Sodium aluminate

MSDS No. 132
4/30/2013

Safety Data Sheet

Section 1 - Chemical Product and Company Identification

Product/Chemical Name:	Sodium aluminate, solution
Chemical Family:	Inorganic salt
General Use:	Water Treatment Chemical
Emergency Contact:	800-282-5322

Manufacturer:
USALCO, LLC
2601 Cannery Ave
Baltimore, MD 21226
Phone 410-354-0100 (7:00am 5:00pm)
FAX 410-354-1021

HMIS	
H	3
F	0
R	0
PPE†	

†Sec. 11

Section 2 - Composition / Information on Ingredients

Ingredient Name	CAS Number	% wt
Sodium aluminate	1302-42-7	31-45
Sodium hydroxide	1310-73-2	3-9
Water	7732-18-5	52-66

	OSHA PEL		ACGIH TLV		NIOSH REL		NIOSH
Ingredient	**TWA**	**STEL**	**TWA**	**STEL**	**TWA**	**STEL**	**IDLH**
Sodium aluminate	none estab.	2 mg/m^3 *as aluminum*	none estab.	2 mg/m^3 *as aluminum*	none estab.	2 mg/m^3 *as aluminum*	none estab.

Section 3 - Emergency Overview

Description: Viscous colorless to amber liquid with no or very mild odor. Not flammable. Not volatile
Hazards: Corrosive; pH 14. Causes burns. Harmful by contact with skin and if swallowed. Risk of serious damage to eyes. Not flammable, but may release toxic vapors if decomposed in a fire.

Section 4 - First Aid Procedures

Overview:	Direct contact can cause corrosive burns and permanent injury.
Inhalation:	(mist or spray) Remove from exposure; seek medical treatment if any symptoms occur.
Eye Contact:	Immediately flush with large amounts of water for at least 15 minutes, occasionally lifting upper and lower lids. Seek medical attention.
Skin Contact:	Remove contaminated clothing and flush contact area with large amounts of water for at least 15 minutes. Seek medical attention if any symptoms are present.
Ingestion:	Do not induce vomiting, drink milk or water and immediately seek medical attention.

After first aid, get appropriate in-plant, paramedic, or community medical support.

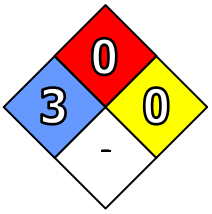
Section 5 - Physical and Chemical Properties

Physical State:	Liquid	**Water Solubility:**	Complete
Characteristics	Clear to amber liquid	**Melting/Freezing Point:**	0° to 12° F (-18° to -11°C)
Odor:	Odorless	**Boiling Point:**	220-240°F (104-116 °C)
Vapor Pressure:	Not applicable	**% Volatile:**	0.0
Specific Gravity (H2O=1, at 4 °C):	1.44-1.56	**Viscosity:**	>2000 cps. @ 20°F 200-800 cps. @ 68°F
Vapor Density (Air=1):	Not applicable	**pH:**	14.0

Section 6 - Fire-Fighting Measures

Flash Point:	NA
Burning Rate:	NA
Autoignition Temperature:	NA
LEL:	NA
UEL:	NA
Flammability:	Not flammable
Extinguishing Media:	NA
Unusual Fire or Explosion Hazards:	None
Hazardous Combustion Products:	None
Fire-Fighting Instructions:	Do not release runoff from fire control methods to sewers or waterways.

NFPA



Section 7 - Stability and Reactivity

Stability:	Will generate heat on contact with water and will hydrolyze to sodium hydroxide and aluminum hydroxide.
Polymerization:	Hazardous polymerization does not occur.
Chemical Incompatibilities:	Incompatible with acids.
Hazardous Decomposition Products:	None.

Section 8 - Health Hazard Information

Primary Entry Routes:	Ingestion, contact
Target Organs:	N/A
Acute Effects:	Chemical (caustic) burns
Eye:	Chemical burn
Skin:	Chemical burn
Ingestion:	Burns, nausea, vomiting, diarrhea, stomach pain
Carcinogenicity:	IARC, NTP, and OSHA do not list Sodium aluminate as a carcinogen
Medical Conditions Aggravated by Long-Term Exposure:	Skin rashes
Chronic Effects:	IARC, NTP, and OSHA do not list

Section 9 - Spill, Leak, and Disposal Procedures

Spill /Leak Procedures:	Wear appropriate personal protective equipment. Do not come in contact with spilled material.
Small Spills:	Neutralize with sodium bicarbonate or weak acid solution.
Large Spills:	Dike and transfer spill to container for reuse and reprocessing. Can flush contaminated areas with large amounts of water and direct rinsing to chemical sewer or collect for treatment.
Cleanup:	Recover liquid when possible. Wash impacted areas with water to remove residues.
Regulatory Requirements:	Waste Sodium aluminate is not a RCRA listed hazardous waste. Waste material can be a RCRA Characteristic Waste (D002) if not neutralized.
Disposal:	Contact your supplier or a licensed contractor for detailed recommendations. Follow applicable Federal, State, and local regulations.
Container Cleaning and Disposal:	Rinse with water, dispose of containers in accordance with State and local regulations.

Section 10 - Regulatory Information

EPA Regulations:	
RCRA Hazardous Waste Classification:	D002 (Corrosive) if the pH of the waste is ≥12.5
CERCLA Hazardous Substance (40 CFR 302.4):	Not listed CWA, Sec. 311 (b)(4)
CERCLA Reportable Quantity (RQ):	Not listed
SARA 311/312 Codes:	Immediate (acute) health hazard
SARA Toxic Chemical (40 CFR 372.65):	Not listed
SARA EHS (Extremely Hazardous Substance) (40 CFR 355):	Not listed
OSHA Regulations:	
Air Contaminant (29 CFR 1910.1000, Table Z-1, Z-1-A):	Not listed
OSHA Specifically Regulated Substance (29CFR 1910.):	Not listed
State Regulations:	USALCO, LLC has not determined regulatory requirements for individual states.

Section 11 - Exposure Controls / Personal Protection

Ventilation:	Under normal conditions, Sodium aluminate solution will not generate mists or vapors. No special ventilation is recommended.
Respiratory Protection:	Seek professional advice prior to respirator selection and use. Follow OSHA respirator regulations (29 CFR 1910.134) and, if necessary, wear a MSHA/NIOSH-approved respirator. Select respirator based on its suitability to provide adequate worker protection for given working conditions, level of airborne contamination, and presence of sufficient oxygen. For emergency or non-routine operations (cleaning spills, reactor vessels, or storage tanks), wear an SCBA. Warning! Air-purifying respirators do not protect workers in oxygen-deficient atmospheres. If respirators are used, OSHA requires a written respiratory protection program that includes at least: medical certification, training, fit-testing, periodic environmental monitoring, maintenance, inspection, cleaning, and convenient, sanitary storage areas.
Protective Clothing/Equipment:	Wear chemically protective gloves, boots, aprons, and gauntlets to prevent prolonged or repeated skin contact. Wear protective chemical safety goggles, per OSHA eye- and face-protection regulations (29 CFR 1910.133). Contact lenses are not eye protective devices. Appropriate eye protection must be worn instead of, or in conjunction with contact lenses.
Safety Stations:	Make emergency eyewash stations, safety/quick-drench showers, and washing facilities available in work area.
Contaminated Equipment:	Separate contaminated work clothes from street clothes. Launder before reuse. Remove this material from your shoes and clean personal protective equipment.
Comments:	Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.

Section 12 - Special Precautions and Comments

Handling Precautions:	Ensure that all containers are labeled in accordance with OSHA regulations. Avoid skin and eye contact. Wear appropriate protective clothing. Material is slippery; use caution if walking on spilled material.
Storage Requirements:	Keep containers tightly closed when not in use.

Section 13 - DOT Transportation Data (49 CFR 172.101)

Proper Shipping Name:	UN1819, Sodium aluminate, solution, 8, II	**Packaging Authorizations**	
		a) Exceptions:	173.154
		b) Non-bulk Packaging:	173.203
Shipping Symbols:	-	**c) Bulk Packaging:**	173.241
Hazard Class:	8	**Quantity Limitations**	
DOT No.:	UN1819	**a) Passenger, Aircraft, or Railcar:**	1 L
Packing Group:	II	**b) Cargo Aircraft Only:**	30 L
Label:	Corrosive	**Vessel Stowage Requirements**	
Special Provisions (172.102):	IB3,T4,TP1	**a) Location:**	A
2008 Emergency Response Guidebook:	Guide 154	**b) Other:**	52

Prepared By: Craig T. Owen
Effective Date: 2/1/2012 **Supercedes:** NA