

Offer Sheet

Product	Sodium Aluminate
Quantity	46 drums x 55 gallons
Net weight	32,659 lbs.
Manufacture date	
Availability	One time
Location	North Chicago, IL 60064
Date	2/6/26
COA and SDS	Attached below



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Elk Grove Village, IL 60007
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Solvent-Systems.com

Sodium aluminate is an industrial chemical primarily used as a **coagulant and binder**, with additional roles in **water treatment, ceramics, catalysts, and chemical manufacturing**. Its commercial use profile is dominated by applications where its **high alkalinity and aluminum content** are functional.

1. Municipal & Industrial Water Treatment (largest use)

Function:

Acts as a **coagulant and flocculant aid**

Mechanism:

When added to water, it hydrolyzes to form aluminum hydroxide, which:

- Adsorbs colloidal impurities
- Enhances particle agglomeration
- Improves sedimentation and filterability

Commercial applications:

- Drinking water purification
- Wastewater clarification
- Industrial process water cleanup

Why used:

- Effective over a wide pH range
- Works synergistically with other coagulants (e.g., ferric salts)
- Reduces turbidity and organic load

Primary buyers:

Municipal water plants, industrial wastewater facilities, water treatment chemical distributors

2. Papermaking & Pulp Processing

Function:

- Fixes dyes and fillers
- Improves retention of fines and colloidal materials
- Strengthens paper sheet properties

Why used:

- Enhances efficiency of alum-based systems
- Lifetime supply of aluminum in filler fixation

Primary buyers:

Paper mills and pulp processors

3. Petroleum & Oilfield Applications

Function:

- Used in fracturing and drilling fluids to control fluid loss and stabilize clay
- Acts as a pH adjuster in certain completion fluids

Commercial benefit:

- Helps maintain borehole stability
- Reduces filtrate invasion

Primary buyers:

Oilfield service companies, drilling fluid formulators

4. Catalyst & Chemical Intermediate

Uses:

- Precursor for aluminum-containing catalysts
- Intermediate in specialty chemical synthesis
- Binder in catalyst supports

Primary buyers:

Specialty chemical manufacturers, catalyst producers

5. Construction & Refractory Materials

Function:

- Binder in refractory castables
- Aluminum source in some cementitious formulations

Why used:

- Adds strength under high temperatures
- Improves chemical resistance

Primary buyers:

Refractory producers, foundries

6. Textile & Dyeing Industry

Function:

- Acts as a **mordant** (fixes dyes to fibers)
- Supports color fastness in some dyeing systems

Primary buyers:

Textile processors, dye houses



Certificate of Compliance

Product

Liquid Sodium Aluminate 45%

LOT	PO	BOL	Tank	Trailer
14543	4500163203	1047351	T3/4	drum

TEST	SPECIFICATION			UNIT	RESULT
Alumina Oxide Al ₂ O ₃	24.6	-	25.4	WT%	24.7
Sodium Oxide Na ₂ O	18.8	-	19.8	WT%	18.9
Specific Gravity @ 70F	1.548	-	1.578		1.564
Product clear and free of solids					Pass

Manufacturing Site:

USALCO Ashtabula Plant, LLC
3050 Lake Rd. East
Ashtabula, OH 44004



I-Lot: 010001618616

Batch: 1000481204
NC Raw Materials Lab

Certificate of Compliance

Material:

20032294

Amount:

0.01 g

Lab Location:

1195_QC-TL60

Storage:

Tight Container, co*

SODIUM ALUMINATE (NON-CFR USE)

NC Raw Materials Lab

GLCA2021032719

Run#:

Misc Raw Material



3079455

14543

Product

Liquid Sodium Aluminate 45%

LOT	PO	BOL	Tank	Trailer
14543	4500163203	1047351	T3/4	drum

TEST	SPECIFICATION			UNIT	RESULT
Alumina Oxide Al ₂ O ₃	24.6	-	25.4	WT%	Pass
Sodium Oxide Na ₂ O	18.8	-	19.8	WT%	Pass
Specific Gravity @ 60F	1.540	-	1.570		Pass
Product clear and free of solids					Pass



Sodium Aluminate Solution

USALCO 38, USALCO 43, USALCO 45

MSDS No. 132

10/27/2020

Safety Data Sheet

1. IDENTIFICATION

Product Identifier

Product Name Sodium Aluminate, solution

Other means of identification

SDS # 132

UN/ID No

UN 1819

Synonyms

USALCO 38, USALCO 43, USALCO 45

Manufacturer
USALCO, LLC
2601 Cannery Ave
Baltimore, MD 21226

Emergency Telephone Number

410-918-2230

Company Phone Number

Emergency Telephone (24 hr)

800- 282-5322

2. HAZARDS IDENTIFICATION

Appearance: Viscous colorless to amber liquid. **Physical State:** Liquid . **Odor:** No or very mild odor.

Classification

Skin corrosion/irritation	Category 1 Sub-category A
Serious eye damage/eye irritation	Category 1
Corrosive to Metals	Category 1

Signal Word

Danger

Hazard Statements

Causes severe skin burns and eye damage
May be corrosive to metals.



Precautionary Statements - Prevention

Do not breathe fume/gas/mist/vapors/spray
Wash face, hands and any exposed skin thoroughly after handling
Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
Immediately call a POISON CENTER or doctor/physician
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
Wash contaminated clothing before reuse
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
Immediately call a POISON CENTER or doctor/physician

Precautionary Statements - Storage

Store in corrosive resistant container or a container with corrosive resistant inner liner.

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal facility.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms Aluminum sodium dioxide
Chemical Family Inorganic Salt.

Ingredient Name	CAS Number	% wt
Sodium aluminate	1302-42-7	37-46
Water	7732-18-5	52-66

4. FIRST-AID MEASURES

First Aid Measures

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Seek immediate medical attention/advice.

Skin Contact Take off contaminated clothing. Wash affected area with soap or mild detergent and large amounts of water until no evidence of chemical remains (approximately 15-20 minutes). Get medical attention if necessary.

Inhalation Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention immediately if symptoms are present.

Ingestion Drink plenty of water. Do not induce vomiting. Seek medical attention immediately.

Most important symptoms and effects

Symptoms Ingestion will cause corrosive burns to mouth, throat, and stomach. Contact may cause severe skin irritation and burns. May cause eye burns and permanent eye damage. Inhalation causes irritation and burning to nose and throat.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically. For inhalation, consider oxygen. Avoid gastric lavage or emesis.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media Dry chemical. Carbon dioxide (CO₂). Water. Foam.

Unsuitable Extinguishing Media None identified.

Specific Hazards Arising from the Chemical Negligible fire hazard.

Sensitivity to Mechanical Impact Not sensitive.
 Sensitivity to Static Discharge Not sensitive.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Move containers from fire area if you can do it without risk. Apply cooling water to sides of containers that are exposed to flames until well after fire is out. Reduce vapors with water spray. Avoid inhalation of combustion by-products.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions Do not touch damaged packages or spilled material. Keep unnecessary people away, isolate hazard area and deny entry.

Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so. Dike and contain spill. Move containers from spill area.

Methods for Clean-Up Cover liquid spill with sand, earth or other non-combustible absorbent material. Place in appropriate containers for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling

Wash thoroughly after handling. Use personal protection recommended in Section 8. Do not breathe fume/gas/mist/vapors/spray.

Conditions for safe storage, including any incompatibilities

Storage Conditions

Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up. Store away from incompatible materials.

Incompatible Materials

Acids. Combustible material. Metals. Aldehydes. Metals such as aluminum, tin, and zinc.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

No exposure limits noted for ingredient(s)

Appropriate engineering controls

Engineering Controls

No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits. Eyewash stations. Showers.

Individual protection measures, such as personal protective equipment

Eye/Face Protection

Wear chemical goggles and face shield.

Skin and Body Protection

Chemical resistant protective gloves. Wear appropriate chemical resistant clothing.

Respiratory Protection

While not normally required, respiratory protection may be required under conditions where extensive misting may occur due to insufficient or improper engineering controls.

General Hygiene Considerations

Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State	Liquid	
Odor	Not available	
Odor Threshold	Not available	
Appearance	Clear to amber liquid	
pH of 1% solution	>11.5	pH of >1% solutions will range from 11.5-14
Melting Point/Freezing Point	0° to 12° F	
Boiling Point/Boiling Range	>230° F	
Flash Point	Not applicable	
Evaporation Rate	Not determined	
Flammability (Solid, Gas)	Not flammable	
Upper Flammability Limits	Not flammable	
Lower Flammability Limit	Not flammable	
Vapor Pressure	Not determined	
Vapor Density	Not determined	
Specific Gravity	±1.52	(1=Water) @ 25 °C (77 °F)
Water Solubility	Soluble in water	
Solubility in other solvents	Insoluble in alcohol	
Partition Coefficient	Not available	
Decomposition Temperature	Not determined	
Viscosity	Up to 1,500cps @55° F	
Explosive Properties	Not determined	
Oxidizing Properties	Not determined	
Additional Information	Molecular Weight:	81.97
Density	12.0 to 13.1 lbs/gal	

10. STABILITY AND REACTIVITY**Reactivity**

Not reactive under normal conditions.

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

May react violently with acids.

Hazardous Polymerization Hazardous polymerization does not occur.

Conditions to Avoid

Contact with incompatible materials.

Incompatible Materials

Acids. Aldehydes. Metals such as aluminum, tin, and zinc.

Hazardous Decomposition Products

None

11. TOXICOLOGICAL INFORMATION**Information on likely routes of exposure****Product Information**

Eye Contact Causes severe eye damage.

Skin Contact Causes severe skin burns.

Inhalation Avoid inhalation of mist.

Ingestion Do not taste or swallow.

Information on physical, chemical and toxicological effects

Symptoms Please see section 4 of this SDS for symptoms.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Carcinogenicity This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

Numerical measures of toxicity

Not determined

12. ECOLOGICAL INFORMATION**Ecotoxicity**

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Persistence/Degradability

Not determined

Bioaccumulation

Not determined

Mobility

Not determined

Other Adverse Effects

Not determined

13. DISPOSAL CONSIDERATIONS
Waste Treatment Methods

- Disposal of Wastes** Disposal should be in accordance with applicable regional, national and local laws and regulations.
EPA Hazardous Waste Code: D002 (Corrosive) if the pH is >12.5.
- Contaminated Packaging** Disposal should be in accordance with applicable regional, national and local laws and regulations.

California Hazardous Waste Status

Chemical Name	California Hazardous Waste Status
Sodium aluminate 1302-42-7	Corrosive

14. TRANSPORT INFORMATION

Note Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

DOT

UN/ID No UN1819
Proper Shipping Name Sodium aluminate, solution
Hazard Class 8
Packing Group II

IATA

UN/ID No UN1819
Proper Shipping Name Sodium aluminate, solution
Hazard Class 8
Packing Group II

IMDG

UN/ID No UN1819
Proper Shipping Name Sodium aluminate, solution
Hazard Class 8
Packing Group II

TDG

UN/ID No UN1819
Proper Shipping Name Sodium aluminate, solution
Hazard Class 8
Packing Group II

15. REGULATORY INFORMATION
International Inventories

TSCA Listed
DSL Listed
EINECS Listed
ENCS Listed
IECSC Listed
KECL Listed
PICCS Listed
AICS Listed

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances

US Federal Regulations
CERCLA

Sodium hydroxide is listed under SARA Section 302 (40 CFR 355 Appendix A) and CERCLA (40 CFR 302.4) and has a reportable quantity of 1,000 lbs.

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

US State Regulations
California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

This product does not contain any substances regulated under applicable state right-to-know regulations

16. OTHER INFORMATION				
NFPA	Health Hazards	Flammability	Instability	Special Hazards
	3	0	0	Not determined
HMIS	Health Hazards	Flammability	Physical Hazards	Personal Protection
	3	0	0	0
Issue Date	20-Sep-2011			
Revision Date:	1/14/2020 – Revised Section 2. 10/27/2020 – Sec. 3 revised		4/05/2016 – Sec. 9 updated.	4/30/2015 - New format

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet