

SAFETY DATA SHEET

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

1.1 Product identifiers

Product name Sodium Hydroxide 2% 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)

Skin Corrosion / Irritation	Category 1A
Eye Damage / Irritation	Category 2A
Specific Target Organs - (single exposure)	Category 1
Corrosive to metals	Category 1

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. Causes serious eye irritation. Causes damage to organs.

Precautionary statements

Keep only in original container. Do not breathe fumes, mist, vapors, or spray. Wash arms, hands and face thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves and eye protection. IF SWALLOWED: rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF exposed: Call a POISON CENTER or physician. Immediately call a POISON CENTER or physician. Specific treatment (Wash areas of contact with water immediately). If eye irritation persists: Get medical attention. Wash contaminated clothing before reuse. Absorb spillage to prevent material damage. Store locked up. Store in corrosive resistant container with a resistant inner liner. Dispose of contents in accordance with local, state, federal and international regulations.

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
Water	H ₂ O	7732-18-5	97.54%
Sodium Hydroxide	Caustic soda	1310-73-2	2.46%

SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice

If inhaled

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

In case of skin contact

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. May cause mild irritation, slick feel to touch.

In case of eye contact IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. May cause slight irritation.

If swallowed IF SWALLOWED: rinse mouth. Do NOT induce vomiting. Dilute with water or milk. Do not induce vomiting. Call a physician if necessary.

4.2 Most important symptoms and effects, both acute and delayed

Causes severe skin burns and eye damage. Causes serious eye irritation. Causes damage to organs. These items are mildly corrosive and should be handled with care. May cause slight irritation to areas of contact. Wash areas of contact with water. Does not present any significant health hazards at this low concentration. EYE CONTACT: May cause slight irritation. SKIN CONTACT: May cause mild irritation, slick feel to touch.

4.3 Indication of any immediate medical attention and special treatment needed

Immediately call a POISON CENTER or physician. Specific treatment (Wash areas of contact with water immediately). Irrigate immediately with large quantity of water for at least 15 minutes. Call a physician if irritation develops. Remove to fresh air. Give artificial respiration if necessary. If breathing is difficult, give oxygen. Flush with plenty of water for at least 15 minutes. Call a physician if irritation develops. Dilute with water or milk. Do not induce vomiting. Call a physician if necessary.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media Use any means suitable for extinguishing surrounding fire.

Unsuitable extinguishing media No information available.

5.2 Specific hazards arising from the substance or mixture

Not considered to be a fire or explosion hazard.

5.3 Special protective equipment and precautions for firefighters

Use protective clothing and breathing appropriate for the surrounding fire.

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
2	0	0	N/A

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear protective gloves and eye protection.

6.2 Environmental precautions

No information available.

6.3 Methods and materials for containment and cleaning up

Collect liquid and dilute with water. Neutralize with dilute acids solutions. Release to drain to local regulations allow. For larger spills, absorb with suitable material (vermiculite, clay, etc). Collect the solid residue and save 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

As with all chemical, wash hands thoroughly after handling. Avoid contact with eyes and skin. Protect from freezing and physical damage. Do not mix with acids.

Hygiene measures

No information available.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Store in corrosion resistant container with a resistant inner liner.

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
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Sodium hydroxide	TWA	2 mg/m3
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US. ACGIH Threshold Limit Values

Component	Type	Value
Sodium hydroxide	TLV-Ceiling	2 mg/m3

US. NIOSH: Pocket Guide to Chemical Hazards

No information available.

Biological occupational exposure limits

No information available

8.2 Exposure controls

Appropriate engineering controls

No specific controls are needed. Normal room ventilation is adequate.

Personal protective equipment

Eye/face protection

Wear protective gloves and eye protection. Safety glasses or goggles.

Skin and body protection

Wear protective gloves and eye protection. Safety glasses or goggles.

Respiratory protection

Normal room ventilation is adequate.

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	Colorless
Odor	No information available
Odor Threshold	No information available
pH	>13
Melting Point/Range	0 °C
Boiling Point/Range	100 °C
Evaporation Rate	No information available
Flammability (solid)	No information available
Flammability or explosive limit	
Upper	No data available
Lower	No data available

Vapor Pressure	No information available
Vapor Density	No information available
Density	1.01
Solubility	Miscible
Partition coefficient; n-octanol/water	No information 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

Stable under normal conditions of use and storage.

10.2 Chemical stability

Stable under normal conditions of use and storage.

10.3 Possibility of hazardous reactions

Data not available.

10.4 Conditions to avoid

Keep only original container. Acids, organic halogen compounds, metals such as aluminum, tin, and zinc.

10.5 Incompatible materials

No information available.

10.6 Hazardous decomposition products

Will not occur.

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	-	-	-

Skin corrosion/irritation

Causes severe skin burns.

Serious eye damage/eye irritation

Causes eye damage and serious eye irritation. If eye irritation persists: Get medical attention.

Respiratory or skin sensitization

No information available.

Germ cell mutagenicity

Investigated as a mutagen (Sodium Hydroxide).

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

Causes damage to organs. Do not breathe fumes, mist, vapors, or spray. Wash arms, hands and face thoroughly after handling.

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

No information available.

12.2 Persistence and degradability

No information available.

12.3 Bio accumulative potential

No information available.

12.4 Mobility in soil

No information available.

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
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)

Listed.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

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

Listed, Sodium Hydroxide: 1000 lb final RQ; 454 kg final RQ.

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

Not regulated

**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.