

SAFETY DATA SHEET

Section 1. Identification

Product name : Sodium Hydroxide, 10% w/w

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

Identified uses : Chemical intermediate, industrial use
Creation date : 03/25/2015
Print date : 03/25/2015
Version : 1.0
Supplier's details : Deep South Chemical, Inc. 229 Millstone Road, Broussard LA 70518
For Product Information/MSDSs Call: 337-837-9931
Emergency telephone number (with hours of operation) : CHEMTREC 800-424-9300 (U.S. 24 hour)
(001)281-276-5400
CANUTEC 613-996-6666 (Canada 24 hours)
CHEMTREC Int'l 01-703-527-3887 (International 24 hour)

Section 2. Hazards identification

2.1 Classification of the substance or mixture

Skin Corrosion 1B: H314 Causes severe skin burns and eye damage
Eye Damage 1: H318 Causes serious eye damage

2.2 GHS label elements



Hazard pictograms : **GHS05**

Signal Word : Danger

Hazard statements

H314 Causes severe skin burns and eye damage

Precautionary statements

P260 Do not breathe dust/fume/gas/mist/vapors/spray
P264 Wash exposed 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: remove/take off immediately all contaminated clothing. Rinse skin with water
P304+P340 IF INHALED: remove victim to fresh air and keep at rest in a position 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/physician
P363 Wash contaminated clothing before reuse
P405 Store locked up
P501 Dispose of contents in accordance with local, state and federal regulations.

Classification system**NFPA ratings:** Health (3) Fire (0) Reactivity (1)**HMIS ratings:** Health (3) Fire (0) Reactivity (1)**Hazards not otherwise classified** : No additional information.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Ingredient name	%	CAS number
Sodium Hydroxide	10	1310-73-2
Water	90	7732-18-5

Section 4. First aid measures

4.1 Description of necessary first aid measures

Eye contact	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Continue to rinse for at least 10 minutes. Check for and remove any contact lenses. Immediately call a Poison Center or doctor/physician..
Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a Poison Center or doctor/physician.
Skin contact	Flush contaminated skin with water for 15 minutes. Do not apply chemical neutralizing agents. Remove contaminated clothing and shoes while washing. Do not remove clothing if it sticks to the skin. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Ingestion	Drink plenty of water. If victim is drowsy or unconscious, place on left side with head down. Seek medical attention. DO NOT INDUCE VOMITING.

4.2 Most important symptoms/effects, acute and delayed

Potential acute health effects

Symptoms/injuries	Causes severe skin burns and eye damage
Eye contact	Corrosion of the eye tissue. Permanent eye damage. Causes serious eye damage.
Inhalation	Coughing. Irritation of the respiratory tract. Irritation of the nasal mucous membranes.
Skin contact	Caustic burns/corrosion of the skin. Slow-healing wounds.
Ingestion	Abdominal pain. Bleeding of the gastrointestinal tract. Burns to the gastric/intestinal mucosa. Nausea. Possible esophageal perforation.

Chronic symptoms Dry skin. Skin rash/inflammation. Possible inflammation of the respiratory tract.

4.3 Indication of immediate medical attention and special treatment needed, if necessary

No additional information available

Section 5. Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media Use foam, dry powder, carbon dioxide, water spray or sand.**Unsuitable extinguishing** No unsuitable extinguishing media known.

media

5.2 Specific hazards arising from the chemical

Fire Hazard	Not flammable.
Explosion Hazard	Not available.
Reactivity	Reacts with some metals, releasing highly flammable gases/vapor (hydrogen). Thermal decomposition generates corrosive vapors.

5.3 Advice for firefighters

Precautionary measures	Keep upwind. Consider evacuation. Have neighborhood close doors and windows.
Firefighting instructions	Cool tanks/drums with water spray. Dilute toxic gases with water spray. Take account of toxic fire-fighting water. Use water moderately and if possible collect or contain it.
Special protective equipment for fire-fighters	Fire-fighters should wear appropriate protective equipment and compressed air/oxygen apparatus.

Section 6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

6.1.1 For non-emergency personnel

Wear chemically protective gloves, lab coat or apron to prevent prolonged or repeated skin contact. Wash contaminated clothes. Evacuate unnecessary personnel. Keep containers closed.

6.1.2 For emergency responders

Equip cleanup crew with proper protection. Ventilate area. Stop leak if safe to do so.

6.2 Environmental precautions

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

6.3 Methods and materials for containment and cleaning up

For containment	Take up liquid spill into inert absorbent material.
Methods for cleaning up	Carefully collect the spill. Clean contaminated surfaces with an excess of water. Wash clothing and equipment after handling. Soak up spills with inert solids, such as clay or diatomaceous earth, as soon as possible. Collect spillage. Store away from other materials.

Section 7. Handling and storage

7.1 Precautions for safe handling

Protective measures	Keep container tightly closed when not in use. Ensure good ventilation/exhaustion at the workplace. Keep ignition sources away. Protect against electrostatic charges.
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Advice on general occupational hygiene	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas.
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7.2 Conditions for safe storage, including incompatibilities

Comply with applicable regulations. Keep only in the original container in a cool, well ventilated area away from strong acids and bases, sources of ignition, heat sources, combustible materials and metals. Keep container closed when not in use. Suitable packaging materials include stainless steel, nickel,

polyethylene, polypropylene, glass and stoneware. Unsuitable include lead, aluminum, copper, tin, zinc and bronze.

Section 8. Exposure controls/personal protection

8.1 Control parameters

1310-73-2 Sodium Hydroxide

PEL (OSHA) TWA: 2 mg/m³
TLV (ACGIH) Ceiling: 2 mg/m³
IDLH 10 mg/m³

8.2 Exposure controls

Appropriate engineering controls	Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Provide adequate general and local exhaust ventilation.
Personal protective equipment	Avoid all unnecessary exposure.
Materials for protective clothing	Give good resistance: butyl rubber, natural rubber, neoprene, nitrile rubber, polyethylene, PVC, tetrafluoroethylene, viton. Give less resistance: chlorinated polyethylene, styrene-butadiene rubber, nitrile rubber/PVC. Give poor resistance: PVA, natural fibers.
Eye/face protection	Wear chemical safety goggles. When transferring material, wear face-shield in addition to chemical safety goggles.
Hand protection	Chemical-resistant gloves: rubber gloves/Neoprene gloves.
Skin protection	Corrosion-proof clothing.
Respiratory protection	Wear gas mask with filter type B if conc. in air > exposure limit.

Section 9. Physical and chemical properties

Physical state	: Liquid
Color	: Clear, colorless
Odor	: None
pH	: >12
Melting/freezing point	: ~10 °F
Boiling point	: >212°F
Flash point	: Not applicable
Evaporation rate	: No data available (butyl acetate = 1)
Flammability	: No data available
Lower and upper explosive limits	: No data available
Vapor pressure	: Not determined
Vapor density	: No data available (Air = 1.0)
Relative density	: 1.109 at 68°F
Density	: 9.249 lbs/gal
Solubility in water	: Exothermically soluble in water
Partition coefficient n-octanol/water	: Not determined
Auto-ignition temp.	: No data available
Decomposition temp.	: Not determined
Viscosity	: No data available
VOC	: Not applicable

Section 10. Stability and reactivity

10.1 Reactivity

On heating will release corrosive gases/vapors. Absorbs the atmospheric CO₂. Violent exothermic reaction with some acids. Reacts with some metals to release highly flammable gases (hydrogen).

10.2 Chemical stability

Stable under normal conditions. Absorbs the atmospheric CO₂. Hygroscopic.

10.3 Possibility of hazardous reactions

Not established.

10.4 Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5 Incompatible materials

Strong acids and oxidizers. Metals.

10.6 Hazardous decomposition products

Sodium oxide. Thermal decomposition generates corrosive vapors.

Section 11. Toxicological Information

Information on toxicological effects

Toxicological Data:

Sodium Hydroxide, 10%: LD50 dermal rabbit 14,835 mg/kg

Sodium Hydroxide (1310-73-2): LD50 dermal rabbit 1,350 mg/kg

Water (7732-18-5): LD50 oral rat >90,000 mg/kg

Section 12. Ecological information

Ecological- General: This product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

Sodium Hydroxide, 10%

LC50 fishes 1 499 mg/L

EC50 Daphnia 1 443 mg/L

Sodium Hydroxide (1310-73-2)

LC50 fishes 1 45.4 mg/L 96 hr; Salmo gairdneri

LC50 other aquatic 1 100 mg/L 48 hr; Daphnia magna

LC 50 fish 2 189 mg/L 48 hr; Leuciscus idus

TLM fish 1 125 ppm 96 hr; Gambusia affinis

TLM fish 2 99 mg/L 48 hr; Lepomis macrochirus

Threshold limit other 1 100 mg/L 48 hr; Daphnia magna

Section 13. Disposal considerations

Disposal methods Dispose of contents/container to comply with local, state and federal regulations. Dispose in a safe manner in accordance with local/national regulations. Avoid release to the environment.

Section 14. Transport information

DOT Transport Information: UN 1824, Sodium Hydroxide, Solution (10%) 8, PG II

DOT Label: Corrosive

Section 15. Regulatory information

Toxic Substances Control Act (TCSA): All ingredients are on the TSCA inventory or are not required to be listed on the TSCA inventory.

CERCLA RQ-40 CFR 302.4(a)

Component

Sodium hydroxide

CERCLA RQ (lbs)

1000

SARA 302 Components-40 CFR 355 Appendix A

<u>Component</u>	<u>TPQ(Threshold Planning Quantity) (lbs)</u>
None	

Section 311/312 Hazard Class-40 CFR 370.2

Immediate (X)
Delayed ()
Fire ()
Reactive (X)
Sudden Release of Pressure ()

SARA 313-40 CFR 372.65

<u>Component</u>	<u>CAS Number</u>	<u>%(by weight)</u>
None		

Section 16. Other information

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