

SODIUM HYDROXIDE SOLUTIONS, >4.0 Normal, >16.3% (w/v), >14.2% (w/w) Aq Solutions

# Material Safety Data Sheet

# Section 1: Chemical Product and Company Identification

# Catalog Number:

7268, 7270, 7271, 7272, 7272, 4, 7273, 7274, 7274,1, 7275, 7276, 7277, 7277.5, 7278, 7278,1, 7278,3, 7279, 7280, 7282, 7283, 7283, 13, 7284, 7284, 29, 7284,32, 7285, 7288, 7288,2, 7288,40, 7290, 7291, 7292, 7464, 7465, 7466, 7467, 7468, 7470, 7470,1, 7471, 7481, R7265000, R7273800, R7274200, R7276300, R7276500, R7286000, R7465210, R7465240, R7465390, R7467650, R7470050, R7470120, S-365, S-368, S-369, S-370, S-372, S-373, S-375, S-378, S-380, S-415, S-418, S-420, S-422, S-424, S-496, S087080, S087100, S087140, S087320, S087340, S087340, S087358, S087360, S087400, SOD36, SS087080, SS087100, SS087140, SS087320, SS087330, SS087340, SS087358, SS087360, SS087400, SX-1322, SX-908

## **Product Identity:**

SODIUM HYDROXIDE SOLUTIONS, >4.0 Normal, >16.3% (w/v), >14.2% (w/w) Aq Solutions

Manufacturer's Name: RICCA CHEMICAL COMPANY LLC	Emergency Contact(24 hr) CHEMTREC® Domestic: 800-424-9300 International: 703-527-3887		
CAGE Code: 0V553			
Address: 448 West Fork Dr Arlington, TX 76012	<b>Telephone Number For Information:</b> 817-461-5601		
Date Prepared: 6/28/99	<b>Revision: 27</b> Last Revised: 07/24/2006 Date Printed: 08/31/2006 11:31:00 am		

# Section 2. Composition/Information on Ingredients

Component	CAS Registry #	Concentration	ACGIH TLV	OSHA PEL
Sodium Hydroxide	1310-73-2	>14.2	Not Available	Not Available
			C 2 mg/m3	2 mg/m3
Water, Deionized	7732-18-5	Balance	Not Available	Not Available
			Not Available	Not Available

# Section 3: Hazard Identification

**Emergency Overview:** CAUTION! Corrosive. Causes severe burns. May be fatal if swallowed. Harmful if inhaled. Wash areas of contact with water for at least 15 minutes. Call a physician if irritation develops. If ingested, dilute with water and call a physician. Do not induce vomiting. For eyes, flush out with plenty of water for at least 15 minutes. Call a physician. Reacts violently with acids.

Target Organs: eyes, skin, respiratory system.

Eye Contact: Corrosive! Causes irritation and burns. Can cause burns that may lead to permanent impairment of vision, including blindness.

Inhalation: Effects from inhalation of mist vary from mild irritation to serious damage of the upper respiratory tract, depending on severity of exposure.

Skin Contact: Causes severe burns.

Ingestion: Causes burns of the mouth, throat and stomach. Symptoms may include bleeding, vomiting, diarrhea, fall in blood pressure.

Chronic Effects/Carcinogenicity: Repeated exposures to Sodium Hydroxide solutions has a destructive effect on tissue.

IARC - No.



SODIUM HYDROXIDE SOLUTIONS, >4.0 Normal, >16.3% (w/v), >14.2% (w/w) Aq Solutions

## NTP - No.

OSHA - No.

#### Reproductive Information: Not Applicable.

Teratology (Birth Defect) Information: Mutation data cited in 'Registry of Toxic Effects of Chemical Substances' for Sodium Hydroxide.

# Section 4: First Aid Measures - In all cases, seek qualified evaluation.

Eye Contact: Irrigate immediately with large quantity of water for at least 15 minutes. Call a physician if irritation develops.
Inhalation: Remove to fresh air. Give artificial respiration if necessary. If breathing is difficult, give oxygen.
Skin Contact: Flush with plenty of water for at least 15 minutes. Call a physician if irritation develops.
Ingestion: Dilute with water or milk. Do not induce vomiting. Call a physician if necessary.

#### **Section 5: Fire Fighting Measures**

 Flash Point: Not Available.
 Method Used: Not Available.

 LFL: Not Available.
 UFL: Not Available.

 Extinguishing Media: Use any means suitable for extinguishing surrounding fire. Adding water to caustic solutions will generate a large amount of heat.

 Fire & Explosion Hazards: Not considered to be a fire or explosion hazard. May react with metals to release flammable Hydrogen gas.

 Fire Fighting Instructions: Use normal procedures/instructions.

 Fire Fighting Equipment: Use protective clothing and breathing equipment appropriate for the surrounding fire.

## **Section 6: Accidental Release Measures**

Collect liquid and dilute with water. Neutralize with dilute acid solutions. Release to drain if local regulations allow. For larger spills, absorb with suitable material (vermiculite, clay, etc.). Collect the solid residue and save for disposal.

# Section 7. Handling and Storage

As with all chemicals, wash hands thoroughly after handling. Avoid contact with eyes and skin. Protect from freezing and physical damage. Do not mix with acids. Safety Storage Code: Corrosive

# Section 8: Exposure Control/Personal Protection

Engineering Controls: No specific controls are needed. Normal room ventilation is adequate. Respiratory Protection: Normal room ventilation is adequate. Skin Protection: Chemical resistant gloves. Eye Protection: Safety glasses or goggles.

# **Section 9: Physical and Chemical Properties**

Appearance: Clear, colorless liquid Odor: Odorless Solubility in Water: Infinite Specific Gravity: Approximately 1.15 - 1.52 pH: 13 - 14 Boiling Point(°C): Approximately 100 Melting Point(°C): Approximately 0 Vapor Pressure: Not Applicable.

## Section 10: Stability and Reactivity

Chemical Stability: Stable under normal conditions of use and storage. Incompatibility: Acids, organic halogen compounds, metals such as aluminum, tin and zinc. Hazardous Decomposition Products: Sodium Oxide, decomposition by reaction with certain metals releases flammable and explosive Hydrogen gas. Hazardous Polymerization: Will not occur.



SODIUM HYDROXIDE SOLUTIONS, >4.0 Normal, >16.3% (w/v), >14.2% (w/w) Aq Solutions

# Section 11. Toxicological Information

No LD50 (oral, rat) information available from "Registry of Toxic Effects of Chemical Substances". Irritation data: skin, rabbit: 500 mg/24H severe; eye, rabbit: 50 ug/24H severe. Investigated as a mutagen (Sodium Hydroxide).

## Section 12. Ecological Information

**Ecotoxicological Information:** Sodium Hydroxide has high acute and chronic toxicity to aquatic life. The toxicity is influenced by the hardness and alkalinity of the receiving water. Insufficient data are available to evaluate the short and long term effects to plants, birds and land animals. **Chemical Fate Information:** Sodium Hydroxide is not expected to accumulate in the edible tissues of aquatic life that are normally consumed by humans.

#### Section 13. Disposal Considerations

Neutralize with dilute acid solutions, then wash the resulting solution down the drain with plenty of water if local regulations allow. If not allowed, containerize for proper disposal with a RCRA approved waste disposal facility. Always dispose of in accordance with local, state and federal regulations.

## Section 14. Transport Information

Part Numbers: . 7268-16. 7268-1CT. 7268-55. 7270-1, 7270-16. 7270-32. 7270-5. 7270-55. 7271-30. 7271-5. 7271-55. 7271-5HP. 7272-32. 7272-4-16. 7272.4-32, 7273-1, 7273-16, 7273-32, 7273-5, 7273-55, 7274-1, 7274-16, 7274-32, 7274-5, 7275-5, 7276-1, 7277-15G, 7277-32, 7277-55 7277.5-5HP, 7278-1, 7278-16, 7278-2.5, 7278-32, 7278.1-55, 7278.3-1, 7279-1, 7279-5, 7280-1, 7280-200, 7280-5, 7280-50, 7280-5HP, 7282-5, 7283-1, 7283-16, 7283-2.5, 7283-32, 7283-5, 7283-50, 7283-5HP, 7284-1, 7288-1, 7288-16, 7288-2.5, 7288-32, 7288-5, 7288-5HP, 7288-40-55, 7290-1, 7290-15G, 7290-16, 7290-2.5, 7290-32, 7290-5, 7290-55, 7290-570, 7290-5HP, 7291-1, 7291-16, 7291-2.5, 7291-30, 7291-32, 7291-5, 7291-55, 7291-5HP, 7464-5, 7464-55, 7465-1, 7465-16, 7465-2.5, 7465-32, 7465-4HP, 7465-5, 7465-55, 7466-1, 7466-16, 7466-32, 7466-55, 7466-55, 7465-55, 7465-55, 7465-16, 7466-32, 7466-55, 7466-55, 7465-32, 7465 7467-16, 7467-32, 7467-5, 7467-5, 7467-5HP, 7468-32, 7470-1, 7470-16, 7470-2.5, 7470-2.5HP, 7470-220, 7470-32, 7470-330, 7470-5, 7470-50, 7470-55, 7470-55, 7470-50, 7470-5HP, 7470.1-32, 7471-32, 7481-16, 7481-32, R7265000-20F, R7273800-55E, R7274200-4A, R7276300-1A, R7276500-55E, R7286000-500A, R7465210-1A, R7465210-4A, R7465240-1A, R7465390-1A, R7465390-4A, R7467650-1A, R7467650-4A, R7470050-4A, R7470120-1A, R7470120-4A, R7470120-1A, R7470120-4A, R7470120-1A, R7470120-1A, R7470120-4A, R7470120-1A, R7470120-500A, S-365 20-LT, S-365 200-LT, S-365 4-LT, S-365 500ML, S-365 LT, S-368 20-LT, S-368 4-LT, S-368 LT, S-369 10-LT, S-369 20-LT, S-369 200-LT, S-369 4-LT, S-369 500ML, S-369 LT, S-370 4-LT, S-372 10-LT, S-372 20-LT, S-372 4-LT, S-372 500ML, S-373 LT, S-375 10-LT, S-375 20-LT, S-375 200-LT, S-375 4-LT, S-375 500ML, S-375 LT, S-378 10-LT, S-378 20-LT, S-378 4-LT, S-378 500ML, S-378 LT, S-380 10-LT, S-380 20-LT, S-380 4-LT, S-380 500ML, S-380 LT, S-415 10-LT, S-415 20-LT, S-415 4-LT, S-415 500ML, S-415 LT, S-418 10-LT, S-418 20-LT, S-418 4-LT, S-418 500ML, S-418 LT, S-420 10-LT, S-420 20-LT, S-420 200-LT, S-420 4-LT, S-420 500ML, S-420 LT, S-422 4-LT, S-422 500ML, S-422 LT, S-422 4-LT, S-424 500ML, S-424 LT, S-496 200-LT, S-496 4-LT, S-496 500ML, SOD36-32, SS087080-10F, SS087080-1A, SS087080-20F, SS087080-4A, SS087080-500A, SS087100-1A, SS087100-4A, SS087140-1A, SS087140-20F, SS087140-4A, SS087320-1A, SS087320-20F, SS087320-4A, SS087330-4A, SS087330-500A, SS087340-1A, SS087340-4A, SS087358-20F, SS087358-4A, SS087360-20F, SS087360-4A, SS087360-500A, SS087400-1A, SS087400-4A, SX-1322 1L, SX-1322 20 L, SX-1322 200 L, SX-1322 4L, SX-1322 500 mL, SX-908 20-LT, SX-908 4-LT, SX-908 500ML, SX-908 LT

D.O.T. Shipping Name: Sodium Hydroxide Solution

D.O.T. Hazard Class: 8

U.N. / N.A. Number: UN1824

Packing Group: II

D.O.T. Label: 8



Section 15. Regulatory Information (Not meant to be all inclusive - selected regulation represented)

OSHA Status: These items meet the OSHA Hazard Communication Standard (29 CFR 1910.1200) definition of a hazardous material. TSCA Status: All components of this solution are listed on the TSCA Inventory or are mixtures (hydrates) of items listed on the TSCA Inventory. Sara Title III:

Section 302 Extremely Hazardous Substances: Not Applicable.

 Section 311/312 Hazardous Catagories:Acute, Chronic, Reactivity: Yes
 Fire, Pressure: No

 Section 313 Toxic Chemicals:Not Applicable.
 Fire, Pressure: No



SODIUM HYDROXIDE SOLUTIONS, >4.0 Normal, >16.3% (w/v), >14.2% (w/w) Aq Solutions

California: None Reported.

Pennsylvania: Sodium Hydroxide is listed as an Environmental Hazard on the state's Hazardous Substances List.

RCRA Status: Not Applicable.

CERCLA Reportable Quantity: Sodium Hydroxide - 1,000 pounds.

WHMIS: E: Corrosive Material.



## Section 16. Other Information

## NFPA Ratings:

Health: 3	Flammability: 0	Reactivity: 1	Special Notice Key:None
HMIS Ratings: Health: 3	Flammability: 0	Reactivity: 1	Protective Equipment:B (Protective Eyewear, Gloves)

Rev 1, 12-10-99: (Section 1) Revised emergency telephone number to CHEMTREC® 800-424-9300.

Rev 2, 7-10-2000: Reformatted to Microsoft Word® from WordPerfect®; (Section 1) added catalog numbers 7272, 7274.1, 7283.13, 7284.29, 7284.32.

Rev 3, 8-21-2000: (Section 1) added catalog number 7278.1.

Rev 4, 9-5-2000: (Section 3) added mutation citing; (Section 4) added physician contact; (Section 15) revised hazardous categories.

Rev 5, 10-09-2001: Reformatted to electronic data format.

Rev 6, 01-21-2002: (Section 1) added catalog numbers 7268, 7271, 7282, 7288.5, 7288.40, 7292 and 7470.1.

Rev 7, 12-09-2002: (Section 1) added Solutions Plus catalog numbers S087080, S087100, S087140, S087320, S087330, S087340, S087358, S087360 and S087400.

Rev 8, 01-15-2004: (Section 1) added catalog number 7277.5.

Rev 9, 01-25-2005: (Section 1) added SpectroPure catalog number SS087330.

Rev 10, 03-01-2005: revised title.

Rev 11, 05-18-2005: (Section 1) added catalog number 7278.3.

Rev 12, 07-18-2005: (Section 1) added catalog number R7470120.

Rev 13, 08-11-2005: (Section 1) added catalog number R7265000.

Rev 14, 09-29-2005: (Section 1) added Red Bird catalog number S-370.

- Rev 15, 10-03-2005: (Section 1) added Red Bird catalog number S-378.
- Rev 16, 10-13-2005: (Section 1) added Red Bird catalog number S-372 and S-424.
- Rev 17, 10-19-2005: (Section 1) added catalog number R7470050.

Rev 18, 12-23-2005: (Section 1) added Red Bird catalog numbers S-365 and S-422.

Rev 19, 01-06-2006: (Section 1) added Red Bird catalog number SX-1322.

Rev 20, 01-21-2006: (Section 1) added catalog numbers R7465210, R7465240, R7465390 and R7467650.

Rev 21, 02-13-2006: (Section 1) added Red Bird catalog number S-496.

Rev 22, 03-07-2006: (Section 1) added catalog number 7272.4. Rev 23, 03-22-2006: (Section 1) added catalog number R7273800 and Red Bird catalog number S-373. Rev 24, 05-19-2006: (Section 1) added catalog number R7276300. Rev 25, 06-14-2006: (Section 1) added catalog number R7286000. Rev 26,

06-22-2006: (Section 1) added catalog number R7274200. Rev 27, 07-24-2006: (Section 1) added catalog number R7276500.



SODIUM HYDROXIDE SOLUTIONS, >4.0 Normal, >16.3% (w/v), >14.2% (w/w) Aq Solutions

When handled properly by qualified personnel, the product described herein does not present a significant health or safety hazard. Alteration of its characteristics by concentration, evaporation, addition of other substances, or other means may present hazards not specifically addressed herein and which must be evaluated by the user. The information furnished herein is believed to be accurate and represents the best data currently available to us. No warranty, expressed or implied, is made and RICCA CHEMICAL COMPANY assumes no legal responsibility or liability whatsoever resulting from its use.