Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

Date of Issue: 03/08/2022

Version: 1.0

SECTION 1: IDENTIFICATION

1.1. Product Identifier

Product Form: Substance

Product Name: Sodium Hydroxide, 30% w/v

Product Code: SH6300SS

1.2. Intended Use of the Product

Laboratory Use.

1.3. Name, Address, and Telephone of the Responsible Party

Company

AquaPhoenix Scientific, Inc.

860 Gitts Run Road Hanover, PA 17331 USA Tel +1 (717)632-1291 Toll-Free: (866)632-1291 tech@aguaphoenixsci.com

.4. Emergency Telephone Number

Emergency Number : ChemTel LLC

(800)255-3924 (North America) +1 (813)248-0585 (International)

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the Substance or Mixture

GHS-US/CA Classification

Met. Corr. 1 H290 Acute Tox. 4 (Oral) H302 Skin Corr. 1A H314 Eye Dam. 1 H318

Full text of hazard classes and H-statements: see section 16

2.2. Label Elements

GHS-US/CA Labeling

Hazard Pictograms (GHS-US/CA)





Signal Word (GHS-US/CA) : Danger

Hazard Statements (GHS-US/CA) : H290 - May be corrosive to metals.

H302 - Harmful if swallowed.

H314 - Causes severe skin burns and eye damage.

Precautionary Statements (GHS-US/CA): P234 - Keep only in original container.

P260 - Do not breathe vapors, mist, or spray.

P264 - Wash hands, forearms, and other exposed areas thoroughly after handling.

P270 - Do not eat, drink or smoke when using this product.

P280 - Wear protective gloves, protective clothing, and eye 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.

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 doctor.

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P321 - Specific treatment (see section 4 on this SDS).

P330 - Rinse mouth.

P363 - Wash contaminated clothing before reuse.

P390 - Absorb spillage to prevent material-damage.

P405 - Store locked up.

P406 - Store in corrosive resistant container with a resistant inner liner.

P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations.

2.3. Other Hazards

Exposure may aggravate pre-existing eye, skin, or respiratory conditions.

2.4. Unknown Acute Toxicity (GHS-US/CA)

No additional information available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substance

Not applicable

3.2. Mixture

Name	Synonyms	Product Identifier	% *	GHS Ingredient Classification
Water	AQUA / water	(CAS-No.) 7732-18-5	70	Not classified
Sodium hydroxide	Caustic soda / Sodium hydroxide (Na(OH)) / SODIUM HYDROXIDE / LYE	(CAS-No.) 1310-73-2	30	Met. Corr. 1, H290 Acute Tox. 4 (Oral), H302 Skin Corr. 1A, H314 Eye Dam. 1, H318 Aquatic Acute 3, H402

Full text of H-statements: see section 16

SECTION 4: FIRST AID MEASURES

4.1. Description of First-aid Measures

General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

Inhalation: Remove to fresh air and keep at rest in a position comfortable for breathing. Immediately call a poison center or doctor/physician.

Skin Contact: Immediately remove contaminated clothing. Immediately flush skin with plenty of water for at least 30 minutes. Get immediate medical advice/attention.

Eye Contact: Immediately rinse with water for at least 30 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention.

Ingestion: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

4.2. Most Important Symptoms and Effects Both Acute and Delayed

General: Causes severe skin burns and eye damage.

Inhalation: May be corrosive to the respiratory tract.

Skin Contact: Causes severe irritation which will progress to chemical burns.

Eye Contact: Causes permanent damage to the cornea, iris, or conjunctiva.

Ingestion: May cause burns or irritation of the linings of the mouth, throat, and gastrointestinal tract.

Chronic Symptoms: None expected under normal conditions of use.

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing Media

Suitable Extinguishing Media: Use extinguishing media suitable for surrounding type of fire.

Unsuitable Extinguishing Media: None known.

5.2. Special Hazards Arising From the Substance or Mixture

Fire Hazard: Not considered flammable but may burn at high temperatures.

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^{*}Percentages are listed in weight by weight percentage (w/w%) for liquid and solid ingredients. Gas ingredients are listed in volume by volume percentage (v/v%).

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Explosion Hazard: Contact with metallic substances may release flammable hydrogen gas.

Reactivity: May be corrosive to metals. Contact with metals may evolve flammable hydrogen gas. Degrades glass, including borosilicate glass. May react exothermically with water releasing heat. Adding an acid to a base or base to an acid may cause a violent reaction.

5.3. Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire.

Firefighting Instructions: Use water spray or fog for cooling exposed containers.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Hazardous Combustion Products: Gives off hydrogen by reaction with metals.

5.4. Reference to Other Sections

Refer to Section 9 for flammability properties.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Do not breathe vapor, mist or spray. Do not get in eyes, on skin, or on clothing.

6.1.1. For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protective equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

6.1.2. For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit. Ventilate area.

6.2. Environmental Precautions

Prevententry to sewers and public waters.

6.3. Methods and Materials for Containment and Cleaning Up

For Containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. As an immediate precautionary measure, isolate spill or leak area in all directions.

Methods for Cleaning Up: Clean up spills immediately and dispose of waste safely. Absorb spillage to prevent material damage. Absorb liquid components with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

6.4. Reference to Other Sections

See Section 8 for exposure controls and personal protection and Section 13 for disposal considerations.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling

Additional Hazards When Processed: May be corrosive to metals. May release corrosive vapors. Degrades glass, including borosilicate glass.

Precautions for Safe Handling: Do not breathe mist, spray, vapors. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Do not get in eyes, on skin, or on clothing. Handle empty containers with care because they may still present a hazard.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures.

7.2. Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations.

Storage Conditions: Keep container closed when not in use. Store in a dry, cool place. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials. Store in original container or corrosive resistant and/or lined container. Store locked up/in a secure area.

Incompatible Materials: Strong acids, strong bases, strong oxidizers, glass, metals. May be corrosive to metals.

7.3. Specific End Use(s)

Laboratory Use.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters

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For substances listed in section 3 that are not listed here, there are no established exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), AIHA (WEEL), NIOSH (REL), OSHA (PEL), or Canadian provincial governments.

Sodium hydroxide (1310-73-2)		
USA ACGIH	ACGIH OEL Ceiling	2 mg/m³
USA OSHA	OSHA PEL (TWA) [1]	2 mg/m³
USA NIOSH	NIOSH REL (Ceiling)	2 mg/m³
USA IDLH	IDLH	10 mg/m³
Alberta	OEL C	2 mg/m³
British Columbia	OEL C	2 mg/m³
Manitoba	OEL C	2 mg/m³
New Brunswick	OEL C	2 mg/m³
Newfoundland & Labrador	OEL C	2 mg/m³
Nova Scotia	OEL C	2 mg/m³
Nunavut	OEL C	2 mg/m³
Northwest Territories	OEL C	2 mg/m³
Ontario	OEL C	2 mg/m³
Prince Edward Island	OEL C	2 mg/m³
Québec	Plafond (OEL Ceiling)	2 mg/m³
Saskatchewan	OEL C	2 mg/m³
Yukon	OEL C	2 mg/m³

8.2. Exposure Controls

Appropriate Engineering Controls: Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

Personal Protective Equipment: Gloves. Protective clothing. Protective goggles. Face shield. Insufficient ventilation: wear respiratory protection.



Freezing Point









Materials for Protective Clothing: Chemically resistant materials and fabrics. Corrosion-proof clothing.

Hand Protection: Wear protective gloves.

Eye and Face Protection: Chemical safety goggles and face shield. **Skin and Body Protection:** Wear suitable protective clothing.

Respiratory Protection: If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn. In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure levels are not known wear approved respiratory protection.

Environmental Exposure Controls: Avoid unnecessary release into the environment.

 $\textbf{Consumer Exposure Controls:} \ We ar \ recommended \ personal \ protective \ equipment.$

Other Information: When using, do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical and Chemical Properties

Physical State : Liquid

Appearance : Clear, colorless Liquid

Odor : Odorless

Odor Threshold: No data availablepH: > 13.0 (Estimate)Evaporation Rate: No data availableMelting Point: No data available

Boiling Point : 105 – 110 °C (221 – 230 °F)

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No data available

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Flash Point : n.a.

Auto-ignition Temperature No data available **Decomposition Temperature** No data available Flammability (solid, gas) Not applicable **Lower Flammable Limit** No data available **Upper Flammable Limit** No data available Vapor Pressure No data available Relative Vapor Density at 20°C No data available **Relative Density** : No data available

Density : 1.33 – 1.40 (Estimated Range)

Specific Gravity : No data available

Solubility : Miscible.

Water: No

Partition Coefficient: N-Octanol/Water : No data available Viscosity : No data available

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity:

May be corrosive to metals. Contact with metals may evolve flammable hydrogen gas. Degrades glass, including borosilicate glass. May react exothermically with water releasing heat. Adding an acid to a base or base to an acid may cause a violent reaction.

10.2. Chemical Stability:

Stable under recommended handling and storage conditions (see section 7).

10.3. Possibility of Hazardous Reactions:

Hazardous polymerization will not occur.

10.4. Conditions to Avoid:

Direct sunlight, extremely high or low temperatures, and incompatible materials.

10.5. Incompatible Materials:

Strong acids, strong bases, strong oxidizers, glass, metals. May be corrosive to metals.

10.6. Hazardous Decomposition Products:

Thermal decomposition may produce: Sodium oxides.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on Toxicological Effects - Product

Acute Toxicity (Oral): Harmful if swallowed.
Acute Toxicity (Dermal): Not classified
Acute Toxicity (Inhalation): Not classified

LD50 and LC50 Data:

Sodium Hydroxide, 30% w/v	
ATE US/CA (oral)	809.26 mg/kg body weight

Skin Corrosion/Irritation: Causes severe skin burns.

pH: > 13.0

Eye Damage/Irritation: Causes serious eye damage.

pH: > 13.0

Respiratory or Skin Sensitization: Not classified

Germ Cell Mutagenicity: Not classified

Carcinogenicity: Not classified

Specific Target Organ Toxicity (Repeated Exposure): Not classified

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): Not classified.

Aspiration Hazard: Not classified

Symptoms/Injuries After Inhalation: May be corrosive to the respiratory tract.

Symptoms/Injuries After Skin Contact: Causes severe irritation which will progress to chemical burns. **Symptoms/Injuries After Eye Contact:** Causes permanent damage to the cornea, iris, or conjunctiva.

Symptoms/Injuries After Ingestion: May cause burns or irritation of the linings of the mouth, throat, and gastrointestinal tract.

Chronic Symptoms: None expected under normal conditions of use.

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11.2. Information on Toxicological Effects - Ingredient(s)

LD50 and LC50 Data:

Sodium hydroxide (1310-73-2)	
LD50 Oral Rat	325 mg/kg

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecology - General: Not classified.

Sodium hydroxide (1310-73-2)	
LC50 Fish 1	45.4 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])
EC50 - Crustacea [1]	40 mg/l

12.2. Persistence and Degradability

Sodium Hydroxide, 30% w/v	
Persistence and Degradability	Not persistent.

12.3. Bioaccumulative Potential

Sodium Hydroxide, 30% w/v	
Bioaccumulative Potential	Not expected to bioaccumulate.

12.4. Mobility in Soil

Sodium Hydroxide, 30% w/v	
Ecology - Soil	Leaches into groundwater.

12.5. Other Adverse Effects

Other Adverse Effects: None known.

Other Information: Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste Treatment Methods: Neutralize collected waste before discharge.

Sewage Disposal Recommendations: Do not dispose of waste into sewer.

Waste Disposal Recommendations: Dispose of contents/container in accordance with local, regional, national, territorial, provincial, and international regulations.

Additional Information: Empty containers may be recycled after cleaning.

Ecology - Waste Materials: Avoid release to the environment.

SECTION 14: TRANSPORT INFORMATION

The shipping description(s) stated herein were prepared in accordance with certain assumptions at the time the SDS was authored, and can vary based on a number of variables that may or may not have been known at the time the SDS was issued.

14.1. In Accordance with DOT

Proper Shipping Name : SODIUM HYDROXIDE SOLUTION

Hazard Class : 8
Identification Number : UN1824
Label Codes : 8
Packing Group : II
ERG Number : 154



14.2. In Accordance with IMDG

EmS-No. (Spillage)

Proper Shipping Name : SODIUM HYDROXIDE SOLUTION

: S-B

Hazard Class : 8
Identification Number : UN1824
Label Codes : 8
Packing Group : II
EmS-No. (Fire) : F-A



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14.3. In Accordance with IATA

Proper Shipping Name : SODIUM HYDROXIDE SOLUTION

Hazard Class : 8

Identification Number : UN1824

Label Codes : 8
Packing Group : II
ERG Code (IATA) : 8L



Proper Shipping Name : SODIUM HYDROXIDE SOLUTION

Hazard Class : 8
Identification Number : UN1824
Label Codes : 8

Packing Group : II



SECTION 15: REGULATORY INFORMATION

15.1. US Federal Regulations

Sodium Hydroxide, 30% w/v		
SARA Section 311/312 Hazard Classes	Physical hazard - Corrosive to metals	
	Health hazard - Serious eye damage or eye irritation	
	Health hazard - Skin corrosion or Irritation	
Water (7732-18-5)		
Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active		
Sodium hydroxide (1310-73-2)		
Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active		
CERCLA RQ	1000 lb	

15.2. US State Regulations

Sodium Hydroxide, 30% w/v()
State or local regulations

Sodium hydroxide (1310-73-2)

U.S. - New Jersey - Right to Know Hazardous Substance List

U.S. - Pennsylvania - RTK (Right to Know) List

U.S. - Massachusetts - Right To Know List

U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List

15.3. Canadian Regulations

Water (7732-18-5)

Listed on the Canadian DSL (Domestic Substances List)

Sodium hydroxide (1310-73-2)

Listed on the Canadian DSL (Domestic Substances List)

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Date of Preparation or Latest : 02/28/2022

Revision

Other Information : This document has been prepared in accordance with the SDS requirements of the OSHA

Hazard Communication Standard 29 CFR 1910.1200 and Canada's Hazardous Products

Regulations (HPR) SOR/2015-17.

GHS Full Text Phrases:

Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Aquatic Acute 3	Hazardous to the aquatic environment - Acute Hazard Category 3
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Met. Corr. 1	Corrosive to metals Category 1
Skin Corr. 1A	Skin corrosion/irritation Category 1A
H290	May be corrosive to metals

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H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage
H402	Harmful to aquatic life

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

NA GHS SDS 2015 (Can, US)

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