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

Emergency Telephone Number
Company Phone Number: 410-918-2230
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

<table>
<thead>
<tr>
<th>Ingredient Name</th>
<th>CAS Number</th>
<th>% wt</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium aluminate</td>
<td>1302-42-7</td>
<td>37-46</td>
</tr>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>52-66</td>
</tr>
</tbody>
</table>

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**
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

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

Molecular Weight: 81.97

Density: 12.0 to 13.1 lbs/gal

(1=Water) @ 25 °C (77 °F)
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

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>California Hazardous Waste Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium aluminate</td>
<td>Corrosive</td>
</tr>
<tr>
<td>1302-42-7</td>
<td></td>
</tr>
</tbody>
</table>

14. TRANSPORT INFORMATION

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

DOT

<table>
<thead>
<tr>
<th>UN/ID No</th>
<th>Proper Shipping Name</th>
<th>Hazard Class</th>
<th>Packing Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN1819</td>
<td>Sodium aluminate, solution</td>
<td>8</td>
<td>II</td>
</tr>
</tbody>
</table>

IATA

<table>
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<tr>
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<th>Packing Group</th>
</tr>
</thead>
<tbody>
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<td>UN1819</td>
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</table>

IMDG

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<tr>
<th>UN/ID No</th>
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<th>Hazard Class</th>
<th>Packing Group</th>
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</thead>
<tbody>
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TDG

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<td>Sodium aluminate, solution</td>
<td>8</td>
<td>II</td>
</tr>
</tbody>
</table>

15. REGULATORY INFORMATION

International Inventories

<table>
<thead>
<tr>
<th>TSCA</th>
<th>Listed</th>
</tr>
</thead>
<tbody>
<tr>
<td>DSL</td>
<td>Listed</td>
</tr>
<tr>
<td>EINECS</td>
<td>Listed</td>
</tr>
<tr>
<td>ENCS</td>
<td>Listed</td>
</tr>
<tr>
<td>IECSC</td>
<td>Listed</td>
</tr>
<tr>
<td>KECL</td>
<td>Listed</td>
</tr>
<tr>
<td>PICCS</td>
<td>Listed</td>
</tr>
<tr>
<td>AICS</td>
<td>Listed</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Health Hazard</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chronic Health Hazard</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fire Hazard</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sudden Release of Pressure Hazard</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reactive Hazard</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>NFPA Health Hazards</th>
<th>3</th>
<th>Flammability</th>
<th>0</th>
<th>Instability</th>
<th>0</th>
<th>Special Hazards</th>
<th>Not determined</th>
</tr>
</thead>
<tbody>
<tr>
<td>HMIS Health Hazards</td>
<td>3</td>
<td>Flammability</td>
<td>0</td>
<td>Physical Hazards</td>
<td>0</td>
<td>Personal Protection</td>
<td>0</td>
</tr>
</tbody>
</table>

Issue Date: 20-Sep-2011
Revision Date: 1/14/2020 – Revised Section 2. 4/05/2016 – Sec. 9 updated. 4/30/2015 - New format
10/27/2020 – Sec. 3 revised

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