Material Safety Data Sheet
Aluminum Hydroxide Suspension

Section 1 - Chemical Product and Company Identification

MSDS Name:
Aluminum Hydroxide Suspension
Catalog Numbers:
LC10840
Synonyms:
None
Company Identification:
LabChem Inc
200 William Pitt Way
Pittsburgh, PA 15238
Company Phone Number:
(412) 826-5230
Emergency Phone Number:
(800) 424-9300
CHEMTREC Phone Number:
(800) 424-9300 or
011-703-527-3887

Section 2 - Composition, Information on Ingredients

<table>
<thead>
<tr>
<th>CAS#</th>
<th>Chemical Name:</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>7782-24-9</td>
<td>Aluminum potassium sulfate dodecahydrate</td>
<td>12.5</td>
</tr>
<tr>
<td>1336-21-6</td>
<td>Ammonium hydroxide</td>
<td>5.5</td>
</tr>
<tr>
<td>7732-18-5</td>
<td>Water</td>
<td>&gt;80</td>
</tr>
</tbody>
</table>

Section 3 - Hazards Identification

Emergency Overview
Appearance: Turbid white solution
Warning! May cause eye, skin, and respiratory tract irritation.
Target Organs: eyes, skin, respiratory tract.

Potential Health Effects
Eye:
- May cause eye irritation.
Skin:
- May cause skin irritation.
Ingestion:
- May cause gastrointestinal irritation.
Inhalation:
- May cause respiratory irritation.
Chronic:
May cause conjunctivitis. Prolonged inhalation may cause irritation to mucous membranes.

Section 4 - First Aid Measures

Eyes:
Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower lids until no evidence of chemical remains. Get medical aid at once.

Skin:
Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists.

Ingestion:
Give conscious victim 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid at once.

Inhalation:
Move victim to fresh air immediately. If breathing is difficult, administer oxygen. Give artificial respiration if necessary. Get medical aid at once.

Notes to Physician:
Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures

General Information:
As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

Extinguishing Media:
For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam.

Autoignition Temperature:
No information found.

Flash Point:
No information found.

NFPA Rating:
Health- 1, Flammability- 0, Instability- 0

Explosion Limits:
Lower: n/a  Upper: n/a

Section 6 - Accidental Release Measures

General Information:
Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:
Absorb spill with inert material such as sand, vermiculite, or diatomaceous earth, and transfer to a suitable container labeled for later disposal.
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Section 7 - Handling and Storage

Handling:
Wash thoroughly after handling. Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation.

Storage:
Store tightly capped in a cool, dry, well-ventilated area away from incompatible materials.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls:
Facilities using or storing this material should be equipped with an eyewash and safety shower. Provide local exhaust or general dilution ventilation to keep airborne levels below the permissible exposure limits.

Exposure Limits:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>NIOSH</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluminum potassium sulfate dodecahydrate</td>
<td>None of the components are on this list.</td>
<td>2 mg/m³ TWA (as Al) (listed as Aluminum, soluble salts)</td>
<td>None of the components are on this list.</td>
</tr>
<tr>
<td>Ammonium hydroxide</td>
<td>25 ppm TWA (as NH₃) 35 ppm STEL (as NH₃)</td>
<td>25 ppm TWA (as NH₃) 300 ppm IDLH</td>
<td>50 ppm TWA (as NH₃) 35 mg/m³ TWA</td>
</tr>
<tr>
<td>Water</td>
<td>None of the components are on this list.</td>
<td>None of the components are on this list.</td>
<td>None of the components are on this list.</td>
</tr>
</tbody>
</table>

OSHA Vacated PELs:
None

Personal Protective Equipment

Eyes:
Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133. Do not wear contact lenses when working with chemicals.

Skin:
Wear appropriate protective gloves to prevent skin exposure.

Clothing:
Wear appropriate protective clothing to prevent skin exposure.

Respirators:
Follow the OSHA respirator regulations found in 29 CFR 1910.134. Always use a NIOSH-approved respirator when necessary.

Section 9 - Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Physical State:</th>
<th>Liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color:</td>
<td>Turbid white</td>
</tr>
<tr>
<td>Odor:</td>
<td>Odorless to slight ammoniacal odor</td>
</tr>
<tr>
<td>pH:</td>
<td>Alkaline</td>
</tr>
<tr>
<td>Vapor Pressure:</td>
<td>No information found.</td>
</tr>
</tbody>
</table>
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Vapor Density: No information found.
Evaporation Rate: No information found.
Viscosity: No information found.
Boiling Point: No information found.
Freezing/Melting Point: No information found.
Decomposition Temperature: No information found.
Solubility in water: Insoluble.
Specific Gravity/Density: No information found.
Molecular Formula: No information found.
Molecular Weight: No information found.

Section 10 - Stability and Reactivity

Chemical Stability:
Stable under normal temperatures and pressures.

Conditions to Avoid:
Incompatible materials, excess heat.

Incompatibilities with Other Materials:
Strong acids.

Hazardous Decomposition Products:
Aluminum fume, ammonia.

Hazardous Polymerization:
Has not been reported

Section 11 - Toxicological Information

RTECS:
CAS# 1336-21-6: BQ9625000.
CAS# 7784-24-9: WS5690000.
CAS# 7732-18-5: ZC0110000.

LD50/LC50:
CAS# 1336-21-6:
   Oral, rat: LD50 = 350 mg/kg
CAS# 7784-24-9:
   No information found.
CAS# 7732-18-5:
   Oral, rat: LD50 = >90 mL/kg.

Carcinogenicity:
CAS# 1336-21-6: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.
CAS# 7784-24-9: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.
CAS# 7732-18-5: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.

Epidemiology:
No information found.

Teratogenicity:
No information found.

Reproductive:
No information found.
Mutagenicity:
Ammonium hydroxide is mutagenic for bacteria and yeast.

Neurotoxicity:
No information found.

Section 12 - Ecological Information

No information found.

Section 13 - Disposal Considerations

Dispose of in accordance with Federal, State, and local regulations.

Section 14 - Transport Information

US DOT
Shipping Name: Not regulated
Hazard Class: 
UN Number: 
Packing Group: 

Section 15 - Regulatory Information

US Federal
TSCA:
CAS# 1336-21-6 is listed on the TSCA Inventory.
CAS# 7784-24-9 is not listed on the TSCA Inventory because it is a hydrate. It is considered to be listed if the CAS number for the anhydrous form in on the Inventory (40CFR 720.3(u)(2)).
CAS# 7732-18-5 is listed on the TSCA Inventory.

SARA Reportable Quantities (RQ):
CAS# 1336-21-6: final RQ = 1000 lb. (454 kg)

CERCLA/SARA Section 313:
None of the components are on this list.

OSHA - Highly Hazardous:
None of the components are on this list.

US State
State Right to Know:
Ammonium hydroxide can be found on the following state Right-to-Know lists: California, Connecticut, Illinois, New York, Pennsylvania, New Jersey, Massachusetts.

California Regulations:
None

European/International Regulations
Canadian DSL/NDSL:
CAS# 1336-21-6 is listed on Canada's DSL List.
CAS# 7784-24-9 is not listed on Canada's DSL or NDSL Lists.
CAS# 7732-18-5 is listed on Canada's DSL List.

Canada Ingredient Disclosure List:
CAS# 1336-21-6 is listed on Canada's Ingredient Disclosure List.
CAS# 7784-24-9 is not listed on Canada's Ingredient Disclosure List.
CAS# 7732-18-5 is not listed on Canada's Ingredient Disclosure List.

Section 16 - Other Information

MSDS Creation Date: September 14, 1998
Revision Date: January 12, 2011

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