly the digestive tract. Ingestion of this product may cause nausea, vomiting and diarrhea.
Disposal	Dispose of contents/container to an approved waste disposal plant

SECTION 3: Composition/information on ingredients

Component	CAS-No.	EC-No.	Weight %
Sodium Hydroxide	1310-73-2	215-185-5	~ 50 %

SECTION 4: First Aid Measures

Inhalation	If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
Skin	Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.
Eyes	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Immediate medical attention is required. Keep eye wide open while rinsing.
Ingestion	Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.
Most important symptoms/effects	Causes burns by all exposure routes. . Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation
Notes to Physician	Treat symptomatically

SECTION 5: Fire Fighting Measures			
Suitable Extinguishing Media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.		
Flash Point	Not Applicable	**Explosion Limits**	
Auto ignition Temperature	No data available	**Upper**	No data available
		Lower	No data available
Hazardous Combustion Products	Sodium oxides		
Specific Hazards Arising from the Chemical	Thermal decomposition can lead to release of irritating gases and vapors. The product causes burn of eyes, skin and mucous membranes.		
NFPA: Health: 3 Flammability: 0 Reactivity: 1 Special hazards: Corrosive			
SECTION 6: Accidental Release Measures			
Personal Precautions	Wear respiratory protection. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.		
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.		
Methods and materials for containment and cleaning up	Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.		
SECTION 7: Handling and Storage			
Handling	Use only under a chemical fume hood. Wear personal protective equipment. Do not breathe vapors or spray mist. Do not get in eyes, on skin, or on clothing. Do not ingest.		
Storage	Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.		
SECTION 8: Exposure Controls/Personal Protection			
Exposure Guidelines:			
Component	**OSHA PEL**	**ACGIH TLV**	
Sodium hydroxide	Ceiling: 2 mg/m^3	Ceiling: 2 mg/m^3	
Engineering Measures	Use only under a chemical fume hood. Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.		
Personal Protective Equipment			
Eye/face Protection	Tightly fitting safety goggles. Face-shield.		
Skin and body protection	Long sleeved clothing.		
Respiratory Protection	**Respiratory protection** Where risk assessment shows air-purifying respirators are appropriate type respirator cartridges as a backup to engine protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards.		
SECTION 9: Physical and Chemical Properties			
Appearance	Colorless liquid	**Water solubility**	Completely miscible, soluble
Odour	Odorless	**Auto-ignition temperature**	No data available
pH	14.0	**Viscosity**	No data available
Melting point/freezing point	-12 - 10 °C	**Flammability (solid, gas)**	No data available
Initial boiling point and	105 - 140 °C	**Decomposition**	No data available

boiling range		**temperature**	
Vapour pressure	< 18 mmHg at 20 °C	**Relative density**	1.327 g/cm^3 at 25 °C
Vapour density	1.38 (Air = 1.0)	**Oxidizing properties**	No data available

SECTION 10: Stability and Reactivity

Reactive Hazard	No data available
Stability	Stable under normal conditions.
Conditions to Avoid	Incompatible products. Excess heat.
Incompatible Materials	Water, Acids, Organic materials, Chlorinated solvents, Aluminum, Phosphorus, Tin/tin oxides, Zinc Water, acids, Organic materials, Chlorinated solvents, Aluminum, Phosphorus, Tin/tin oxides, Zinc
Hazardous Decomposition Products	Sodium oxides
Hazardous Polymerization	Hazardous polymerization does not occur.
Hazardous Reactions	Acids, Metals

SECTION 11: Toxicological Information

Acute toxicity	No data available Sodium hydroxide
Carcinogenicity	ACGIH: Not listed OSHA: Not listed

SECTION 12: Ecological Information

Eco toxicity	Do not empty into drains. The product contains following substances which are hazardous for the environment.
Other	Harmful to aquatic life.

SECTION 13: Disposal Considerations

Waste treatment methods	
Product	Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.
Contaminated packaging	Dispose of as unused product.

SECTION 14: Transport Information

UN number	1824
UN proper shipping name	SODIUM HYDROXIDE SOLUTION
Transport hazard class	8
Packaging group	II
Environmental hazards	IMDG Marine pollutant: No

SECTION 15: Regulatory Information

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

This safety datasheet complies with the requirements of Regulation.

Chemical safety assessment

For this product a chemical safety assessment was not carried out.

SECTION 16: Other Information

Disclaimer

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.