TheSage.com
Majestic Mountain Sage Inc ®

Sodium Hydroxide
Safety Data Sheet

SECTION 1: Identification of the Substance/Mixture and of the Company/Undertaking

1.1 Product Name: Sodium Hydroxide
Product Code: 519-120X

1.2 Intended Use: Compound used in customer substance/mixture/product.

1.3 Supplier:
Majestic Mountain Sage Inc
2490 S 1350 W
Nibley, Utah 84321 - United States of America
T 435.755.0863 - F 435.755.2108
www.TheSage.com

1.4 Emergency Telephone Number
No additional information available.

SECTION 2: Hazards Identification

2.1 Classification of the Substance or Mixture

Classification According to Regulation (EC) No. 1272/2008 [CLP]

Corrosive to Metals, Category 1	H290: May be corrosive to metals.
Skin Corrosion/Irritation, Category 1A	H314: Causes severe skin burns and eye damage.
Eye Damage/Irritation, Category 1	H318: Causes serious eye damage.

2.2 Label Elements

Signal Word: Danger.

Hazard Statements

H290	May be corrosive to metals.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.

Precautionary Statements

P260	Do not breathe dust/fume/gas/mist/vapors/ spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P303+P361+P353	IF ON SKIN (or hair): Immediately remove/take off all contaminated clothing. Rinse skin with water/shower.
P310	Immediately call a POISON CENTER or doctor/physician.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.
P501	Dispose of contents/container in accordance with local/national regulations.

2.3 Other Hazards

No data available.

SECTION 3: Composition/Information on Ingredients

3.1 Substances

Chemical Name	CAS No.	EC No.	Weight %	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Sodium hydroxide	1310-73-2	215-85-5	99	Metal Corrosion 1 (H290) Skin Corrosion 1A (H314) Eye Damage 1 (H318)

SECTION 4: First Aid Measures

4.1 Description of First Aid Measures

General Advice:

Remove contaminated clothing and shoes. Do not get in eyes, on skin, or on clothing. Do not breathe dust/fume/gas/mist/vapors/spray. In the case of skin irritation or allergic reactions see a physician. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible.

Inhalation:
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.

Skin Contact:
Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Wash contaminated clothing before reuse. If skin irritation persists, call a physician.

Eye Contact:
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Ingestion:
Rinse mouth. Get medical attention. Never give anything by mouth to an unconscious person.

4.2 Most Important Symptoms/Effects, Acute and Delayed

Inhalation:	Corrosive. Burning sensation. Sore throat. Cough. Labored breathing. Shortness of breath. Symptoms may be delayed.
Skin Contact:	Corrosive. Redness. Pain. Serious skin burns. Blisters.
Eyes Contact:	Corrosive. Redness. Pain. Blurred vision. Severe deep burns.
Ingestion:	Corrosive. Burning sensation. Abdominal pain. Shock or collapse.

4.3 Indication of Immediate Medical Attention and Special Treatment Needed

Treat symptomatically and supportively. Treatment may vary with condition of victim and specifics of incident.

SECTION 5: Firefighting Measures

5.1 Extinguishing Media

Suitable:	Powder, alcohol-resistant foam, water spray, carbon dioxide.
Unsuitable:	No information available.

5.2 Special Hazards Arising from the Substance or Mixture

Not combustible.

5.3 Advice for Firefighters

Evacuate personnel to safe areas. Move containers from fire area if you can do it without risk. Cool drums with water spray. Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Stay upwind. Ensure adequate ventilation, especially in confined areas.

SECTION 6: Accidental Release Measures

6.1 Personal Precautions, Protective Equipment and Emergency Procedures

Evacuate personnel to safe areas. Keep away from heat, sparks, flame and other sources of ignition. Ensure adequate ventilation, especially in confined areas. Use personal protection recommended in section 8. Avoid contact with skin, eyes or clothing. Avoid generation of dust. Avoid breathing dust. Do not eat, drink or smoke when using this product., Wash throughly after handling.

6.2 Environmental Precautions

Prevent entry into waterways, sewers, basements or confined areas.

6.3 Methods and Materials for Containment and Cleaning Up

Sweep and shovel into suitable containers for disposal. Avoid generation of dust. Avoid breathing dust.

6.4 Reference to Other Sections

See Section 7 for more information.
See Section 8 for more information.
See Section 12 for more information.

SECTION 7: Handling and Storage

7.1 Precautions for Safe Handling

Handle in accordance with good industrial hygiene and safety practice. Do not handle until all safety precautions have been read and understood. Keep away from heat, sparks, flame and other sources of ignition. Ensure adequate ventilation, especially in confined areas. Use personal protection recommended in Section 8. Avoid generation of dust. Avoid breathing dust. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Wash throughly after handling.

7.2 Conditions for Safe Storage, Including Any Incompatibilities

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks, flame and other sources of ignition. Keep locked up and out of reach of children. Keep away from food, drink, and animal feeding stuffs. Store in accordance with local regulations.

7.3 Specific End Uses

Apart from the uses mentioned in Section 1.2 no other specific uses are stipulated.

SECTION 8: Exposure Controls/Personal Protection

8.1 Control Parameters

Chemical Name	Australia	Austria	Belgium	Denmark	European Union
Sodium hydroxide (CAS #: 1310-73-2)	2 mg/m^3 Peak	STEL: 4 mg/m^3 TWA: 2 mg/m^3	-	Ceiling: 2 mg/m^3	-

Chemical Name	Latvia	France	Finland	Germany	Italy
Sodium hydroxide (CAS #: 1310-73-2)	TWA: 0.5 mg/m^3	TWA: 2 mg/m^3	STEL: 2 mg/m^3 Ceiling: 2 mg/m^3	-	-

Chemical Name	Poland	Portugal	Spain	Switze-rland	Netherlan-ds
Sodium hydroxide (CAS #: 1310-73-2)	STEL: 1 mg/m^3 TWA: 0.5 mg/m^3	Ceiling: 2 mg/m^3	STEL: 2 mg/m^3	STEL: 2 mg/m^3 TWA: 2 mg/m^3	-

Chemical Name	Norway	United Kingdom	ACGIH TLV	OSHA PEL	NIOSH IDLH
Sodium hydroxide (CAS #: 1310-73-2)	Ceiling: 2 mg/m^3	STEL: 2 mg/m^3	Ceiling: 2 mg/m^3	TWA: 2 mg/m^3 (vacated) Ceiling: 2 mg/m^3	IDLH: 10 mg/m^3 Ceiling: 2 mg/m^3

Derived No Effects Level (DNEL)

For the worker	Inhalation	Systemic effects - Long-term	1.0 mg/m^3
For the general population	Inhalation	Systemic effects - Long-term	1.0 mg/m^3

Predicted No Effect Concentration (PNEC)
No information available

8.2 Exposure Controls

Engineering Controls: Ensure adequate ventilation, especially in confined areas, Showers. Eyewash stations. Remove all sources of ignition..

Environmental Exposure Controls: Do not allow into any sewer, on the ground or into any body of water.

8.3 Personal Protective Equipment

Eye/Face Protection: Wear safety glasses with side shields (or goggles).

Hand Protection:

Full contact:
Glove material: Nitrile rubber
Glove thickness: 0.11 mm
Break through time: >480 min

Splash contact:
Glove material: Nitrile rubber
Glove thickness: 0.11 mm
Break through time: >480 min

Skin and Body Protection: Suitable protective clothing

Respiratory Protection: In case of insufficient ventilation. Wear suitable respiratory equipment.

SECTION 9: Physical and Chemical Properties

9.1 Information on Basic Physical and Chemical Properties

Appearance:	Solid
Color:	White
Odor:	Special
Odor Threshold:	No specific odor
pH:	Not determined
Melting/ Freezing Point:	323°C (101, 325 Pa)
Boiling Point/Boiling Range:	1388°C (101, 325 Pa)
Flashpoint:	>100°C
Evaporation Rate:	Not determined
Flammability (Solid, Gas):	Not flammable
Flammability Limit in Air:	Not applicable
Vapor Pressure:	Not determined
Vapor Density:	Not applicable
Density:	2.13 g/cm^3 (20°C)
Relative Density:	Not determined
Solubility (ies):	Not determined
Parition coeffcient (LogPow):	Not determined
Auto-ignition Temperature:	Not applicable
Decomposition Temperature:	Not determined
Kinematic Viscosity:	Not determined
Dynamic Viscosity:	Not determined
Explosive Properties:	Not an explosive
Oxidizing Properties:	Non-oxidizing

9.2 Other Information

Molecular Formula:	NaOH
Molecular Weight:	40.0 g/mol

SECTION 10: Stability and Reactivity

10.1 Reactivity

Exothermic reaction when solid material is dissolved in water.

10.2 Chemical Stability

No decomposition if used and stored according to specifications.

10.3 Possibility of Hazardous Reactions

Strong base, reacts violently with acid and is corrosive in moist air to metals like zinc, aluminum, tin and lead forming a combustible/explosive gas.
Reacts with ammonium salts to produce ammonia, causing fire hazard. Attacks some forms of plastics, rubber or coatings.

10.4 Conditions to Avoid

Moisture. Incompatible materials.

10.5 Incompatible Materials

Metals, oxidizing agents, reducing agents, acids, alkalis, moisture.

10.6 Hazardous Decomposition Products

Sodium oxide.

SECTION 11: Toxicological Information

11.1 Information on Toxicological Effects

Acute Toxicity:	No data available
Skin Corrosion/Irritation:	Causes severe skin burns.
Serious Eye Damage/Irritation:	Causes serious eye damage.
Sensitization:	Existing data do not demonstrate that NaOH is a skin sensitizer.
Germ Cell Mutagenicity:	Negative mutagenicity test support no classification.
Carcinogenicity:	No data available.

Reproductive Toxicity:
Classification for reproductive or developmental toxicity is not necessary since NaOH is not expected to be systemically available in the body under normal handling and use conditions and the substance will not reach the fetus nor reach male and female reproductive organs. (EU RAR, 2007; Section 4.1.2.8, page 73).

Specific Target Organ Systemic Toxicity (Single Exposure):	No information available.
Specific Target Organ Systemic Toxicity (Repeated Exposure):	No information available.
Aspiration Hazard:	No information available.

SECTION 12: Ecological Information

12.1 Toxicity

Chemical Name	Algae/Aquatic plants EC50	Fish LC50	Crustacea EC50
Sodium hydroxide (CAS #: 1310-73-2)	-	-	40.4 mg/L 48h Ceriodaphnia sp. EC50

12.2 Persistence and Degradability
NaOH will rapidly dissolve and dissociate in water.

12.3 Bioaccumulative Potential
Bioaccumulation is not relevant for NaOH.

12.4 Mobility in Soil
No information available.

12.5 Results of PBT and vPvB Assessment
NaOH does not fulfil the criteria for persistency, bioaccumulation and toxicity. Therefore, NaOH is not considered a PBT or vPvb substance (EU RAR, 2007; Section 3.3.1.2, page 34).

12.6 Other Adverse Effects
No information available.

SECTION 13: Disposal Considerations

13.1 Waste Treatment Methods

Waste From Residues/Unused Products:
Disposal should be in accordance with applicable local, regional, national and international laws and regulations.

Contaminated Packaging:
Disposal should be in accordance with applicable local, regional, national and international laws and regulations.

SECTION 14: Transport Information

14.1 UN Number	1823
14.2 UN Proper Shipping Name	SODIUM HYDROXIDE, SOLID
14.3 Transport Hazard Class(es)	8
14.4 Packing Group	II
14.5 Environmental Hazards	Non-marine pollutant
14.6 Special Precautions for User	No information available
14.7 Transport in Bulk According to Annex II of MARPOL and the IBC Code	Not applicable

SECTION 15: Regulatory Information

15.1 Safety, Health and Environmental Regulations/Legislation Specific for the substance or mixture

European Union

Component	EINECS/ELINCS	SVHC Candidates	RESTRICTIONS - REACH TITLE VIII
Sodium hydroxide 1310-73-2 (99)	EINECS	-	-

Take note of Directive 98/24/EC on the protection of the health and safety of works from the risks related to chemical agents at work.
Take note of Directive 94/33/EC on the protection of young people at work.
Take note of Directive 92/85/EC on the protection of pregnant and breast-feeding women at work.

International Inventories

Component	TSCA	DSL/NDSL	ENCS	IECSC	KECL	PICCS	AICS
Sodium hydroxide 1310-73-2 (99)	X	DSL	X	X	X	X	X

"-" Not listed
"X" Listed

15.2 Chemical safety Assessment

A Chemical Safety Assessment has been carried out for this substance.

SECTION 16: Other Information

16.1 Key or Legend to Abbreviations and Acronyms Used in the Safety Data Sheet

TWA: Time Weighted Average
STEL: Short Term Exposure Limit
Ceiling: Maximum limit value
TSCA: Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL: Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS: European Inventory of Existing Commercial Chemical Substances/European List of Notified Chemical Substances
ENCS: Japanese Existing and New Chemical Substances
IECSC: Chinese Inventory of Existing Chemical Substances
KECL: Korea Existing Chemicals List
PICCS: The Philippine Inventory of Chemicals and Chemical Substances
AICS: The Australian Inventory of Chemical Substances

16.2 Full Text of H-Statements Referred to Under Section 3

H290: May be corrosive to metals
H314: Causes severe skin burns and eye damage
H318: Causes serious eye damage

Notes:
This safety data sheet is based on the properties of the material known at the time the data sheet was issued. The safety data sheet is intended to provide information for a health and safety assessment of the material and the circumstances, under which it is packaged, stored or applied in the workplace. For such a safety assessment holds no responsibility. This document is not intended for quality assurance purposes.