




**SOUTHERN IONICS INCORPORATED (SII)**  
**SAFETY DATA SHEET**

SDS NO. 204  
Effective Date: April 17, 2015  
Revision Date: September 20, 2023

**I. Product and Company Information**

<b>SII Product Name(s):</b>	Sodium Aluminate Solution (38%, 43%, & 45%)	<b>Synonym(s):</b>	LSA, Liquid Sodium Aluminate
<b>Chemical Name:</b>	Sodium Aluminate Solution	<b>CAS Number:</b>	1302-42-7
<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.	
<b>Signal Word:</b> Danger	<b>Precautionary Statement(s):</b>		
<b>Symbol(s):</b> 	<b>Prevention:</b>	Wash affected body part thoroughly after handling.	
		Wear eye and face protection.	
		Wear protective gloves and clothing.	
		Keep in original container.	
	<b>Response:</b>	IF SWALLOWED: Rinse mouth. Do not induce vomiting. Immediately seek medical advice.	
	IF ON SKIN: Immediately remove 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.		
	For specific treatment, see Section IV. First Aid Measures.		

**III. Composition / Information on Ingredients**

<b>Chemical Name:</b>	<b>CAS Number(s):</b>	<b>%</b>
Sodium Aluminate	1302-42-7	31- 42
Sodium Hydroxide	1310-73-2	4 - 10
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, if you feel unwell.
<b>Dermal / Skin:</b>	Remove contaminated clothing and wash exposed area thoroughly with soap and water for at least 15 minutes. Seek medical attention, if you feel unwell.
<b>Inhalation:</b>	Move to fresh air immediately. If breathing is difficult, give oxygen. Seek medical attention, if you feel unwell.
<b>Ingestion:</b>	If swallowed, DO NOT induce vomiting. Rinse mouth. Seek medical attention, if you feel unwell.

### 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 (SCBA). 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.
<b>Storage:</b>	Use black iron, mild steel, cast iron or stainless steel for bulk storage. Store at appropriate temperature to protect from freezing or crystallization. Store away from excessive heat (e.g. steam pipes, radiators), and from reactive materials. Do not store this material near food, animal feed, or drinking water. Store in a well-ventilated area. 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 Number</b>	<b>Value</b>	<b>Parameters</b>	<b>Basis</b>
Sodium Hydroxide	1310-73-2	TWA	2.0 mg/m <sup>3</sup>	as Sodium Hydroxide
<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>	Chemical-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 for particulates and Sulfur Dioxide.			
<b>Other Protective Items:</b>	Where splash is possible, full chemical-resistant protective clothing and boots are required. Ensure that eyewash stations and safety showers are proximal to the work 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 to hazy, yellow to amber	<b>Molecular Weight:</b>	93.3 - 102.5
<b>Odor:</b>	Slight	<b>Odor Threshold:</b>	No Data Available
<b>Specific Gravity: (H<sub>2</sub>O=1)</b>	1.48 - 1.55 @ 77°F/25°C	<b>Weight per Gallon:</b>	12.3 - 12.9 lbs. @ 77°F / 25°C
<b>Vapor Density: (Air=1)</b>	Similar to water	<b>Vapor Pressure:</b>	Similar to Water
<b>Boiling Point:</b>	228°F - 244°F (108°C - 118°C)	<b>Freezing/Melting Point:</b>	24.8°F - 14°F (-4°C to -10°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>	Appreciable	<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>	Mixture with strong acids produces considerable heat.
<b>Incompatible Materials:</b>	Avoid contact with copper, tin, zinc, aluminum, and their alloys.
<b>Hazardous Products of Decomposition:</b>	None

### 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 serious eye damage.						
<b>Ingestion:</b>	May cause burns to mouth, throat, and stomach.						
<b>Skin Contact:</b>	Causes severe skin burns.						
<b>Inhalation:</b>	May irritate respiratory tract.						
<b>Carcinogenicity:</b>	Not Listed	NPT	Not Listed	IARC	Not Listed	OSHA	Not Regulated
<b>Ingredient Name:</b>	<b>Species</b>	<b>Test</b>	<b>Route</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 Aluminate	Western Mosquitofish	111 mg/L	96 hrs	LC50
<b>Comments:</b>	When released into the soil, this material is not expected to biodegrade and may leach into groundwater.			

### 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 aluminate solution				
<b>DOT Classification:</b>	8				
<b>Identification Number:</b>	UN 1819	<b>Packing Group:</b>	II	<b>Other Labels:</b>	Corrosive
<b>Comments:</b>					

XV. Regulatory Information			
<b>Inventory Status:</b>		<b>US Regulations:</b>	
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 on dry weight basis as Sodium Hydroxide
Korean KECI	Yes	RCRA 261.33	D002 (Corrosive) if the pH of the waste is $\geq 12.5$
Philippines PICCS	Yes		
Australian AICS	Yes	SARA 311/312	<input checked="" type="checkbox"/> Acute <input type="checkbox"/> Chronic <input type="checkbox"/> Fire <input type="checkbox"/> Release of Pressure <input type="checkbox"/> Reactive
<b>International Regulations:</b>			<b>Other Regulations:</b>
EINECS	215-100-1		California PROP 65 <input type="checkbox"/> Not Listed
<b>Comments:</b>			

XVI. Other Information	
<b>Other:</b>	
<b>Revision Notes:</b>	04.12.18 Section I. Product and Company Information, SII Product Name(s)- added all products covered under the SDS; Section IX. Physical and Chemical Properties, Appearance – revised wording; Section XV. Regulatory Information, International Regulations – removed Canada information. 10.30.18 Section IX. Physical and Chemical Properties, Appearance – revised wording. 09.25.20 Reviewed as part of a 3-year review process. Updated logo and formatting.
<b>MSDS Replacements:</b>	SII MSDS 001 - Sodium Aluminate 45%, SII MSDS 003 - Sodium Aluminate 43%, SII MSDS 004 - Sodium Aluminate 38%.

<b>SALES OFFICE</b>		
<b>For Product Information:</b> TEL: 662-494-3055 FAX: 662-494-2828	Post Office Drawer 1217 West Point, MS 39773	<b>To Place an Order:</b> TEL: 800-953-3585 FAX: 800-953-3588
<b>IMPORTANT</b>		
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