




SOUTHERN IONICS INCORPORATED (SII)
SAFETY DATA SHEET

SDS NO. 204
Effective Date: April 17, 2015
Revision Date: April 12, 2018

I. Product and Company Information

SII Product Name(s):	Sodium Aluminate Solution (38%, 43%, & 45%)	Synonym:	LSA, Liquid Sodium Aluminate
Chemical Name:	Sodium Aluminate Solution	CAS Number:	1302-42-7
Manufacturer's Name: Southern Ionics Incorporated 579 Commerce Street West Point, MS 39773 Customer Service: 1-800-953-3585 Web Site www.southernionics.com	Emergency Contacts: 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

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.	
Signal Word:	Precautionary Statement(s):		
Danger	Prevention:	Wash affected body part thoroughly after handling.	
Symbol(s): 		Wear eye and face protection.	
		Wear protective gloves and clothing.	
		Keep in original container.	
	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.	
		For specific treatment: See First Aid section IV.	

III. Composition / Information on Ingredients

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

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 (SCBA). 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.
Storage:	Use black iron, mild steel, cast iron or stainless steel for bulk storage. Store at appropriate temperature to protect from freezing or crystallization. Consult the appropriate SII Product Bulletin for temperature recommendations. Do not store this material near food, animal feed, or drinking water. Store in a well ventilated area. Store away from excessive heat (e.g. steam pipes, radiators), 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	as Sodium Hydroxide
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 for particulates and Sulfur Dioxide.			
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.			
HMS 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 to hazy, light amber	Molecular Weight:	93.3-102.5
Odor:	Slight	Odor Threshold:	No Data Available
Specific Gravity:(H₂O=1)	1.48 to 1.55 @ 77°F/25°C	Weight per Gallon:	12.3 to 12.9 lbs. @ 77°F/25°C
Vapor Density: (Air=1)	Similar to Water	Vapor Pressure:	Similar to Water
Boiling Point:	228°F to 244°F (108°C to 118°C)	Freezing/Melting Point:	24.8°F to 14°F (-4°C to -10°C)
Lower Explosive Limit:	Not Applicable	Upper Explosive Limit:	Not Applicable
Flash Point:	Not Applicable	Autoignition Temp:	Not Applicable
Solubility in water:	Appreciable		
Other:			

X. Stability and Reactivity Data

Chemical Stability:	Product is stable under normal or expected use.
Conditions To Avoid:	Mixture with strong acids produces considerable heat.
Incompatible Materials:	Avoid contact with the following: copper, tin, zinc, aluminum, and their alloys.
Hazardous products of Decomposition:	None

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 serious eye damage.					
Ingestion:	May cause burns to mouth, throat, and stomach.					
Skin Contact:	Causes severe skin burns.					
Inhalation:	May irritate respiratory tract.					
Carcinogenicity:	NPT	Not Listed	IARC	Not Listed	OSHA	Not Regulated
Ingredient Name:	Species		Test		Route	Results
Sodium Hydroxide	Rabbit		1350 mg/kg		dermal	LD 50
Comments:						

XII. Ecological Information

Ingredient Name:	Species	Test	Period	Results
Sodium Aluminate	Western Mosquitofish	111mg/L	96 hrs	LC 50
Comments:	When released into the soil, this material is not expected to biodegrade and may leach into groundwater.			

XIII. Disposal Considerations

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

XIV. Transportation Information

Proper Shipping Name:	Sodium Aluminate Solution				
DOT Classification:	8				
Identification Number:	UN 1819	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 on dry weight basis as Sodium Hydroxide.
Korean KECI	Yes	RCRA 261.33	Not Listed (D002 (Corrosive) if the pH of the waste is ≥ 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
International Regulations:		Other Regulations:	
EINECS	215-100-1		California PROP 65 Not Listed

XVI. Other Information

NSF Certification:	Sodium Aluminate manufactured at Calhoun, TN is NSF/ANSI -60 Certified. Maximum use in potable water is 105 mg/L.
Other:	_____
Revision Notes:	<u>04.12.2018 Added all products covered under the SDS in the product name, revised wording in appearance (Physical&Chemical Properties and removed the Canada information in the International Regulations Section.</u>
MSDS Replacements:	<u>SII MSDS 001 - Sodium Aluminate 45%, SII MSDS 003 - Sodium Aluminate 43%, SII MSDS 004 - Sodium Aluminate 38%.</u>

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

SALES OFFICE
 Post Office Drawer 1217
 West Point, MS 39773

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

IMPORTANT

Although the information contained is offered in good faith, SUCH INFORMATION IS EXPRESSLY GIVEN WITHOUT ANY WARRANTY (EXPRESS OR IMPLIED) OR ANY GUARANTEE OF ITS ACCURACY OR SUFFICIENCY and is taken at the user's sole risk. User is solely responsible for determining the suitability of use in each particular situation. SII specifically DISCLAIMS ANY LIABILITY WHATSOEVER FOR THE USE OF SUCH INFORMATION, including without limitation any recommendation which user may construe and attempt to apply which may infringe or violate valid patents, licenses, and/or copyright.