



## Material Safety Data Sheet

Product Name: Caustic Soda

Revision date: R1- 01/01/2018

### Section1: Manufacturer and Substance Identification:

CHEMFAB ALKALIS LIMITED  
Gnanananda place  
Kalapet  
Puducherry- 605014  
India.

**Product Identifier:** CAUSTIC SODA LIQUID (31.5% and 48%)

Caustic soda Solution Sodium hydroxide solution Caustic Soda lye	
<b>CAS #: 1310-73-2</b> UN #: 1824	Formula: NaOH Molecular mass: 40.0 g/mol

### SECTION 1. Product company identification

Emergency Contact number: 0413- 2655111-113  
Email: [chemfabalkalis@drroaholings.com](mailto:chemfabalkalis@drroaholings.com)  
Website: [www.chemfabalkalis.com](http://www.chemfabalkalis.com)  
AMAI CERN NO (Emergency Contact Number): 1800-11-1735

### SECTION 2: Composition/Information on ingredients

Component	Percent [%]	CAS Number
Water	69 - 52 %	7732-18-5
Sodium Hydroxide	31- 48 %	1310-73-2

### SECTION 3: Hazard identification

**MAJOR HEALTH HAZARDS:** CORROSIVE. CAUSES SERIOUS EYE DAMAGE. CAUSES SEVERE SKIN BURNS CAUSES DAMAGE TO THE RESPIRATORY SYSTEM AND GASTROINTESTINAL SYSTEM. EFFECTS OF CONTACT OR INHALATION MAY BE DELAYED.

**PHYSICAL HAZARDS:** MAY BE CORROSIVE TO METALS. Mixing with water, acid or incompatible materials may cause splattering and release of heat. Do not store in aluminum container or use aluminum fittings or transfer lines, as flammable hydrogen gas may be generated.



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### SECTION 4: First Aid Measures

**INHALATION:** If inhalation of mists, vapors, or spray occurs and adverse effects result, remove to uncontaminated area. Evaluate ABC's (is Airway constricted, is Breathing occurring, and is blood Circulating) and treat symptomatically. GET MEDICAL ATTENTION IMMEDIATELY. There is no specific antidote, treat symptomatically.

**SKIN CONTACT:** Immediately flush contaminated areas with water. Remove contaminated clothing, jewelry, and shoes immediately. Wash contaminated areas with large amount of water. GET MEDICAL ATTENTION IMMEDIATELY. Thoroughly clean and dry contaminated clothing before reuse. Discard contaminated leather goods.

**EYE CONTACT:** Immediately flush contaminated eyes with a directed stream of water for as long as possible. Remove contact lenses, if present and easy to do. Continue rinsing. GET MEDICAL ATTENTION IMMEDIATELY. Washing eyes within several seconds is essential to achieve maximum effectiveness.

**INGESTION:** If swallowed, do not induce vomiting. For definite or probable ingestion, do not administer oral fluids. If vomiting occurs spontaneously, keep airway clear. Monitor airway. Volume resuscitation (IV fluids) and circulatory support (CPR) may be required. Never give anything by mouth to an unconscious or convulsive person. GET MEDICAL ATTENTION IMMEDIATELY.

### SECTION 5: Fire Fighting Measures

**Fire Hazard:** Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes. May react with chemically reactive metals such as aluminum, zinc, magnesium, copper, etc. to release hydrogen gas which can form explosive mixtures in air.

**Extinguishing Media:** Use extinguishing agents appropriate for surrounding fire.

**Fire Fighting:** Move container from fire area if it can be done without risk. Cool containers with water. Do not apply water directly on this product. Heat is generated when mixed with water.

Component	Immediately Dangerous to Life/ Health (IDLH)
Sodium Hydroxide 1310-73-2	10 mg/m <sup>3</sup> IDLH

**Hazardous Combustion Products:** Sodium hydroxide fumes can be generated by thermal decomposition at elevated temperatures

**Sensitivity to Mechanical Impact:** Not sensitive.

**Sensitivity to Static Discharge:** Not sensitive.

**Lower Flammability Level (air):** Not flammable



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**Upper Flammability Level (air):** Not flammable

**Flash point:** Not flammable

**Auto-ignition Temperature:** Not applicable

**GHS: PHYSICAL HAZARDS:**

- Corrosive to Metals

### SECTION 6: Accidental Release Measures

**Personal Precautions:**

Do not get in eyes, on skin or on clothing. Avoid breathing mist, vapour, or spray. Do not ingest. Wear appropriate personal protective equipment recommended in Section 8 of the MSDS.

**Methods and Materials for Containment and Cleaning Up:**

In case of spill or leak, stop the leak as soon as possible, collect spilled materials with dikes, sandbags, etc. Shovel dry material into suitable container. Liquid material may be removed with a vacuum truck. Remaining material may be diluted with water and neutralized with dilute acid. Flush spill area with water, if appropriate.

### SECTION 7: Handling and Storage

**Precautions for Safe Handling:**

Avoid breathing vapor or mist. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. Do not ingest. Do not eat, drink or smoke in areas where this material is used. Wear personal protective equipment as described in Exposure Controls/Personal Protection.

**Safe Storage Conditions:**

Store and handle in accordance with all current regulations and standards. Keep container tightly closed and properly labeled. Do not store in aluminum container or fittings or transfer lines, as flammable hydrogen gas may be generated.

### SECTION 8: Exposure Controls/Personal Protection:

**Regulatory Exposure Limit(s):** Listed below for the product components that have regulatory occupational exposure limits (OEL's).

Component	OSHA Final PEL TWA
Sodium Hydroxide 1310-73-2	2 mg/m <sup>3</sup>

### PERSONAL PROTECTIVE EQUIPMENT:

**Eye Protection:** Wear chemical safety goggles with a face-shield to protect against eye and skin contact when appropriate. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.



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**Skin and Body Protection:** Wear protective clothing to minimize skin contact. Wear chemical resistant clothing and rubber boots when potential for contact with the material exists. Always place pants legs over boots. Contaminated clothing should be removed, then discarded or laundered. Discard contaminated leather goods.

**Hand Protection:** Wear appropriate chemical resistant gloves. Consult a glove supplier for assistance in selecting an appropriate chemical resistant glove.

**Protective Material Types:** Natural rubber, Neoprene, Nitrile, Polyvinyl chloride (PVC),

**Respiratory Protection:** A NIOSH approved respirator with N95 (dust, fume, mist) cartridges may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits, or when symptoms have been observed that are indicative of overexposure. If eye irritation occurs, a full face style mask should be used.

Component	Immediately Dangerous to Life/ Health (IDLH)
Sodium Hydroxide 1310-73-2	10 mg/m <sup>3</sup> IDLH

**HYGIENE MEASURES:** Handle in accordance with good industrial hygiene and safety practices. Wash hands and affected skin immediately after handling, before breaks, and at the end of the workday.

### SECTION 9: Physical and Chemical Properties.

Physical state	: Liquid
Appearance	: Clear to opaque
Color	: Colorless to slightly colored
Odor	: Odorless
Molecular Weight	: 40.01
Molecular Formula	: NaOH
Vapor Pressure	: 13 - 135 mmHg @ 60 °C
Relative Density/Specific Gravity	: 1.35–1.56 @ 25°C
Water Solubility	: 100%
pH	: 14.0 (theoretical value of 7.5% solution)
Flash point	: Not flammable
Flammability (solid, gas)	: Not flammable
Lower Flammability Level (air)	: Not flammable
Upper Flammability Level (air)	: Not flammable
Auto-ignition Temperature	: Not applicable

### SECTION 10: Stability and Reactivity.

**Reactivity:** Soluble in water and reacts with metals, and may form hydrogen gas.

**Chemical Stability:** Stable at normal temperatures and pressures.



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### SECTION 11: Toxicological Information.

#### TOXICITY DATA:

Component	LD50 Oral:	LD50 Dermal:	LC50 Inhalation:
Sodium Hydroxide 1310-73-2	-----	1350 mg/kg	-----

### SECTION 12: Ecological Information.

#### ECOTOXICITY DATA:

##### Aquatic Toxicity:

This material has exhibited moderate toxicity to aquatic organisms.

### SECTION 13: Disposal Consideration.

#### **Waste from material:**

Reuse or reprocess, if possible. May be subject to disposal regulations. Dispose in accordance with all applicable regulations.

#### **Container Management:**

Dispose of container in accordance with applicable local, regional, national, and/or international regulations. Container reinstated must be disposed of in compliance with applicable regulations.

### SECTION 15: Transport Information:

#### **GHS Classification**

Signal: Danger

Harmful if swallowed

Causes severe skin burns and eye damage

May cause respiratory irritation



### SECTION 15: Regulatory Information:

#### **Occupational exposure limits**

TLV: 2mg/m<sup>3</sup> (ceiling value)



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### **SECTION 16: Other Information:**

The Information provided in this MSDS is given in good faith and is correct to the best of our knowledge and information at the date of Publication. It is designed only a guidance of safe handling, transportation, use and disposal. No Warranty is expressed or implied.

Contact: Section 1

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Revision History:

Revision	Effective date	Changed Date