

SAFETY DATA SHEET

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

1.1 Product identifiers

Product name Sodium Hydroxide 5N Solution
CAS number 7732-18-5

Synonyms Soda Lye, Caustic Soda, Aetznatron, Sodium Hydrate

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 1)
Eye Damage/ irritation (Category 1)

2.2 GHS Label elements, including precautionary statements

Pictogram



Signal Word

Danger

Hazard statements

H314 Causes severe skin burns and eye damage

H318 Causes serious eye damage

Precaution statements

P260 Do not breathe fumes, mist, vapors, and spray.

P264 Wash arms, hands and face thoroughly after handling.

P280 Wear protective gloves and eye protection.

P301 + P330 + P331 IF SWALLOWED: rinse mouth. DO NOT induce vomiting.

P303 + P361 IF ON SKIN (or hair): Take off immediately all contaminated clothing.
Rinse skin with water.

P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER or physician.

P321 Specific treatment (wash areas of contact with water immediately).

P363 Wash contaminated clothing before reuse.

P405 Store locked up

P501 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	79.2-80.8 %
Sodium Hydroxide	NaOH	1310-73-5	19.6-20.2%

SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice

If inhaled Remove to fresh air. If breathing is difficult, give oxygen. Get medical attention if

In case of skin contact IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Causes severe burns.

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. Corrosive! Causes irritation and burns. Can cause burns that may lead to permanent impairment of vision, including blindness.
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 damage. CAUTION! Corrosive. Causes severe burns. May be fatal if swallowed. Harmful if inhaled. Wash areas of contact with water for at least 15 minutes. Call a physician if irritation develops. If ingested, dilute with water and call a physician. Do not induce vomiting. For eyes, flush out with plenty of water for at least 15 minutes. Call a physician. Reacts violently with acids. EYE CONTACT: Corrosive! Causes irritation and burns. Can cause burns that may lead to permanent impairment of vision, including blindness. SKIN CONTACT: Causes severe burns. CHRONIC EFFECTS /CARCINOGENICITY: Repeated exposures to Sodium Hydroxide solutions has a destructive effect on tissue.

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	Water spray, Carbon dioxide (CO ₂), dry chemical, alcohol-resistant foam
Unsuitable extinguishing media	No information available

5.2 Specific hazards arising from the substance or mixture

Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes.

5.3 Special protective equipment and precautions for firefighters

Wear special protective clothing and positive pressure self-contained breathing apparatus. Butyl rubber, natural rubber, Neoprene, nitrile rubber, polyethylene, polyvinyl chloride, Teflon, Viton, or Saranex barrier recommended.

5.4 Further information

No information available

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

Keep water away from release. Stop or control the leak, if this can be done without undue risk. Prompt cleanup and removal are necessary. Shovel into suitable dry container. Control runoff and isolate discharged material for proper 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

Store locked up. As with all chemicals, 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 locked up.

Incompatibilities

acids

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	TWA	2 mg/m3

US. ACGIH Threshold Limit Values

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

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 protection

Wear protective gloves and eye protection. Chemical resistant gloves.

Body Protection

Wear protective clothing to minimize skin exposure.

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 liquid
Odor	No information available
Odor Threshold	No information available
pH	Greater than 13
Melting Point/Range	Approx. 0°C
Boiling Point/Range	Approximately 100°C
Evaporation Rate	No information available
Flammability (solid)	No information available
Flammability or explosive limit	No information available
Vapor Pressure	No information available
Vapor Density	No information available
Density	1.19
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	No information available
Molecular Weight	No information available
VOC Content(%)	No information available
Oxidizing properties	No information available

9.2 Other safety information

No data 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

No information available

10.4 Conditions to avoid

Incompatible materials

10.5 Incompatible materials

Violent reactions possible with: Acetone, Chlorine, Ethylene oxide, Fluorine, Hydrogen halides, Hydrazine hydrate, hydroxylamine, Acid anhydrides, Acrolein, Acid chlorides, Acids, Sulfur acid, Chloroform, Water, Hydrogen peroxide, Anhydrides, Phosphides, Halogen-halogen compounds, Trichloroethene.

Can decompose violently in contact with: Organic substances, Hydrogen sulphide

Risk of ignition or formation of inflammable gases or vapors with: Powdered aluminum, Ammonium salts, persulfates, Sodium borohydride, Phosphorus, Oxides of phosphorus, Halogenated hydrocarbon, Light metals, metals

Risk of explosion/exothermic reaction with: Bromine, Calcium. In powder form: furfuryl alcohol, Nitromethane, Peroxides, Organic nitro compounds, Nitriles, Acrylic monomers, Chloroform with Acetone, Nitrobenzene with Methanol, Nitrobenzene with salts, Magnesium, Zinc, and Tin (In the presence of atmospheric oxygen and/or moisture).

10.6 Hazardous decomposition products

No information available

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Product Information, Component Information

Acute toxicity

No information available

Skin corrosion/irritation

Causes severe skin burns and eye damage. Do not breathe fumes, mist, vapors, or spray. Wash arms, hands and face thoroughly after handling. 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. Wash contaminated clothing before reuse. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or physician. Specific treatment (Wash areas of contact with water immediately). IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Store locked up. Dispose of contents in accordance with local, state, federal and international regulations.

Serious eye damage/eye irritation

Causes serious eye damage. Wear protective gloves and eye protection. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or physician.

Respiratory or skin sensitization

Not applicable

Germ cell mutagenicity

Not applicable

Carcinogenicity

Not applicable

Specific target organ toxicity - single exposure

None known

Specific target organ toxicity - repeated exposure

None known

Reproductive toxicity

Not applicable

Chronic effects

Not applicable

11.2 Additional Information

No information available

SECTION 12: Ecological information

12.1 Toxicity

Not applicable

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) 20L, 55 Gal
UN number: UN1824
Proper shipping name: Sodium Hydroxide Solution
Hazard Class 8
Packaging Group II

Environmental hazards



IMDG 20L, 55 Gal
UN number: UN1824
Proper shipping name: Sodium Hydroxide Solution
Hazard Class 8
Packaging Group II

Environmental hazards



IATA 20L, 55 Gal
UN number: UN1824
Proper shipping name: Sodium Hydroxide Solution
Hazard Class 8
Packaging Group II



SECTION 15: Regulatory information

US federal regulations This product is not 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 regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous Chemicals

Sodium Hydroxide (CAS # 1310-73-2): 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 regulated

Food and Drug Administration (FDA)

Allowed as food additive in levels lower than 1%

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

Revision date: 06/14/2024

Revision number: 0

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.