

Safety Data Sheet Sodium Hydroxide 2N

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Sodium Hydroxide 2N

Synonyms/Generic Names: Caustic Soda Solution

Product Number: C7498

Product Use: Industrial, Manufacturing or Laboratory use

Manufacturer: Lab Alley LLC

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2. HAZARDS IDENTIFICATION

OSHA Hazards: Corrosive, Target organ effect

Target Organs: Kidney, Liver, Eyes, Skin, Mucous membranes, Respiratory system, Cardiovascular system

Signal Words: Danger

Pictograms:



GHS Classification:

Skin corrosion	Category 1
Serious eye damage	Category 1

GHS Label Elements, including precautionary statements:

Hazard Statements:

H314 Causes severe skin burns and eye damage.

Precautionary Statements:

P260	Do not breathe mists.	
P264	Wash hands thoroughly after handling.	
P280	Wear protective gloves/protective clothing/eye protection/face protection.	
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.	
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse	

Revised on 12/10/2019 Page 1 of 6

	skin with water/shower.	
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/doctor/physician.	
P363	Wash contaminated clothing before reuse.	
P501	Dispose of all contents/containers in accordance with local waste regulations.	

Potential Health Effects

Eyes	Causes severe eye burns.	
Inhalation	May be harmful if inhaled. Material is extremely destructive to the tissue of the mucous	
	membranes and upper respiratory tract.	
Skin	May be harmful if absorbed through skin. Causes skin burns.	
Ingestion	May be harmful if swallowed.	

NFPA Ratings

Health	3
Flammability	0
Reactivity	0
Specific hazard	Not Available

HMIS Ratings

Health	3
Fire	0
Reactivity	0
Personal	D

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	Weight %	CAS#	EINECS# / ELINCS#	Formula	Molecular Weight
Sodium Hydroxide	8	1310-73-2	215-185-5	NaOH	40.00 g/mol
Water	Balance	7732-18-5	231-791-2	H ₂ O	18.00 g/mol

4. FIRST-AID MEASURES

Eyes	Rinse with plenty of water for at least 15 minutes and seek medical attention immediately.
Inhalation	Move casualty to fresh air and keep at rest. If breathing is difficult, give oxygen. If not
	breathing, give artificial respiration. Get medical attention immediately.
Skin	Immediately flush with plenty of water for at least 15 minutes while removing contaminated
	clothing and wash using soap. Get medical attention immediately.
Ingestion	Do Not Induce Vomiting! Never give anything by mouth to an unconscious person. If
	conscious, wash out mouth with water. Get medical attention.

5. FIRE-FIGHTING MEASURES

Suitable (and unsuitable) extinguishing media	Product is not flammable. Use appropriate media for adjacent fire. Cool containers with water.
Special protective equipment and precautions for firefighters	Wear self-contained, approved breathing apparatus and full protective clothing, including eye protection and boots.
Specific hazards arising from the chemical	Emits toxic fumes (sodium oxides) under fire conditions. (See also Stability and Reactivity section).

Revised on 12/10/2019 Page 2 of 6

6. ACCIDENTAL RELEASE MEASURES

Personal precautions,	See section 8 for recommendations on the use of personal protective
protective equipment and	equipment.
emergency procedures	
Environmental precautions	Prevent spillage from entering drains. Any release to the environment
	may be subject to federal/national or local reporting requirements.
Methods and materials for	Neutralize spill. Absorb spill with noncombustible absorbent material, then
containment and cleaning up	place in a suitable container for disposal. Clean surfaces thoroughly with
	water to remove residual contamination. Dispose of all waste and cleanup
	materials in accordance with regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

See section 8 for recommendations on the use of personal protective equipment. Use with adequate ventilation. Wash thoroughly after using. Keep container closed when not in use. Avoid formation of aerosols.

Conditions for safe storage, including any incompatibilities

Store in cool, dry well ventilated area. Keep away from incompatible materials (see section 10 for incompatibilities).

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational exposure controls:

Component	Exposure Limits	Basis	Entity
Sodium Hydroxide	2 mg/m ³	CEIL	ACGIH
	2 mg/m ³	PEL	OSHA
	2 mg/m ³	CEIL	NIOSH

TWA: Time Weighted Average over 8 hours of work. TLV: Threshold Limit Value over 8 hours of work.

REL: Recommended Exposure Limit PEL: Permissible Exposure Limit

STEL: Short Term Exposure Limit during x minutes. IDLH: Immediately Dangerous to Life or Health WEEL: Workplace Environmental Exposure Levels

CEIL: Ceiling

Personal Protection

Eyes	Wear chemical safety glasses or goggles.	
Inhalation	Provide local exhaust, preferably mechanical. If exposure levels are excessive, use an	
	approved respirator.	
Skin	Wear nitrile or rubber gloves, apron or lab coat.	
Other	Not Available	

Other Recommendations

Provide eyewash stations, quick-drench showers and washing facilities accessible to areas of use and handling.

Revised on 12/10/2019 Page 3 of 6

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance (physical state, color, etc.)	Colorless liquid.
Odor	Odorless.
Odor threshold	Not Available
pH	14
Melting point/freezing point	-12-10°C (10-50°F)
Initial boiling point and boiling range	105-140°C (221-284°F)
Flash point	Not Flammable
Evaporation rate	Not Available
Flammability (solid, gas)	Not Flammable
Upper/lower flammability or explosive limit	Not Explosive
Vapor pressure	<24 hPa (<18 mmHg) at -20°C (68°F)
Vapor density	1.38 (air=1)
Density	1.38 g/cm ³
Solubility (ies)	Soluble in water.
Partition coefficient: n-octanol/water	Not Available
Auto-ignition temperature	Not Applicable
Decomposition temperature	Not Available

10. STABILITY AND REACTIVITY

Chemical Stability	Stable
Possibility of Hazardous Reactions	Will not occur.
Conditions to Avoid	Not Available
Incompatible Materials	Acids, organic materials, chlorinated solvents, aluminum,
	phosphorus, zinc, tin.
Hazardous Decomposition Products	Sodium oxides.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Skin	Not Available
Eyes	Not Available
Respiratory	Not Available
Ingestion	Not Available

Carcinogenicity

Carcinogeni	City
IARC	No components of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
ACGIH	No components of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
NTP	No components of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA	No components of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Signs & Symptoms of Exposure

Skin	Extent of damage depends on duration of contact. Burning, itching, redness, inflammation or swelling of exposed tissues.
Eyes	Eye burns, watering eyes.
Respiratory	Burning, choking, coughing, wheezing, laryngitis, shortness of breath, headache, nausea.
Ingestion	Burning, choking, nausea, vomiting, severe pain.

Revised on 12/10/2019 Page 4 of 6

Chronic Toxicity	Not Available
Teratogenicity	Not Available
Mutagenicity	Not Available
Embryotoxicity	Not Available
Specific Target Organ Toxicity	Not Available
Reproductive Toxicity	Not Available
Respiratory/Skin Sensitization	Not Available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Aquatic Vertebrate	Not Available
Aquatic Invertebrate	Not Available
Terrestrial	Not Available

Persistence and Degradability	Not Available
Bioaccumulative Potential	Not Available
Mobility in Soil	Not Available
PBT and vPvB Assessment	Not Available
Other Adverse Effects	Not Available

13. DISPOSAL CONSIDERATIONS

Waste Residues	Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies if necessary before disposing of waste product container.
	' '
Product	Users should review their operations in terms of the applicable federal/national or
Containers	local regulations and consult with appropriate regulatory agencies if necessary
	before disposing of waste product container.

The information offered in section 13 is for the product as shipped. Use and/or alterations to the product may significantly change the characteristics of the material and alter the waste classification and proper disposal methods.

14. TRANSPORTATION INFORMATION

US DOT	UN1824, Sodium hydroxide solution, 8, pg II
TDG	UN1824, SODIUM HYDROXIDE SOLUTION, 8, pg II
IMDG	UN1824, SODIUM HYDROXIDE SOLUTION, 8, pg II
Marine Pollutant	No
IATA/ICAO	UN1824, Sodium hydroxide solution, 8, pg II

Revised on 12/10/2019 Page 5 of 6

15. REGULATORY INFORMATION

TSCA Inventory Status	All ingredients are listed on the TSCA inventory.
DSCL (EEC)	All ingredients are listed on the DSCL inventory.
California Proposition 65	Not Listed
SARA 302	Not Listed
SARA 304	Not Listed
SARA 311	Acute Health Hazard
SARA 312	Acute Health Hazard
SARA 313	Not Listed
WHMIS Canada	Class E: Corrosive material.

16. OTHER INFORMATION

Revision	Date
Revision 1	12/03/2012
Revision 2	12/10/2019

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Revised on 12/10/2019 Page 6 of 6