



Water Guard Inc. (WGI)

SAFETY DATA SHEET

Effective Date: May 22, 2015

Revision Date:

I. Product and Company Information			
Product Name(s):	Caustic Soda Solution (10% - 50%)	Synonym:	Caustic, Alkali, Lye, Caustic Lye, Soda Lye, Liquid Caustic.
Chemical Name:	Sodium Hydroxide	CAS Number:	1310-73-2
Manufacturer's Name: Water Guard Inc. P.O. Box 2226 Wilson, N.C. 27894 Customer Service: 1-800-872-7665 Web Site www.waterguardinc.com		Emergency Contacts: Afterhours (PERS) 1-800-633-8253	

II. Hazard Identification																											
OSHA HCS / GHS Classification(s):	Hazard Statement(s):																										
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.																										
Signal Word:	Precautionary Statement(s):																										
Danger	<table border="0" style="width: 100%;"> <tr> <td style="width: 20%;">Prevention:</td> <td>Wash affected body part thoroughly after handling.</td> </tr> <tr> <td></td> <td>Wear protective gloves/eye protection/ face protection and clothing.</td> </tr> <tr> <td></td> <td>Do not breathe mist or vapor.</td> </tr> <tr> <td></td> <td>Do not eat, drink or smoke when using this product.</td> </tr> <tr> <td></td> <td>Keep in original container.</td> </tr> <tr> <td></td> <td>Avoid release to the environment.</td> </tr> <tr> <td>Response:</td> <td>IF SWALLOWED: Rinse mouth. Do not induce vomiting. Immediately seek medical advice.</td> </tr> <tr> <td></td> <td>IF ON SKIN: Take off immediately all contaminated clothing. Rinse skin with water. Continue rinsing. Wash contaminated clothing before reuse.</td> </tr> <tr> <td></td> <td>IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.</td> </tr> <tr> <td></td> <td>IF INHALED: Remove person to fresh air and keep comfortable for breathing.</td> </tr> <tr> <td></td> <td>Immediately call a physician.</td> </tr> <tr> <td></td> <td>Keep in original container.</td> </tr> <tr> <td></td> <td>For Specific treatment: See First Aid section IV.</td> </tr> </table>	Prevention:	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.	Response:	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.
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III. Composition / Information on Ingredients		
Chemical Name:	CAS Reg #'s	%
Sodium Hydroxide	1310-73-2	10-50
Water	7732-18-5	Balance

IV. First Aid Measures

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

V. Fire Fighting Measures

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

VI. Accidental Release Measures

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

VII. Handling and Storage

Handling:	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.
Storage:	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

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

Respiratory:	None required under normal conditions. When conditions warrant a respirator, use NIOSH approved respirator and cartridge.			
Other Protective Items:	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.			
HMIS Classification:	Health (Blue)	Flammability (Red)	Physical Hazard (Yellow)	PPE (White)
	3	0	1	See Above
Hazard Classification: 0 = Minimal 1=Slight 2= Moderate 3= Serious 4= Severe				

IX. Physical and Chemical Properties

Physical State:	Liquid	pH:	14
Appearance:	Clear	Molecular Weight:	40 for NaOH
Odor:	No distinct odor	Odor Threshold:	No data available
Specific Gravity:(H₂O=1)	1.11 - 1.53 @60°F/15.6°C	Weight per Gallon:	9.27 - 12.76 @60°F/15.6°C
Vapor Density: (Air=1)	Similar to water	Vapor Pressure:	Similar to water
Boiling Point:	230°F to 291°F 110°C to 114°C	Freezing / Melting Point:	-26°F to 59°F -32°C to -15°C
Lower Explosive Limit:	Not Applicable	Upper Explosive Limit:	Not Applicable
Flash Point:	Not Applicable	Autoignition Temp:	Not Applicable
Solubility in water:	100%		
Other:			

X. Stability and Reactivity Data

Chemical Stability:	Product is stable under normal or expected use.
Conditions To Avoid:	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)
Incompatible Materials:	Avoid contact with the following: Oxidizing agents, Acids, Phosphorus, Aluminum, Zinc, or Tin. Initiates or catalyzes violent polymerization of Acetaldehyde, Acrolein, or Acrylonitrile.
Hazardous products of Decomposition:	Contact with metals (aluminum, zinc, tin) and sodium tetrahydroborate liberates hydrogen gas.

XI. Toxicological Information

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

XII. Ecological Information

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

XIII. Disposal Considerations

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

Proper Shipping Name:	Sodium hydroxide solution				
DOT Classification:	8				
Identification Number:	UN 1824	Packing Group:	II	Other Labels:	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 KECI	Yes	RCRA 261.33	Not Listed (D002 (Corrosive) if the pH of the waste is ≥ 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

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

IMPORTANT

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