1. IDENTIFICATION

Product Identifier

Product Name: Sodium Aluminate, solid

Other means of identification

USALCO SDS # 133

UN/ID No: UN2812

Synonyms: Sodium aluminate, solid, Aluminum sodium oxide

Recommended use of the chemical and restrictions on use

Recommended Use: Water treatment chemical. Phosphorus removal. Concrete/drilling mud accelerant.

Emergency Telephone Number

Company Phone Number: Business 1-410-354-0100 (7:00am-5:00pm)
Fax 1-410-354-1021

Emergency Telephone (24 hr): 1-800-282-5322

2. HAZARDS IDENTIFICATION

Appearance: White amorphous powder.

Physical State: Solid.

Odor: Negligible.

Signal Word

Danger

Hazard Statements

Causes severe skin burns and eye damage

Precautionary Statements - Prevention

Do not breathe dust/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 swallowed: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
Wash contaminated clothing before reuse. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.

Precautionary Statements - Storage

Store in a secure area.
Store in corrosive resistant plastic or FRP container or container with corrosive resistant inner liner.

Precautionary Statements - Disposal

Dispose in accordance with all applicable regulations. Subject to disposal regulations: U.S. EPA 40 CFR 262. Hazardous Waste Number(s): D002 (Corrosive) if the pH of the waste is ≥12.5.
3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No</th>
<th>Weight-%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium aluminate</td>
<td>1302-42-7</td>
<td>100</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
If adverse effects occur, remove to fresh air and observe. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek immediate medical attention/advice.

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

Most important symptoms and effects

Symptoms
Irritation and corrosive burns to mouth, throat, and stomach. Prolonged contact may even cause severe skin irritation or mild burn. 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
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media
Not determined.

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
Use water spray to keep fire-exposed containers cool. Do not release runoff from fire control methods to sewers or waterways.
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 dust/fume/gas/mist/vapors/spray. Do not let the material come into contact with moisture, dust, or dirt.

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.


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 dusting 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

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>White amorphous powder</td>
</tr>
<tr>
<td>Odor</td>
<td>Negligible</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>Not determined</td>
</tr>
<tr>
<td>pH</td>
<td>±11.5</td>
</tr>
<tr>
<td>Relative density (specific gravity)</td>
<td>1.52 (1=Water) @ 25 °C (77 °F)</td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>1650-1850 °C / 3002-3362 °F</td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
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</tr>
<tr>
<td>Decomposition temperature</td>
<td>Not determined</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>Will not burn</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Flash point</td>
<td>Will not burn</td>
</tr>
<tr>
<td>Upper/lower flammability or explosive limits</td>
<td>Will not burn</td>
</tr>
<tr>
<td>Solubility</td>
<td>Complete in water</td>
</tr>
<tr>
<td>Vapor density</td>
<td>Not applicable</td>
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<tr>
<td>Vapor pressure</td>
<td>Not applicable</td>
</tr>
<tr>
<td>VOC Content (%)</td>
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10. STABILITY AND REACTIVITY

Reactivity
Not reactive under normal conditions.

Chemical Stability
Stable under recommended storage conditions.

Possibility of Hazardous Reactions
May ignite or explode on contact with combustible materials.

Hazardous Polymerization
Hazardous polymerization does not occur.

Conditions to Avoid
Avoid heat, sparks, open flames and other ignition sources. Dangerous gases may accumulate in confined spaces. Contact with incompatible materials.

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

Hazardous Decomposition Products
Miscellaneous decomposition products.

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 dust.

Ingestion
Do not taste or swallow.

Component Information
Not available

Revision Date: 1/31/2019
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.

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>
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<tbody>
<tr>
<td>Sodium aluminate</td>
<td>1302-42-7 Corrosive</td>
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14. TRANSPORT INFORMATION

Note: Subject to the requirements of the US Hazardous Materials Regulations only when offered or intended for transportation by aircraft.

DOT, Air Transportation Only

<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>UN2812</td>
<td>Sodium aluminate, solid</td>
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IATA

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IMDG

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<th>UN/ID No</th>
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<td>Sodium aluminate, solid</td>
<td>8</td>
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</tbody>
</table>
Packing Group  III

TDG

UN/ID No  UN2812
Proper Shipping Name  Sodium aluminate, solid
Hazard Class  8
Packing Group  III

15. REGULATORY INFORMATION

International Inventories

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

US Federal Regulations

CERCLA
Not listed

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  

SARA 313
Not listed

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</th>
<th>Health Hazards</th>
<th>Flammability</th>
<th>Instability</th>
<th>Special Hazards</th>
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</table>

<table>
<thead>
<tr>
<th>HMIS</th>
<th>Health Hazards</th>
<th>Flammability</th>
<th>Physical Hazards</th>
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Issue Date  9/20/2011
Revision Date:  9/30/15 New format; 1/31/2019 Reviewed
Revision Note

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