

PRODUCT SAFETY DATA SHEET
GHS COMPLIANT
Sodium Hydroxide, 50%Diaphragm

Section 1 – Product and Company Information

GHS Product Identification

Product Name: Sodium Hydroxide, 50%Diaphragm

Other Identification Information

CAS Number:

Florida Chemical ID: 2BA001TD500L.000

Chemical Formula:

Synonyms:

Recommended Use and Restrictions on Use

Description and Uses: Used in metal finishing, industrial/institutional cleaners, as a process chemical and in the petroleum industry.

Supplier Information

Company Name/Address: Florida Chemical Supply, Inc
6810 East Chelsea Street
Tampa, FL 33610

Phone (Non Emergency) 813.623.1274

Emergency Phone Number

24 Hour Emergency Phone: 800.255.3924 (Chemtel)



Section 2 – Hazard Information

Classification of the Substance or Mixture

Corrosive to Skin 1B
Corrosive to Metals
Corrosive to Eyes 1

GHS Label Elements

GHS Pictogram:



Signal Word:

DANGER

Hazard Statements:

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

Precautionary Statements:

P234: Keep only in original packaging.
P260: Do not breathe dust/fume/gas/mist/vapours/spray
P264: Wash hands thoroughly after handling.
P280: Wear protective gloves/protective clothing/eye protection/face protection
P301+330+331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
P303+P361+P353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
P363: Wash contaminated clothing before reuse
P304+340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
P310: Immediately call a POISON CENTER or doctor if you feel unwell.
P321: Specific treatment see First Aid Instructions on product label
P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do –

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continue rinsing
P390: Absorb spillage to prevent material-discharge.
P405: Store locked up
P406: Store in a corrosion resistant container with a resistant inner liner.
P501: Dispose of contents/container to appropriate waste disposal site in accordance with local, state and federal regulations.

Other Hazards Not Resulting In Classification

HMIS:

Health	3
Flammability	0
Reactivity	1
Personal Protection	J

Special Medical Response:

Section 3 – Hazardous Composition

Component	CAS #	Wt. %
Sodium Hydroxide	1310-73-2	50%
Water	7732-18-5	50%

Section 4 – First Aid Information

Necessary First Aid Measures

Skin Exposure: Rinse with water for fifteen minutes. Remove all contaminated clothing. Do not re-use clothing until rinsed thoroughly with water. Seek medical attention if symptoms persist.

Eye Exposure: Flush eyes with water for fifteen minutes. Remove contact lenses if easy to do. Cold water may be used. Get immediate medical attention.



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Inhalation Exposure: Remove to fresh air. Treat symptomatically. If symptoms persist, seek medical attention.

Ingestion: Do not induce vomiting. Give two glasses of water or milk to drink. Seek immediate medical attention. Do not give anything by mouth to an unconscious person.

Most Important Symptoms Acute and Delayed

Acute Effects: Irritation to skin, eyes, soft tissues and mucous membranes.

Delayed Effects: Inhalation may cause pulmonary edema.

Immediate Medical Attention or Special Treatment Requirements

NOTE TO PHYSICIAN: Probability of mucosal damage may contraindicate the use of gastric lavage. This product is corrosive to the upper respiratory tract and mucous membranes. May cause pulmonary edema if inhaled or aspirated.

SECTION 5 – Firefighting Precautions

Suitable Extinguishing Media:

Use media appropriate to surrounding fire and materials.

Specific Fire Hazards Arising from the Chemical:

None specific to this product.

Special Protective Measures for Firefighters

PPE for Firefighter: In the event of material discharge during fire, see Section 8. Otherwise, use fire protection equipment suitable to surrounding fire and materials.

Personal Precautions: See Section 8 for personal protection requirements.

PPE Requirements: In the event of material discharge during fire, see Section 8. Otherwise, use fire protection equipment suitable to surrounding fire and materials.

Precautionary Measures: None specific to this product.



SECTION 6 – Accidental Release Measures

For Non-Emergency Personnel

All untrained, non-essential, and non-responding personnel should be evacuated from the immediate area of the spill without delay. If Personal Protective Equipment is necessary to achieve evacuation safely, see Section 8 for requirements.

For Emergency / Response Personnel

Protective Equipment: See Section 8 for personal protection requirements.

Environmental Precautions: Keep product and any flush water or other neutralizing agents from entering water supplies, sewers, or running water. This product is highly alkaline and may raise the pH of surface waters with low buffering capacity. Immediately report (within one hour of spill discovery) any accidental release or discharge in excess of reportable quantities to the appropriate regulatory authority.

Methods and Materials for Cleanup

Evacuate all personnel from affected area.

Stop spill/release if it can be done with minimal risk. Wear appropriate protective equipment, including respiratory protection, as conditions warrant. (See Section 8.)

Small Spills: Absorb with inert material, and sweep into appropriate container for disposal according to federal, state and local regulations.

Large Spills: Dike around area of spill to prevent release to the environment. Stop source of spill or leak if it is safe to do so. Evacuate all non-essential, non-responding and non-emergency personnel. Absorb / neutralize with inert material. Shovel dry materials into suitable container. Remaining material may be diluted with water and neutralized with dilute acid, then absorbed and collected. Flush spill area with water if appropriate.

SECTION 7 – Handling and Storage

Precautions for Safe Handling

Avoid breathing vapors or mists. Do not get on skin, in eyes or on clothing. Wash thoroughly after handling.

When mixing, note that this product reacts exothermically with water, producing large amounts of heat. Always add slowly to water to minimize heat generation and spattering.



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Handle in accordance with all current regulations and industry standards.

Conditions for Safe Storage, Including Incompatibilities

- Storage:** Keep container tightly closed and properly labeled. Do not store in aluminum container or use aluminum fittings or transfer lines, as flammable hydrogen gas may be generated. Keep separated from incompatible substances.
- Incompatible Materials:** Keep separate from acids, oxidizers, bleach and chlorine products. Do not allow to come into contact with aluminum or other soft metals.
- Incompatible Conditions:** Store in a cool, dry location away from direct sunlight and extreme temperatures.

SECTION 8 – Exposure Controls and Personal Protection

Control Parameters

- Exposure Limits:** OSHA Permissible Exposure Limit (PEL): 2mg/m³
NIOSH: Recommended Exposure Limit (REL): 2 mg/m³
ACGIH: Threshold Limit Value (TLV): 2 mg/m³

Appropriate Engineering Controls

Safety shower and emergency eyewash should be located nearby and accessible to all points of product use, storage and handling.

Individual Protection Measures

- Gloves:** Chemical resistant rubber or neoprene.
- Respiratory:** NIOSH approved respirator with appropriate cartridge whenever airborne concentrations exceed TLV, or when product is used in areas with little to no ventilation. Consult with a respirator specialist for the appropriate mask and cartridge.
- Eyes:** Chemical splash goggles are preferred, otherwise chemical safety glasses with side shields. Ophthalmic lens glasses are not protective eyewear, and should not be relied on to provide protection unless specifically designed as prescription safety lenses meeting all personal protection standards.



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Other Protection: Chemical resistant coveralls, and other protective coverings to prevent contact with skin. Chemical resistant boots.

Industrial Hygiene: Personal hygiene is an important work practice exposure control measure and the following general measures should be taken when working with or handling this material:

- * Do not store, use, and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored.
- * Wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics, or using the toilet.
- * Always thoroughly wash any contaminated clothing before reuse.

SECTION 9 – Physical Properties

Appearance:	Clear Liquid	UEL/LEL:	Not Applicable
Odor:	Odorless	Vapor Pressure:	ND
Odor Threshold:	NA	Vapor Density:	ND
pH:	14.00	Relative Density:	1.60
Melt/Freeze Point:	-26 to 59 F (-32 to 15 C)	Solubility:	Complete in Water
Boiling Point/Range:	230 - 291 F (110 - 144 C)	Partition Coefficient (n-octanol/water):	ND
Flash Point:	NA	Auto Ignition Temp:	Not Flammable
Evaporation Rate:	Clear Liquid	Decomposition Temp:	ND
Flammability (solid/gas):	Not Flammable	Viscosity:	Slightly higher than water

SECTION 10 – Stability and Reactivity

Reactivity: Stable at normal pressures and temperatures.

Stability: Product is chemically stable under normal conditions of handling and storage.

Conditions to Avoid: Will react with some metals to form hydrogen gas. Corrosive to metal. Carbon monoxide gas may form upon contact with reducing sugars, food and beverage products in enclosed spaces.



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Incompatible Materials: Strong acids, strong oxidizers. Prolonged contact with aluminum, brass, bronze, copper, lead, tin, zinc or other alkali sensitive metals or their alloys.

Decomposition Products: Toxic Fume of sodium oxide.

Hazardous Polymerization: Will not occur.

SECTION 11 – Toxicological Information

Acute Toxicity: Skin contact may cause irritation, itchiness, redness, blotching. Eye contact may cause tearing, redness, itchiness and irritation.

Chronic: Repeated exposure may cause dermatitis. Severity of tissue damage is a function of product concentration, length of tissue contact time, and local tissue conditions. After exposure, there may be a time delay before irritation and other effects occur.

Eyes: No data available

Skin: Sodium hydroxide: LD50 1350 mg/kg (Rabbit)

Sensitization: Exposure to asthmatic, atopic and sulfite sensitive individuals may result in severe bronchoconstriction and reduced levels in forced expiratory volume.

Mutagenicity: No evidence for mutagenicity

Carcinogenicity: This product does not contain any ingredients which have been classified as a carcinogen by NTP, IARC or OSHA.

Reproductive Toxicity: No known reproductive toxicity

Target Organs: This material may cause severe burns and permanent damage to any tissue with which it comes into contact. Eye contact may result in severe corrosion with possible corneal damage and blindness. Inhalation will cause severe irritation, possible burns with pulmonary edema, which may lead to pneumonitis.

Aspiration Hazard: Aspiration of this product will cause severe corrosive damage to lungs, and upper respiratory tract tissues.



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SECTION 12 – Ecological Toxicity

Fish: LC50 Brook Trout: 25 ppm/24 Hour

Daphnia: EC50 Daphnia magna: 100 ppm

Algae: No data available.

SECTION 13 – Disposal Considerations

Reuse or reprocess before classifying as waste, where possible. Handle and dispose of waste product in accordance with federal, state and local regulations.

SECTION 14 – Transportation Information

UN Number: UN1824

Proper Shipping Name: Sodium Hydroxide Solution

Packing Group: II

Hazard Class: 8

Subsidiary Hazards: No subsidiary hazards

Required DOT Label/s: UN1824, Sodium hydroxide solutions, 8 - Corrosive, PG III

SECTION 15 – Regulatory Information

TSCA: This product and/or all of its components are listed on the Section 8(b) TSCA Inventory.

CERCLA: 1,000 lbs

RCRA: This product must be handled as hazardous waste if the pH of the waste to be disposed is greater than 12.50.



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SECTION 16 – Other Information

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Prepared By: Florida Chemical Regulatory Department
Approved By: Marc Maseman

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