




### I. Product and Company Information

<b>SII Product Name(s):</b>	Caustic Soda Solution (All Grades)	<b>Synonym:</b>	Caustic, Alkali, Lye, Caustic Lye, Soda Lye, Liquid Caustic.
<b>Chemical Name:</b>	Sodium Hydroxide	<b>CAS Number:</b>	1310-73-2
<b>Manufacturer's Name:</b> Southern Ionics Incorporated 579 Commerce Street West Point, MS 39773 Customer Service: 1-800-953-3585 Web Site <a href="http://www.southernionics.com">www.southernionics.com</a>	<b>Emergency Contacts:</b> Afterhours (Southern Ionics) 1-888-610-2379  For Chemical Emergency, Spill or Accident Call CHEMTREC at 1-800-424-9300 CHEMTREC CCN - 20596		

### II. Hazard Identification

<b>OSHA HCS / GHS Classification(s):</b>	<b>Hazard Statement(s):</b>
Skin Corrosion, Category 1A	Causes severe skin burns.
Serious Eye Damage, Category 1	Causes serious eye damage.
Corrosive to Metals, Category 1	May be corrosive to metals.
Acute toxicity oral, Category 4	Harmful if swallowed.
Acute Aquatic Hazard, Category 3	Harmful to aquatic life.
<b>Signal Word:</b>	<b>Precautionary Statement(s):</b>
Danger	<b>Prevention:</b> Wash affected body part thoroughly after handling. Wear protective gloves/eye protection/ face protection and clothing. Do not breathe mist or vapor. Do not eat, drink or smoke when using this product. Keep in original container. Avoid release to the environment.  <b>Response:</b> IF SWALLOWED: Rinse mouth. Do not induce vomiting. Immediately seek medical advice. IF ON SKIN: Take off immediately all contaminated clothing. Rinse skin with water. Continue rinsing. Wash contaminated clothing before reuse. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a physician. Keep in original container. For Specific treatment: See First Aid section IV.
<b>Symbol(s):</b>	
	

### III. Composition / Information on Ingredients

<b>Chemical Name:</b>	<b>CAS Reg #'s</b>	<b>%</b>
Sodium Hydroxide	1310-73-2	10-50
Water	7732-18-5	Balance

#### IV. First Aid Measures

<b>Eyes:</b>	Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Remove any contact lenses. Seek medical attention.
<b>Dermal / Skin:</b>	Immediately remove contaminated clothing and wash exposed area thoroughly with soap and water for at least 15 minutes. Seek medical attention.
<b>Inhalation:</b>	Move to fresh air immediately. If breathing is difficult, give oxygen. Seek medical attention.
<b>Ingestion:</b>	If swallowed, DO NOT induce vomiting. Rinse mouth, seek medical attention immediately.

#### V. Fire Fighting Measures

<b>NFPA Hazard Rating:</b>	Health (Blue)	Fire (Red)	Reactivity (Yellow)	Special Instructions (White)
	3	0	1	None
<b>NFPA Hazard Classification: 0 = Least 1=Slight 2= Moderate 3= High 4= Extreme</b>				
<b>Extinguishing Media:</b>	Use extinguishing media appropriate for surrounding fire.			
<b>Special Firefighting Procedure:</b>	Wear NIOSH-approved Self-contained breathing apparatus. Use water spray to keep containers cool and to knock down fumes.			

#### VI. Accidental Release Measures

<b>Precaution if Spilled or Released:</b>	Steps should be taken to contain spilled liquids and prevent discharges to streams or sewer systems.
<b>Neutralizing Chemicals:</b>	Dilute Acid.

#### VII. Handling and Storage

<b>Handling:</b>	Handle all chemicals with respect. Keep separated from incompatible substances. Handle only with equipment, materials and supplies specified by their manufacturer as being compatible and appropriate for use with this product. Use caution when combining with water; DO NOT add water to caustic; ALWAYS add caustic to water while stirring to minimize heat generation.
<b>Storage:</b>	Use black iron, mild steel, cast iron or stainless steel for bulk storage. Do not store below 45°F/7°C. Storage temperature of 70°F to 100°F (21°C - 38°C) is recommended. Do not store this material near food, animal feed or drinking water. Store in well ventilated area. Store away from excessive heat and from reactive materials. Keep container tightly closed when not in use.

#### VIII. Exposure Control / Personal Protective Equipment

<b>Component Workplace Control Parameters:</b>				
<b>Components:</b>	<b>CAS-No.</b>	<b>Value</b>	<b>Parameters</b>	<b>Basis</b>
Sodium Hydroxide	1310-73-2	TWA	2.0mg/m <sup>3</sup>	OSHA
<b>Engineering Controls:</b>	Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value.			
<b>General Hygiene:</b>	Practice good personal hygiene after using this material, especially before eating, drinking, smoking, or using the toilet.			
<b>Personal Protection Equipment:</b>				
<b>Eye:</b>	Use chemical splash goggles and face shield. Eye protection worn must be compatible with respiratory protection system employed.			
<b>Skin:</b>	Chemically resistant gloves should be worn whenever this material is handled. Gloves should be removed and replaced immediately if there is any indication of degradation or chemical breakthrough.			

<b>Respiratory:</b>	None required under normal conditions. When conditions warrant a respirator, use NIOSH approved respirator and cartridge.			
<b>Other Protective Items:</b>	Where splash is possible, full chemically resistant protective clothing and boots are required. Ensure that eyewash stations and safety showers are proximal to the work-station location.			
<b>HMIS Classification:</b>	Health (Blue)	Flammability (Red)	Physical Hazard (Yellow)	PPE (White)
	3	0	1	See Above
<b>Hazard Classification: 0 = Minimal 1=Slight 2= Moderate 3= Serious 4= Severe</b>				

### IX. Physical and Chemical Properties

<b>Physical State:</b>	Liquid	<b>pH:</b>	14
<b>Appearance:</b>	Clear	<b>Molecular Weight:</b>	40 for NaOH
<b>Odor:</b>	No distinct odor	<b>Odor Threshold:</b>	No data available
<b>Specific Gravity:(H<sub>2</sub>O=1)</b>	1.11 - 1.53 @60°F/15.6°C	<b>Weight per Gallon:</b>	9.27 - 12.76 @60°F/15.6°C
<b>Vapor Density: (Air=1)</b>	Similar to water	<b>Vapor Pressure:</b>	Similar to water
<b>Boiling Point:</b>	230°F to 291°F 110°C to 114°C	<b>Freezing / Melting Point:</b>	-26°F to 59°F -32°C to -15°C
<b>Lower Explosive Limit:</b>	Not Applicable	<b>Upper Explosive Limit:</b>	Not Applicable
<b>Flash Point:</b>	Not Applicable	<b>Autoignition Temp:</b>	Not Applicable
<b>Solubility in water:</b>	100%		
<b>Other:</b>			

### X. Stability and Reactivity Data

<b>Chemical Stability:</b>	Product is stable under normal or expected use.
<b>Conditions To Avoid:</b>	Reacts violently with strong acids. Do not mix with other chemicals. Corrosive to aluminum, tin, zinc, copper and most alloys in which they are present including brass and bronze. Corrosive to steels at elevated temperatures above 104°F (40°C)
<b>Incompatible Materials:</b>	Avoid contact with the following: Oxidizing agents, Acids, Phosphorus, Aluminum, Zinc, or Tin. Initiates or catalyzes violent polymerization of Acetaldehyde, Acrolein, or Acrylonitrile.
<b>Hazardous products of Decomposition:</b>	Contact with metals (aluminum, zinc, tin) and sodium tetrahydroborate liberates hydrogen gas.

### XI. Toxicological Information

<b>Routes of Entry:</b>	<input checked="" type="checkbox"/> Eyes <input checked="" type="checkbox"/> Skin <input checked="" type="checkbox"/> Ingestion <input checked="" type="checkbox"/> Inhalation					
<b>Sign and symptoms of Exposure:</b>	May cause irritation to eyes, skin and respiratory passages.					
<b>Eye Contact:</b>	Causes severe eye burns.					
<b>Ingestion:</b>	Causes digestive tract burns. Harmful if swallowed.					
<b>Skin Contact:</b>	Causes severe skin burns.					
<b>Inhalation:</b>	May cause irritation to the respiratory system.					
<b>Carcinogenicity:</b>	<b>NPT</b>	Not Listed	<b>IARC</b>	Not Listed	<b>OSHA</b>	Not Regulated
<b>Ingredient Name</b>	<b>Species</b>		<b>Test</b>		<b>Period</b>	<b>Results</b>
Sodium Hydroxide	Rabbit		1350 mg/kg		dermal	LD50
<b>Comments:</b>						

### XII. Ecological Information

<b>Ingredient Name</b>	<b>Species</b>	<b>Test</b>	<b>Period</b>	<b>Results</b>
Sodium Hydroxide	Ceriodaphnia dubia	40mg/L	48 hrs	EC50
<b>Comments:</b>				

### XIII. Disposal Considerations

<b>Waste Disposal:</b>	Always dispose of material in accordance with local, state, and federal regulations.
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### XIV. Transportation Information

<b>Proper Shipping Name:</b>	Sodium hydroxide solution				
<b>DOT Classification:</b>	8				
<b>Identification Number:</b>	UN 1824	<b>Packing Group:</b>	II	<b>Other Labels:</b>	Corrosive

### XV. Regulatory Information

Inventory Status:		US Regulations:		
U. S. TSCA	Yes	SARA 302 TPQ	Not Listed	
Europe EINECS	Yes	SARA 304 RQ	Not Listed	
Canadian DSL	Yes	SARA 313 List	Not Listed	
Japan ENCS	Yes	CERCLA (RQ)	1,000 lbs	
Korean KECL	Yes	RCRA 261.33	Not Listed (D002 (Corrosive) if the pH of the waste is $\geq 12.5$ )	
Philippines PICCS	Yes	CWA 117	Yes	
Australian AICS	Yes			
China IECSC	Yes	SARA 311/312	<input checked="" type="checkbox"/> Acute <input type="checkbox"/> Chronic <input type="checkbox"/> Fire <input type="checkbox"/> Release of Pressure <input checked="" type="checkbox"/> Reactive	
International Regulations:			Other Regulations:	
Canada WHMIS	E	Corrosive	California PROP 65	No
EINECS	215-185-5			

### XVI. Other Information

<b>NSF Certification:</b>	
<b>Other:</b>	_____
<b>Revision Notes:</b>	_____
<b>MSDS Replacements:</b>	<u>SII MSDS 014 Caustic Soda Solution (All Grades)</u>

#### SALES OFFICE

**For Product Information:**  
TEL: 662-494-3055  
FAX: 662-494-2828

Post Office Drawer 1217  
West Point, MS 39773

**To Place An Order:**  
TEL: 800-953-3585  
FAX: 800-953-3588

#### IMPORTANT

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