

## SAFETY DATA SHEET

### 1. Identification

**Product identifier** SODIUM HYDROXIDE ALL CONCENTRATIONS MEMBRANE

**Other means of identification** Not available.

**Recommended use** All proper and legal Purposes

**Maximum Use Level for Potable Water:**

Sodium Hydroxide 32% : 100 mg/L

Sodium Hydroxide 25% : 100 mg/L

**Recommended restrictions** None known.

**Manufacturer/Importer/Supplier/Distributor information**

**Manufacturer**

**Company name** Carbonfree Chemicals

**Address** 11503 Bulverde Rd.

**Telephone** San Antonio, TX  
United States  
210.476.5906

**Emergency phone number** CHEMTREC - Day or Night  
Within USA and Canada:  
800-424-9300 or  
+1 703-527-3887 (collect calls accepted)

### 2. Hazard(s) identification

**Physical hazards** Not classified.

**Health hazards** Skin Corrosion/ Irritation Category 1A  
Serious eye damage/eye irritation Category 1

**Environmental hazards** Hazardous to the aquatic environment, acute hazard Category 3  
Hazardous to the aquatic environment, long-term hazard Category 3

**OSHA defined hazards** Not classified.

**Label elements**



**Signal word** Danger

**Hazard statement** Causes severe skin burns and eye damage. Causes serious eye damage. Harmful to aquatic life with long lasting effects.

**Precautionary statement**

**Prevention** Do not breathe mist or vapor. Wash thoroughly after handling. Avoid release to the environment. Wear eye protection/face protection. Wear protective gloves/protective clothing/eye protection/face protection

**Response** If swallowed Rinse mouth. **Do NOT induce vomiting.** If on skin (or hair), immediately take off all contaminated clothing. Rinse skin with water/shower. If inhaled, remove person to fresh air and keep comfortable for breathing. 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/doctor. Wash contaminated clothing before reuse.

<b>Storage</b>	Store locked up.
<b>Disposal</b>	Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>Hazard(s) not otherwise classified (HNOC)</b>	None known.
<b>Supplemental information</b>	None

### 3. Composition/information on ingredients

#### Mixtures

Chemical name	Common name and synonyms	CAS number	%
SODIUM HYDROXIDE (NAOH)		1310-73-2	25.0-32.0
Other components below reportable levels			75.0 -78.0

\*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

### 4. First-aid measures

<b>Inhalation</b>	Move to fresh air. Call a physician if symptoms develop or persist.
<b>Skin contact</b>	Immediately take off all contaminated clothing. Rinse skin with water/shower. Call a physician or poison control center immediately. Chemical burns must be treated by a physician. Wash contaminated clothing before reuse.
<b>Eye contact</b>	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses if present and easy to do. Continue rinsing. Call a physician or poison control center immediately.
<b>Ingestion</b>	Call a physician or poison control center immediately. Rinse mouth. <b>Do not induce vomiting.</b> If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.
<b>Most important symptoms/effects, acute and delayed</b>	Burning pain and severe corrosive skin damage causes serious eye damage. Symptoms may include stinging, redness, and tearing, swelling and blurred vision. Permanent eye damage including blindness could result.
<b>Indication of immediate medical attention and special treatment needed</b>	Provide general supportive measures and treat symptomatically. Chemical burns: Flush with water immediately. While flushing, remove clothes that do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim under observation. Symptoms may be delayed.
<b>General information</b>	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

### 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).
<b>Unsuitable extinguishing media</b>	Do not use water jet as an extinguisher, as this will spread the fire.
<b>Specific hazards arising from the chemical</b>	During fire, gases hazardous to health may be formed.
<b>Special protective equipment and precautions for firefighters</b>	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire-fighting equipment/instructions</b>	Move containers from fire area if you can do so without risk.
<b>Specific methods</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>General fire hazards</b>	No unusual fire or explosion hazards noted.

## 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upward of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection see section 8 of the SDS.

### Methods and materials for containment and cleaning up

Large Spills: Stop the flow of material if this is without risk. Dike the spilled material where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Prevent product from entering drains. Following product recovery flush area with water.

Small Spills, wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination, see section 13 of the SDS.

Never return spills to original containers or re-use. For waste disposal see section 13 of the SDS.

### Environmental precautions

Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground. Inform appropriate managerial or supervisory personnel of all environmental releases.

## 7. Handling and storage

### Precautions for safe handling

Provide adequate ventilation. Do not breathe mist or vapor. Do not get in eyes, on skin, or on clothing. Avoid prolonged exposure. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good Industrial hygiene practices.

### Conditions for safe storage, including any incompatibilities

Store locked up. Store in original tightly closed container. Store away from compatible materials (see Section 10 of the SDS).

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
SODIUM HYDROXIDE	PEL	2 mg/m3
NaOH (CAS 1310-73-2)		

#### US. ACGIH Threshold Limit Values

Components	Type	Value
SODIUM HYDROXIDE	Ceiling	2 mg/m3
NaOH (CAS 1310-73-2)		

#### US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
SODIUM HYDROXIDE	Ceiling	2 mg/m3
NaOH (CAS 1310-73-2)		

### Biological limit values

No biological exposure limits noted for the ingredient(s).

### Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

### Individual protection measures, such as personal protective equipment

#### Eye/face protection

Wear safety glasses with side shields (or goggles) and a face shield.

#### Skin protection

#### Hand protection

Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.

#### Other

Wear appropriate chemical resistant clothing

#### Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment.

#### Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

### General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

## 9. Physical and chemical properties

### Appearance

Physical state	Liquid.
Form	Liquid.
Color	Clear colorless odorless
Odor	Not Available
Odor threshold	Not available.
pH	Not available.
Melting point/freezing point	613.4 °F (323°C) estimated / -42 °F (-40.6 °C) estimated
Initial boiling point and boiling range	791.6 °F (422 °C) estimated
Flash point	999.0 °F (537.2 °C)
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable

### Upper/lower flammability or explosive limits

Flammability limit – lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	0.17 hPa estimated
Vapor density	Not available
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Not available.

Partition coefficient (n-octanol/water)	Not available.
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Auto-ignition temperature	Not available.
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Decomposition temperature	Not available.
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Viscosity	Not available.
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### Other information

Density	17.77lbs/gal estimated
Explosive properties	Not explosive
Flammability class	Combustible IIIB estimated
Oxidizing properties	Not oxidizing
Percent volatile	76.13 % estimated
Specific gravity	2.13 estimated

## 10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Contact with incompatible materials.
Incompatible materials	Strong acids.
Hazardous decomposition products	No hazardous decomposition products are known.

### 11. Toxicological information

Information on likely routes of exposure

<b>Ingestion</b>	Causes digestive tract burns.
<b>Inhalation</b>	Prolonged inhalation may be harmful. May cause irritation to the respiratory system.
<b>Skin contact</b>	Causes severe skin burns. Harmful in contact with skin.
<b>Eye contact</b>	Causes serious eye damage.
<b>Symptoms related to the physical, chemical and toxicological characteristics</b>	Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.
<b>Information on toxicological effects</b>	
<b>Acute toxicity</b>	Not Available
<b>Skin corrosion/irritation</b>	Causes severe skin burns and eye damage.
<b>Serious eye damage/eye irritation</b>	Causes serious eye damage. Irritation
<b>Respiratory or skin sensitization</b>	
<b>Respiratory sensitization</b>	not available.
<b>Skin corrosion/irritation</b>	This product is not expected to cause skin sensitization.
<b>Germ cell mutagenicity</b>	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
<b>Carcinogenicity</b>	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.
<b>OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)</b>	Not listed
<b>Reproductive toxicity</b>	This product is not expected to cause reproductive or developmental effects.
<b>Specific target organ toxicity - Single exposure</b>	Not classified.
<b>Specific target organ toxicity - Repeated exposure</b>	Not classified.
<b>Aspiration hazard</b>	Not an aspirational hazard
<b>Chronic effects</b>	Prolonged inhalation may be harmful.

### 12. Ecological information

Ecotoxicity		Harmful to aquatic life with long lasting effects	
Components		Species	Test Results
SODIUW HYDROXIDE (NaOH)) (CAS 1310-73-2)			
Aquatic			
Crustacea	EC50	Water flea (Ceriodaphnia dubia)	34.59-47.13 mg/l, 48 hours
Fish	EC50	Western mosquitofish (Gambusia affinis)	125 mg/l, 96 hours
* Estimates for product may be based on additional component data not shown.			
Persistence and degradability		No data is available on the degradability of this product.	
Bio accumulative potential		No data available.	
Mobility in soil		No data available.	
Other adverse effects		No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.	

### 13. Disposal considerations

<b>Disposal instructions</b>	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>Local disposal regulations</b>	Dispose in accordance with all applicable regulations.

<b>Hazardous waste code</b>	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
<b>Waste from residues / unused products</b>	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
<b>Contaminated packaging</b>	Some empty containers may retain product residue. Follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

## 14. Transport information

### DOT

<b>UN number</b>	UN1824
<b>UN proper shipping name</b>	SODIUM HYDROXIDE SOLUTION (RQ = RQ)
<b>Transport hazard class(es)</b>	
<b>Class</b>	8
<b>Subsidiary risk</b>	-
<b>Packing group</b>	II
<b>Special precautions for user</b>	Read safety instructions SDS and emergency procedures before handling
<b>ERG Code</b>	154

DOT information on packaging may be different from that listed.

DOT



## 15. Regulatory information

**US federal regulations** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)** Not regulated.

**CERCLA Hazardous Substance List (40 CFR 302.4)**

SODIUM HYDROXIDE (CAS 1310-73-2)

Listed.

**SARA 304 Emergency release notification**

Not regulated.

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

Not listed.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**Hazard categories**

Immediate Hazard -  
 Yes Delayed Hazard -  
 No Fire Hazard - No  
 Pressure Hazard - No  
 Reactivity Hazard - No

**SARA 313 (TRI reporting)**

Not regulated.

**Other federal regulations**

**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated.

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated.

**Safe Drinking Water Act (SDWA)**

Not

regulated.

### US state regulations

**US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)**

Not listed.

**US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd.**

(a))

SODIUMHYDROXIDE (NaOH) (CAS 1310-73-2)

**US. Massachusetts RTK -Substance List**

SODIUM HYDROXIDE (NaOH) (CAS 1310-73-2)

**US. New Jersey Worker and Community Right-to-Know Act**

SODIUM HYDROXIDE (NaOH) (CAS 1310-73-2)

**US. Pennsylvania Worker and Community Right-to-Know Law**

SODIUM HYDROXIDE (NaOH) (CAS 1310-73-2)

**US. Rhode Island RTK**

SODIUM HYDROXIDE (NaOH) (CAS 1310-73-2)

**US. California Proposition 65**

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

### International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

## 16. Other information, including date of preparation or last revision

**Issue date** 10-4-2015

**Revision Date** none

**Version #** 0

<b>HMIS® Ratings</b>	Health	3
	Flammability	0
	Physical Hazard	0
	Health	3

<b>NFPA Ratings</b>	Health	3
	Flammability	0
	Instability	0

### Disclaimer

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## C H E M I C A L S

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