

Precautionary Statements – Response

Immediately call a POISON CENTER or doctor/physician

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 or doctor/physician.

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

Precautionary Statements – Storage

Store locked up

Keep only in original container

Precautionary Statements –Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations

Other Hazards

Harmful to aquatic life

May be corrosive to metals

3. Composition/information on ingredients

<u>Name</u>	<u>CAS number</u>	<u>%</u>
Sodium Hydroxide	1310-73-2	45
Potassium Hydroxide	1310-58-3	5

4. First aid measures

Eye contact:	Immediately flush with plenty of running water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Immediately call a POISON CENTER or Doctor/physician.
Skin contact:	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. Seek medical attention.
Inhalation:	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or Doctor/physician.
Ingestion:	IF SWALLOWED: Rinse mouth, Do NOT induce vomiting. Drink plenty of water or milk immediately. Immediately call a POISON CENTER or doctor/physician.
Protection of first-aiders;	Causes severe skin burns and eye damage. May cause respiratory irritation. Inhalation may cause burns. Ingestion causes acute irritation and burns to the mucous membranes of the mouth, trachea, esophagus and stomach
Note to physician	Treat symptomatically

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

Unsuitable Extinguishing media Not determined

Specific Hazards arising from the Chemical Product is not flammable

Special protective equipment for fire-fighters: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. Accidental release measures

Personal precautions: Wear protective clothing as described in Section 8 of this safety data sheet.
Environmental precautions: Prevent from entering into soil, ditches, sewers, waterways and/or groundwater.

Methods and material for containment and cleaning up

Prevent further leakage or spillage if safe to do so. Dike spill area and cap leaking container as necessary to prevent further spreading of spilled material. Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust)

Use neutralizing agent.

Clean up: Pick and transfer to properly labeled containers.

7. Handling and storage

Handling: Handle in accordance with good industrial hygiene and safety practice. Use personal protection recommended in Section 8. Avoid contact with skin, eyes or clothing. Wash face, hands and any exposed skin thoroughly after handling. Do not breathe dust/fume/as/mist/vapors/spray.

Storage Ensure Good ventilation, exhaustion at the workplace. Keep containers tightly closed and store in a cool, dry and well-ventilated place. Store locked up. Keep from freezing.

Incompatible Materials Do not mix with other chemicals or cleaners

8. Exposure controls/personal protection

Consult local authorities for acceptable exposure limits.

Engineering Controls Apply technical measures to comply with the occupational exposure limits.
Local exhaust ventilation recommended. Eye wash stations. Showers.

Individual-protection measures, such as personal protective equipment

Eye/Face Protection Chemical anti-splash safety goggles
Skin and Body Protection Rubber gloves. Suitable protective clothing
Respiratory Protection Ensure adequate ventilation, especially in confined areas. In case of inadequate ventilation wear respiratory protection.
General Hygiene considerations Wash contaminated clothing before reuse. Wash face, hands and any exposed skin thoroughly after handling

9. Physical and chemical properties

Physical state	Liquid
Color	Red
pH	13
Boiling/condensation point	138 C
Vapor pressure (mm Hg)	N/A
Specific Gravity (HSO-1)	1.4856
Reactivity in water	None
Solubility in water	Complete

10. Stability reactivity

Stability Stable
Hazardous polymerization Will not occur
Conditions to avoid Contact with strong mineral
Materials to avoid Amphoteric Metals: Strong Acids
Hazardous decomposition products In a fire: CO, CO₂, Hydrocarbons

11. Toxicological information

Acute toxicity:

LD/LC50 values that is relevant for classification:

1310-73-2 Sodium Hydroxide

Oral/LD50/2000 mg/kg (rat)

Primary irritant effect:

Skin: Strong caustic effect on skin and mucous membranes

Eye: Strong caustic effect

Additional toxicological information:

Product shows the dangers below according to internally approved calculation methods for preparations:

Corrosive

Swallowing will lead to strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

Carcinogenic categories

IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

NTP (National Toxicology Program)

None of the ingredients is listed

12. Ecological information

Environmental effects:

The environmental impact of this product has not been fully investigated

Aquatic Toxicity: No further relevant information available

13. Disposal considerations

Waste disposal:

The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a license waste contactor. Disposal of this product, solutions and any by products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contract with soil, waterways, drains and sewers.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

14. Transport information

Note:

Please see current shipping paper for most up to date shipping information, Including exemptions and special circumstances;
*When shipped in containers of 32 oz., or less this material may be reclassified in accordance with DOT regulations 40CFR173.154 as:

Limited Quantity



* Limited Quantity

Regulatory Information	UN number	Proper shipping name	Class	PG*
DOT Classification	UN1824	Sodium Hydroxide Solution	8	II
	UN1814	Potassium Hydroxide	8	II

*PG: Packing group

15. Regulatory information

California Proposition 65:

This product does not contain any Proposition 65 chemicals.

16. Other information

HMIS

Health Hazards

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Flammability

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Reactivity

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Personal Protection

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Indicates information that has changed from previously issued version.

Disclaimer

The information provided in the Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet