

Sodium Hydroxide Solution

Safety Data Sheet

Section 1: Identification

1.1 Identification

Product Name : Sodium hydroxide solution

1.2 Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Laboratory chemicals, Plating

1.3 Details of the supplier of the safety data sheet

Nano3D Systems LLC
1110 NE Circle Blvd., ATAMI/Bldg. 11
Corvallis, OR 97330

1.4 Emergency telephone number

Emergency number Chemtrec : 800-424-9300

Section 2: Hazard(s) identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Corrosive to metals (Category 1), H290

Skin corrosion (Category 1), H314

Serious eye damage (Category 1), H318

For the full statement of the H-Statements mentioned in this Section, see Section 16.

2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word (GHS-US)

Danger

Hazard statements (GHS-US)

H290

May be corrosive to metals.

H314

Causes severe skin burns and eye damage.

H318

Causes serious eye damage.

Precautionary statements (GHS-US)

P234

Keep only in original container.

P264

Wash skin 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 skin with water/shower.

P304 + P340 + P310

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.

P305 + P351 + P338 + P310

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/doctor.

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P363 Wash contaminated clothing before reuse.
P390 Absorb spillage to prevent material damage.
P405 Store locked up.
P406 Store in corrosive resistant stainless steel container with a resistant inner liner.
P501 Dispose of contents/ container to an approved waste disposal plant.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

NONE

2.4 Unknown acute toxicity (GHS US)

No additional information available

Section 3: Composition/information on ingredients

3.2 Mixtures

Formula : HNaO
Molecular weight : 40.00 g/mol
: 1310-73-2

Hazardous components

Component	Classification	Concentration
Sodium Hydroxide		
CAS-No. 1310-73-2	Met. Corr. 1; Skin Corr. 1A;	Trade Secret
EC-No. 215-185-5	Eye Dam. 1; Aquatic Acute 3; H290, H314, H402	

Section 4: First Aid Measures

4.1 Description of first aid measures

Inhalation : If breathed in, move person into fresh air. If not breathing, give artificial respiration.

Skin contact : Wash off with soap and plenty of water.

Eye contact : Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

Ingestion : Never give anything by mouth to an unconscious person. Rinse mouth with water.

4.2 Most important symptoms and effects, both acute and delayed

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Inhalation	: No information available
Skin contact	: No information available
Eye contact	: No information available
Ingestion	: No information available

4.3 Indication of any immediate medical attention and special treatment needed

No further information available

Section 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media	: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Unsuitable extinguishing media	: None

5.2 Special hazards arising from the substance or mixture

Fire hazard	: Sodium oxides
	Nature of decomposition products not known

5.3 Advice for firefighters

Protection during firefighting	: Wear self-contained breathing apparatus for firefighting if necessary.
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Section 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

6.1.1 For non-emergency personnel	: Avoid dust formation. Avoid breathing vapors, mist or gas.
6.1.2 For emergency personnel	: No additional information available

6.2 Environmental precautions

No special environmental precautions required.

6.3 Methods and materials for containment and cleaning up

Sweep up and shovel. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal see section 13.

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Section 7: Handling and storage

7.1 Precautions for safe handling

Precautions for safe handling : For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions : Keep container tightly closed in a dry and well-ventilated place.
Storage class (TRGS 510): Non-combustible Solids.

Section 8: Exposure controls/personal protection

8.1 Control parameters

Components with workplace control parameters

Component	CAS-No.	Value	Control Parameters	Basis
Sodium hydroxide	1310-73-2	TWA	2.000000 mg/m ³	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
		C	2.000000 mg/m ³	USA. ACGIH Threshold Limit Values (TLV)
	Remarks	Upper Respiratory Tract irritation Eye irritation Skin irritation		
		C	2.000000 mg/m ³	USA. NIOSH Threshold Limit Values (TLV)

8.2 Exposure controls

Appropriate engineering controls	: General industrial hygiene practice.
Hand protection	: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.
Eye/face protection	: Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
Body protection	: Choose body protection in relation to its type, to the concentration and amount of dangerous

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	substances, and to the specific work-place. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Respiratory protection	: Respiratory protection is not required. For nuisance exposures use type OV/AG (US) or type ABEK (EU EN 14387) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US)
Control of environmental exposure	No special environmental precautions required.

Section 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	: Liquid, clear
Colour	: Colourless
Odor	: No information available
Odor threshold	: No information available
pH	: No information available
Melting point	: No information available
Freezing point	: No information available
Boiling point	: No information available
Flash point	: No information available
Relative evaporation rate (butyl acetate = 1)	: No information available
Flammability (solid, gas)	: No information available
Explosion limits	: No information available
Explosive properties	: No information available
Vapor pressure	: No information available
Relative density	: No information available
Water Solubility	: No information available
Partition coefficient: n-octanol/water	: No information available
Auto-ignition temperature	: No information available
Decomposition temperature	: No information available
Viscosity	: No information available
Viscosity, kinematic	: No information available
Viscosity, dynamic	: No information available
Oxidizing properties	: No information available

9.2 Other information

No further information available

Section 10: Stability and reactivity

10.1 Reactivity

No information available

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10.2 Chemical Stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

No data available.

10.4 Conditions to avoid

No data available.

10.5 Incompatible materials

Strong oxidizing agents.

10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Sodium oxides
Other decomposition products - No data available
In event of fire: see section 5.

Section 11: Toxicological information

11.1 Control parameters

Acute toxicity	: No data available
Skin corrosion/irritation	: No data available
Serious eye damage/irritation	: No data available
Respiratory or skin sensitization	: No data available
Germ cell mutagenicity	: No data available
Carcinogenicity IARC:	No component of this product present at levels greater than or equal 0.1% is identified as a known or anticipated carcinogen by IARC.
ACGIH:	No component of this product present at levels greater than or equal 0.1% is identified as a known or anticipated carcinogen by ACGIH.
NTP	: NTP, No component of this product present at levels greater than or equal 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA	OSHA, No component of this product present at levels greater than or equal 0.1% is identified as a known or anticipated carcinogen by OSHA.

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Reproductive toxicity : No information available

Specific target organ toxicity (single exposure) : No information available

Specific target organ toxicity (repeated exposure) : No information available

Aspiration hazard : No information available

Additional information

RTECS: Not available

Section 12: Ecological information

12.1 Toxicity

No information available

12.2 Persistence and degradability

No information available

12.3 Bioaccumulative potential

No information available

12.4 Mobility in soil

No information available

12.4 Other adverse effects

No information available

Section 13: Disposal considerations

13.1 Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging

Dispose of as unused product.

Section 14: Transportation information

14.1 Transportation information

Department of Transportation (DOT)

UN number: 1824

Class: 8

Packing group: II

Proper shipping name: Sodium hydroxide solution

Poison Inhalation Hazard: No

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IMDG

UN number: 1824 Class: 8 Packing group: II EMS-No: F-A, S-B
Proper shipping name: SODIUM HYDROXIDE SOLUTION

IATA

UN number: 1824 Class: 8 Packing group: II
Proper shipping name: Sodium hydroxide solution

Section 15: Regulatory information

15.1 US Federal regulations

SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312

NOSARA HAZARDS

Massachusetts Right to Know Components

	CAS-No.	Revision Date
Sodium hydroxide	1310-73-2	1989-08-11

Pennsylvania Right to Know Components

	CAS-No.	Revision Date
Water	7732-18-5	
Sodium hydroxide	1310-73-2	1989-08-11

New Jersey Right to Know Components

	CAS-No.	Revision Date
Water	7732-18-5	
Sodium hydroxide	1310-73-2	1989-08-11

California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Section 16: Other information

Full text of H-Statements referred to under section 2 and 3.

Aquatic Acute	Acute aquatic toxicity
Eye Dam.	Serious eye damage
H290	May be corrosive to metals.

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H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H402	Harmful to aquatic life.
Met. Corr.	Corrosive to metals
Skin Corr.	Skin corrosion

HMIS Rating

Health hazard: 3
Chronic Health Hazard:
Flammability: 0
Physical Hazard: 1

NFPA Rating

Health hazard: 3
Fire Hazard: 0
Reactivity Hazard: 0

SDS Preparation date: May 14, 2019 **Supersedes previous version:** New SDS

This SDS contains revisions in the following sections(s): Not applicable. New SDS.

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End of Safety Data Sheet