



Material Safety Data Sheet

Sodium hydroxide, ACS

Section 1 - Chemical Product and Company Identification

MSDS Name:

Sodium hydroxide, ACS

Catalog Numbers:

LC23900

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

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name:	Percent
1310-73-2	Sodium hydroxide	100

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: White

Danger! Corrosive. Causes skin burns. Causes eye burns. Causes digestive tract burns.

Causes respiratory tract burns.

Target Organs: None.

Potential Health Effects
Eye:

Causes severe eye burns.

Skin:

Causes skin burns. May cause deep, penetrating ulcers of the skin.

Ingestion:

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



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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:

Wear appropriate protective clothing to prevent contact with skin and eyes. Wear a self-contained breathing apparatus (SCBA) to prevent contact with thermal decomposition products. Use water with caution and in flooding amounts.

Extinguishing Media:

For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam.

Autoignition Temperature:

Not applicable.

Flash Point:

Not applicable.

NFPA Rating:

CAS# 1310-73-2: Not published.

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.



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Spills/Leaks:

Material may be neutralized to pH 7 with citric acid or other suitable neutralizing agent. Contains spill if possible, scoop into clean DRY container (plastic) and label "Corrosive" for later disposal. NOTE: CONTACT WITH WATER PRODUCES HEAT AND A STRONG CORROSIVE SOLUTION. When washing down area, keep out of drains, sewers and use flooding amounts of water.

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.

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:

Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Exposure Limits

Chemical Name:	ACGIH	NIOSH	OSHA
Sodium hydroxide	None of the components are on this list.	None of the components are on this list.	2 mg/m ³ TWA;

OSHA Vacated PELs

Personal Protective Equipment

Eyes:

Wear appropriate protective eye glasses 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 29 CFR 1910.134. Always use a NIOSH-approved respirator when necessary.

Section 9 - Physical and Chemical Properties

Physical State: Pellets

Color: White

Odor: Not available.

pH: 14 (5% soln)

Vapor Pressure: 42 mm Hg @ 1000C



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Vapor Density: No information found.

Evaporation Rate: No information found.

Viscosity: >1 (ether=1)

Boiling Point: 2534°F (1,390.00°C)

Freezing/Melting Point: 605°F (318.33°C)

Decomposition Temperature: No information found.

Solubility in water: Soluble.

Specific Gravity/Density: 2.1

Molecular Formula: NaOH

Molecular Weight: 40

Section 10 - Stability and Reactivity

Chemical Stability:

Stable. Material is a strong base, reacts exothermically with water - corrosive fumes of sodium hydroxide may be released.

Conditions to Avoid:

Incompatible materials, acids.

Incompatibilities with Other Materials

Reacts with mineral acids to form corresponding salts; reacts with weak acids gases like hydrogen sulfide, sulfur dioxide, and carbon dioxide; ignites when in contact with cinnamaldehyde or zinc; and reacts explosively with a mixture of chloroform and methane. Corrosive to metals such as aluminum, tin, and zinc as well as to alloys such as steel, and may cause formation of flammable hydrogen gas.

Hazardous Decomposition Products

Toxic fumes of sodium oxide, sodium peroxide fumes.

Hazardous Polymerization

Has not been reported.

Section 11 - Toxicological Information

RTECS:

CAS# 1310-73-2: WB4900000.

LD50/LC50:

CAS# 1310-73-2:
No information found.

Carcinogenicity:

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

Epidemiology:

No information reported.

Teratogenicity:

No information reported.

Reproductive:

No information reported.

Mutagenicity

Mutation data reported.



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Neurotoxicity

No information reported.

Section 12 - Ecological Information

Ecotoxicity:

TLm, mosquito fish, 125 ppm/96hr. (fresh water); TLm, bluegill, 99 mg/48hr.(tap water).

Environmental:

Once liquid, sodium hydroxide leaches rapidly into the soil.

Physical:

No information found.

Other:

No information found.

Section 13 - Disposal Considerations

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

Section 14 - Transport Information

US DOT

Shipping Name: Sodium hydroxide, solid

Hazard Class: 8

UN Number: UN1823

Packing Group: PG II

Section 15 - Regulatory Information

US Federal

TSCA

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, Florida, Pennsylvania, Minnesota, Massachusetts.



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California Regulations

European/International Regulations

Canadian DSL/NDSL

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

Canada 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: July 31, 2008

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