

SAFETY DATA SHEET

Section 1. Identification

Product name: Sodium Hydroxide, 3% w/w

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

Identified uses : Chemical intermediate, industrial use

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 : CHEMTREC 800-424-9300 (U.S. 24 hour)

number (with hours of (001)281-276-5400

operation) 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 : No additional information.

otherwise classified

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Ingredient name	%	CAS number
Sodium Hydroxide	3	1310-73-2
Water	97	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

Use foam, dry powder, carbon dioxide, water spray or sand.

media

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 Fire-fighters should wear appropriate protective equipment and

equipment for fire-fighters 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.

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.

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 Emergency eye wash fountains and safety showers should be available

controls 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 : No data available

Boiling point : >212

Flash point : Not applicable

Evaporation rate : No data available (butyl acetate = 1)

Flammability : No data available Lower and upper : No data available

explosive limits

Vapor pressure : Not determined

Vapor density : No data available (Air = 1.0)

Relative density : 1.032 at 68°F Density : 8.607 lbs/gal

Solubility in water : Exothermically soluble in water

Partition coefficient : Not determined

n-octanol/water

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 (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 (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 (3%) 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 RO-40 CFR 302.4(a)

ComponentCERCLA RQ (lbs)Sodium hydroxide1000

SARA 302 Components-40 CFR 355 Appendix A

Component TPO(Threshold Planning Quantity) (lbs)

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>Cas Number</u> <u>%(by weight)</u>

None

Section 16. Other information

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