

## SAFETY DATA SHEET

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

#### 1.1 Product identifiers

Product name Sodium Hydroxide 30% solution  
CAS number 1310-73-2  
Synonyms Caustic soda

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

Identified uses Laboratory chemicals

#### 1.3 Details of the supplier of the safety data sheet

Company Lab Alley, LLC  
12501 Pauls Valley Road  
Austin, Texas 78737  
U.S.A.  
Telephone 512-668-9918  
Fax 512-886-4008

#### 1.4 Emergency telephone

Emergency Phone # US & Canada: 1-800-535-5053 INFOTRAC  
International 1-352-323-3500 INFOTRAC

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

##### GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Corrosive to metals	Category 1
Skin Corrosion/Irritation	Category 1A
Serious Eye Damage/Eye Irritation	Category 1
Specific target organ toxicity (single exposure)	Category 3
Target Organs - Respiratory system.	

#### 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal Word

Danger

Hazard statements

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

Precautionary statements

Prevention

Do not breathe dust/fume/gas/mist/vapors/spray. Wash face, hands and any exposed skin thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. Use only outdoors or in a well-ventilated area. Keep only in original container.

Response

Immediately call a POISON CENTER or doctor/physician.

Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Skin

IF ON SKIN (or hair): Take off immediately call contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse.

Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Ingestion

IF SWALLOWED: Rinse mouth. DO NOT induce vomiting.

Spills

Absorb spillage to prevent material damage.

Storage

Store lock up. Store in a well-ventilated place. Keep container tightly closed. Store in corrosive resistant polypropylene container with a resistant inliner. Store in a dry place.

Disposal

Dispose of contents/container to an approved waste disposal plant.

### 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

No information available.

## SECTION 3: Composition/information on ingredients

### 3.1 Components

Chemical name	Common name and synonyms	CAS number	Concentration
Sodium hydroxide	Caustic soda	1310-73-2	30%
Water	-	7732-18-5	70%

## SECTION 4: First aid measures

### 4.1 Description of first-aid measures

**General advice**

<b>If inhaled</b>	Move to fresh air. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the air of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Immediate medical attention is required. If not breathing, give artificial respiration.
<b>In case of skin contact</b>	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Immediate medical attention is required.
<b>In case of eye contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Immediate medical attention is required.
<b>If swallowed</b>	Do not induce vomiting. Call a physician or Poison Control Center immediately.

#### **4.2 Most important symptoms and effects, both acute and delayed**

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.

#### **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** Substance is nonflammable; use agent most appropriate to extinguish surrounding fire.

**Unsuitable extinguishing media** Carbon dioxide (CO<sub>2</sub>).

#### **5.2 Specific hazards arising from the substance or mixture**

Corrosive material. Non-combustible, substance itself does not burn, but may decompose upon heating to produce corrosive and/or toxic fumes. Keep product and empty container away from heat and sources of ignition. Hazardous combustion products: Sodium oxides.

#### **5.3 Special protective equipment and precautions for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

#### **5.4 Further information**

**Flash Point** No information available

**Autoignition Temperature** No information available

## Explosion limits

Upper	No data available
Lower	No data available
Sensitivity to Mechanical Impact	No information available
Sensitivity to Static Discharge	No information available
NFPA	

Health	Flammability	Instability	Physical hazards
3	0	1	N/A

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Wear self-contained breathing apparatus and protective suit. Evacuate personnel to safe areas. Ensure adequate ventilation. Do not get in eyes, on skin, or on clothing.

### 6.2 Environmental precautions

Avoid release to the environment. See Section 12 for additional ecological information. Do not flush into surface water or sanitary sewer system.

### 6.3 Methods and materials for containment and cleaning up

Wear self-contained breathing apparatus and protective suit. Soak up with inert absorbent materials. Keep in suitable, closed containers for disposal.

### 6.4 Reference to other sections

See section 2 for full list of hazard and precaution statements.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

#### Precautions on safe handling

Use only under a chemical fume hood. Wear personal protective equipment. Do not get in eyes, on skin, or on clothing. Do not breathe vapors or spray mist. Do not ingest.

#### Hygiene measures

Handle in accordance with good industrial hygiene and safety practice.

### 7.2 Conditions for safe storage, including any incompatibilities

#### Storage conditions

Keep containers tightly closed in a dry, cool and well-ventilated place. Corrosives area.

#### Incompatibilities

No information available.

## SECTION 8: Exposure controls/personal protection

## 8.1 Occupational exposure limits

### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Component	Type	Value
Sodium hydroxide	Ceiling	2 mg/m <sup>3</sup>
	TWA	2 mg/m <sup>3</sup>

### US. ACGIH Threshold Limit Values

Component	Type	Value
Sodium hydroxide	Ceiling	2 mg/m <sup>3</sup>

### US. NIOSH: Pocket Guide to Chemical Hazards

Component	Type	Value
Sodium hydroxide	IDLH	10 mg/m <sup>3</sup>
	Ceiling	2 mg/m <sup>3</sup>

### Biological occupational exposure limits

No information available.

## 8.2 Exposure controls

### Appropriate engineering controls

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

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

#### Skin and body protection

Wear appropriate protective gloves and clothing to prevent skin exposure.

#### Respiratory protection

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

#### Control of environmental exposure

No information available.

## SECTION 9: Physical and chemical properties

## 9.1 Information on basic physical and chemical properties

Physical State	Liquid
Appearance	Clear, viscous.
Odor	Odorless
Odor Threshold	No information available
pH	> 13 (Alkaline)
Melting Point/Range	12 °C / 53.6 °F
Boiling Point/Range	145 °C / 293 °F
Evaporation Rate	No information available
Flammability (solid)	No information available
Flammability or explosive limit	
Upper	No data available
Lower	No data available
Vapor Pressure	14 mmHg
Vapor Density	> 1.0
Density	1.5
Solubility	Soluble in water
Partition coefficient; n-octanol/water	No data available
Autoignition Temp	No information available
Decomposition Temp	No information available
Viscosity	No information available
Molecular Formula	NaOH
Molecular Weight	39.997
VOC Content(%)	No information available
Oxidizing properties	No information available

## 9.2 Other safety information

No information available.

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

No information available.

### 10.2 Chemical stability

Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

Corrosive to metals.

### 10.4 Conditions to avoid

Incompatible products. Excess heat.

### 10.5 Incompatible materials

Acids, organic materials, metals.

### 10.6 Hazardous decomposition products

Sodium oxides.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Product Information, Component Information

##### Acute toxicity

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Sodium hydroxide	-	1350 mg/kg (rabbit)	-

##### Skin corrosion/irritation

No information available.

##### Serious eye damage/eye irritation

No information available.

##### Respiratory or skin sensitization

No information available.

##### Germ cell mutagenicity

No information available.

##### Carcinogenicity

Component	CAS	IARC	NTP	ACGIH	OSHA	Mexico
Sodium hydroxide	1310-73-2	Not listed	Not listed	Not listed	Not listed	Not listed

##### Specific target organ toxicity - single exposure

Respiratory system.

##### Specific target organ toxicity - repeated exposure

None known.

##### Reproductive toxicity

No information available.

##### Chronic effects

No information available.

### 11.2 Additional Information

No information available.

## SECTION 12: Ecological information

### 12.1 Toxicity

Do not empty into drains. Large amounts will affect pH and harm aquatic organism. Contains a substance which is: Harmful to aquatic organisms. The product contains following substances which are hazardous for the environment.

Product		Species	Test Results
Sodium hydroxide	LC50	Oncorhynchus mykiss	45.4 mg/L 96h

### 12.2 Persistence and degradability

Soluble in water. Persistence is unlikely based on information available.

### 12.3 Bio accumulative potential

No information available.

### 12.4 Mobility in soil

Will likely be mobile in the environment due to its water solubility.

### 12.5 Results of PBT and vPvB assessment

No information available.

### 12.6 Endocrine disrupting properties

No information available.

### 12.7 Other adverse effects

No information available.

## SECTION 13: Disposal considerations

### 13.1 Waste Disposal Methods

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.

## SECTION 14: Transport information

#### DOT (US)

UN-No	UN1824
Proper Shipping Name	SODIUM HYDROXIDE SOLUTION
Hazard Class	8
Packing Group	III

#### IMDG

UN-No	UN1824
Proper Shipping Name	SODIUM HYDROXIDE SOLUTION
Hazard Class	8
Packing Group	III

#### IATA

UN-No	UN1824
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**Proper Shipping Name** SODIUM HYDROXIDE SOLUTION  
**Hazard Class** 8  
**Packing Group** III

## SECTION 15: Regulatory information

**US federal regulations** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not listed.

**CERCLA Hazardous Substance List (40 CFR 302.4)**

Listed, 1000 lb.

**SARA 304 Emergency release notification**

Not listed.

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)**

Not listed.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**SARA 302 Extremely hazardous substance**

Not listed.

**SARA 311/312 Hazardous**

See section 2 for more information.

**SARA 313 (TRI reporting)**

Not listed.

**Other federal regulations**

**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated.

**Safe Drinking Water Act**

Listed, 1000 lb.

**FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace**

Not listed

**US state regulations**

**US. Massachusetts RTK - Substance List**

Listed.

**US. New Jersey Worker and Community Right-to-Know Act**

Listed.

**US. Pennsylvania Worker and Community Right-to-Know Law**

Listed.

**California Proposition 65**

Not listed

**SECTION 16: Other information**

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**SECTION 17: 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.