



Material Safety Data Sheet Sodium hydroxide solutions, 1-50%

Section 1 - Chemical Product and Company Identification

MSDS Name:

Sodium hydroxide solutions, 1-50%

Catalog Numbers:

LC23950, LC24000, LC24040, LC24060, LC24070, LC24075, LC24078, LC24085, LC24090, LC24095, LC24100, LC24110, LC24115, LC24120, LC24140, LC24150, LC24200, LC24220, LC24230, LC24250, LC24270, LC24275, LC24280, LC24300, LC24305, LC24307, LC24310, LC24320, LC24330, LC24350, LC24380, LC24400, LC24420, LC24430, LC24450, LC24455, LC24460, LC24500, LC24523, LC24525

Synonyms:

Caustic Soda, Soda Lye, Sodium Hydrate

Company Identification:

LabChem, Inc.
200 William Pitt Way
Pittsburgh, PA 15238

Company Phone Number:

(412) 826-5230

Emergency Phone Number:

(800) 424-9300

CHEMTREC Phone Number:

(800) 424-9300 or
011-703-527-3887

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name:	Percent
7732-18-5	Water	balance
1310-73-2	Sodium hydroxide	0.04-50

Section 3 - Hazards Identification

Emergency Overview

Appearance: Clear, colorless solution

Caution! Corrosive. Causes burns by all exposure routes.

Target Organs: Eyes, skin, mucous membranes

Potential Health Effects

Eye:

Causes eye burns. May cause chemical conjunctivitis and corneal damage.

Skin:

Causes skin burns. May cause deep, penetrating ulcers of the skin. May cause skin rash (in milder cases), and cold and clammy skin with cyanosis or pale color.



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Ingestion:

Causes gastrointestinal tract burns. Causes severe pain, nausea, vomiting, diarrhea, and shock.

Inhalation:

Irritation may lead to chemical pneumonitis and pulmonary edema. Causes severe irritation of upper respiratory tract with coughing, burns, breathing difficulty, and possible coma.

Chronic:

Prolonged or repeated skin contact may cause dermatitis.

Section 4 - First Aid Measures

Eyes:

Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower lids until chemical is gone. Get medical aid at once.

Skin:

Get medical aid at once. Immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Remove contaminated clothing to reduce further exposure.

Ingestion:

Do NOT induce vomiting. Give conscious victim 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid at once.

Inhalation:

Move victim to fresh air immediately. Give artificial respiration if necessary. If breathing is difficult, give oxygen. Get medical aid.

Notes to Physician:

Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures

General Information:

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Use water spray to keep fire-exposed containers cool. Use water with caution and in flooding amounts. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas. Contact with metals may evolve flammable hydrogen gas. Containers may explode when heated. Non-combustible, substance itself does not burn but may decompose upon heating to produce irritating, corrosive and/or toxic fumes.

Extinguishing Media:

Do NOT get water inside containers. For small fires, use dry chemical, carbon dioxide, or water spray. For large fires, use dry chemical, carbon dioxide, alcohol-resistant foam, or water spray. Cool containers with flooding quantities of water until well after fire is out.

Autoignition Temperature:

Not applicable.

Flash Point:

Not applicable.

NFPA Rating:

CAS# 7732-18-5: Health- 0, Flammability- 0, Instability- 0

CAS# 1310-73-2: Health- 3, Flammability- 0, Instability- 1



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Explosion Limits:

Lower: No information Upper: No information

Section 6 - Accidental Release Measures

General Information:

Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:

Absorb spills with absorbent (vermiculite, sand, fuller's earth) and place in plastic bags for later disposal.

Section 7 - Handling and Storage

Handling:

Wash thoroughly after handling. Use with adequate ventilation. Do not get in eyes, on skin, or on clothing. Do not ingest or inhale. Do not breathe spray or mist.

Storage:

Store in a cool, dry, well-ventilated area away from incompatible substances. Keep away from strong acids. Keep away from metals. Keep away from flammable liquids. Keep away from organic halogens.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Exposure Limits:

Chemical Name:	ACGIH	NIOSH	OSHA
Water	None of the components are on this list.	None of the components are on this list.	None of the components are on this list.
Sodium hydroxide	2 mg/m3 Ceiling	10 mg/m3 IDLH	2 mg/m3 TWA

OSHA Vacated PELs:

None listed

Personal Protective Equipment

Eyes:

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

Skin:

Wear appropriate gloves to prevent skin exposure.

Clothing:

Wear appropriate protective clothing to prevent skin exposure.

Respirators:

Follow the OSHA respirator regulations found in 29CFR 1910.134. Always use a NIOSH-approved respirator when necessary.



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Section 9 - Physical and Chemical Properties

Physical State:	Liquid
Color:	Clear
Odor:	Not available.
pH:	Alkaline
Vapor Pressure:	3 mm Hg @ 37°C
Vapor Density:	>1.0
Evaporation Rate:	No information found.
Viscosity:	>1 (ether=1)
Boiling Point:	100-142°C
Freezing/Melting Point:	0-10.6°C
Decomposition Temperature:	No information found.
Solubility in water:	Soluble
Specific Gravity/Density:	1.0-1.5
Molecular Formula:	NaOH
Molecular Weight:	40.00

Section 10 - Stability and Reactivity

Chemical Stability:

Stable.

Conditions to Avoid:

Incompatible materials, extreme temperatures..

Incompatibilities with Other Materials:

Metals, acids, aluminum, nitro compounds, zinc, tin, halogenated hydrocarbons, nitromethane, flammable liquids.

Hazardous Decomposition Products:

Toxic fumes of sodium oxide.

Hazardous Polymerization:

Has not been reported.

Section 11 - Toxicological Information

RTECS:

CAS# 7732-18-5: ZC0110000.

CAS# 1310-73-2: WB4900000.

LD50/LC50:

CAS# 7732-18-5:

Oral, rat: LD50 = >90 mL/kg.

CAS# 1310-73-2:

Draize test, rabbit, eye: 400 ug Mild;

Draize test, rabbit, eye: 1% Severe;

Draize test, rabbit, eye: 50 ug/24H Severe;

Carcinogenicity:

CAS# 7732-18-5: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.

CAS# 1310-73-2: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.



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Epidemiology:

No information found.

Teratogenicity:

No information found.

Reproductive:

No information found.

Mutagenicity:

No information found.

Neurotoxicity:

No information found.

Section 12 - Ecological Information

No information found.

Section 13 - Disposal Considerations

Dispose of in accordance with Federal, State, and local regulations.

Section 14 - Transport Information

US DOT

	< 0.5%	Between 0.5% and 2.0%	> 2.0%
Shipping Name:	Not regulated.	Sodium hydroxide solution	Sodium hydroxide solution
Hazard Class:		8	8
UN Number:		UN1824	UN1824
Packing Group:		PG III	PG II

Section 15 - Regulatory Information

US Federal**TSCA:**

CAS# 7732-18-5 is listed on the TSCA Inventory.

CAS# 1310-73-2 is listed on the TSCA Inventory.

SARA Reportable Quantities (RQ):

CAS# 1310-73-2: final RQ = 1000 pounds (454 kg)

CERCLA/SARA Section 313:

None of the components are on this list.

OSHA - Highly Hazardous:

None of the components are on this list.

US State**State Right to Know:**

Sodium hydroxide can be found on the following state Right-to-Know lists: California, New Jersey, Pennsylvania, Minnesota, Massachusetts.



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California Regulations:

None.

European/International Regulations

Canadian DSL/NDSL:

CAS# 7732-18-5 is listed on Canada's DSL List.

CAS# 1310-73-2 is listed on Canada's DSL List.

Canada Ingredient Disclosure List:

CAS# 7732-18-5 is not listed on Canada's Ingredient Disclosure List.

CAS# 1310-73-2 is listed on Canada's Ingredient Disclosure List.

Section 16 - Other Information

MSDS Creation Date: July 6, 1998

Revision Date: October 20, 2011

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