Section 1 - Chemical Product and Company Identification

MSDS Name:  
Sodium Ammonium Phosphate Solutions  
Catalog Numbers:  
LC16981, LC22860  
Synonyms:  
Microcosmic salt solution  
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  

Section 2 - Composition, Information on Ingredients

<table>
<thead>
<tr>
<th>CAS#</th>
<th>Chemical Name:</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>7783-13-3</td>
<td>Sodium ammonium phosphate, tetrahydrate</td>
<td>5-20</td>
</tr>
<tr>
<td>7732-18-5</td>
<td>Water</td>
<td>balance</td>
</tr>
</tbody>
</table>

Section 3 - Hazards Identification

Emergency Overview

Appearance: Clear, colorless solution

Caution! May cause eye, skin and respiratory tract irritation.

Target Organs: None.

Potential Health Effects

Eye:  
May cause eye irritation.

Skin:  
May cause mild skin irritation.

Ingestion:  
May cause gastrointestinal irritation.

Inhalation:  
May cause respiratory tract irritation.

Chronic:  
Prolonged or repeated skin contact may cause dermatitis.
Section 4 - First Aid Measures

Eyes:
Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

Skin:
Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

Ingestion:
Never give anything by mouth to an unconscious person. Get medical aid. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.

Inhalation:
Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

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. Combustion generates toxic fumes.

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

Autoignition Temperature:
No information found.

Flash Point:
No information found.

NFPA Rating:
Health-1; flammability-0; reactivity-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:
Vacuum or sweep up material and place into a suitable disposal container. Clean up spills immediately, observing precautions in the Protective Equipment section. Provide ventilation.
Material Safety Data Sheet
Sodium Ammonium Phosphate Solutions

Section 7 - Handling and Storage

Handling:
Use with adequate ventilation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation. Use with adequate ventilation. Wash clothing before reuse.

Storage:
Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls:
Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations 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>Sodium ammonium phosphate</td>
<td>none listed</td>
<td>none listed</td>
<td>none listed</td>
</tr>
</tbody>
</table>

OSHA Vacated PELs:
Sodium ammonium phosphate: No OSHA Vacated PELs are listed.

Personal Protective Equipment

Eyes:
Do not wear contact lenses when working with chemicals. An eye wash fountain should be available in the immediate work area. Wear appropriate protective eyeglasses or chemical safety goggles as described in 29 CFR 1910.133.

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. Use a NIOSH/MSHA approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9 - Physical and Chemical Properties

Physical State: Liquid
Color: Colorless
Odor: Odorless
pH: 8 (5% solution)
Vapor Pressure: Not available
Vapor Density: Not available
Evaporation Rate: Not available
Viscosity: Not available
Material Safety Data Sheet
Sodium Ammonium Phosphate Solutions

Boiling Point: Not available
Freezing/Melting Point: Not available
Decomposition Temperature: Not available
Solubility in water: Soluble
Specific Gravity/Density: Not available
Molecular Formula: Not applicable
Molecular Weight: Not applicable

Section 10 - Stability and Reactivity

Chemical Stability:
Stable under normal storage and handling conditions.

Conditions to Avoid:
Excess heat.

Incompatibilities with Other Materials:
No significant incompatibilities identified with common materials and contaminants.

Hazardous Decomposition Products:
Oxides of phosphorus, oxides of nitrogen, ammonia, ammonia derivatives, sodium oxide.

Hazardous Polymerization:
Has not been reported.

Section 11 - Toxicological Information

RTECS:
CAS# 7783-13-3: unlisted.
CAS# 7732-18-5: ZC0110000.

LD50/LC50:
CAS# 7783-13-3:
Draize test, rabbit, eye: 500 mg/24H Mild;
Draize test, rabbit, skin: 500 mg/24H Mild;
Oral, rat: LD50 = 17 gm/kg
CAS# 7732-18-5:
Oral, rat: LD50 = >90 ml/kg

Carcinogenicity:
CAS# 7783-13-3: Not listed by ACGIH, IARC, NTP, or CA Proposition 65.
CAS# 7732-18-5: Not listed by ACGIH, IARC, NTP, or CA Proposition 65.

Epidemiology:
No information available.

Teratogenicity:
No information available.

Reproductive:
No information available.

Mutagenicity:
No information available.

Neurotoxicity:
No information available.
Material Safety Data Sheet  
Sodium Ammonium Phosphate Solutions

Section 12 - Ecological Information

No information available.

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# 7783-13-3 is not on the TSCA Inventory because it is a hydrate. It is considered to be listed if the CAS number for the anhydrous form is on the inventory (40CFR720.3(u)(2)).
CAS# 7732-18-5 is listed on the TSCA Inventory.

SARA Reportable Quantities (RQ):
None of the chemicals in this material have an RQ.

CERCLA/SARA Section 313:
Not reportable under Section 313.

OSHA - Highly Hazardous:
Not considered highly hazardous by OSHA.

US State
State Right to Know:
CAS# 7783-13-3 is not listed on the following state right to know lists: California, New Jersey, Pennsylvania, Minnesota, Florida, and Massachusetts.
CAS# 7732-18-5 is not listed on the following state right to know lists: California, New Jersey, Pennsylvania, Minnesota, Florida, and Massachusetts.

California Regulations:
Not listed.

European/International Regulations
Canadian DSL/NDSL:
CAS# 7783-13-3 is not listed on Canada’s DSL or NDSL List.
CAS# 7732-18-5 is listed on Canada’s DSL List.

Canada Ingredient Disclosure List:
CAS# 7783-13-3 is not listed on the Ingredient Disclosure List.
CAS# 7732-18-5 is not listed on the Ingredient Disclosure List.

Section 16 - Other Information

MSDS Creation Date: November 26, 2007
Revision Date: November 30, 2007

Information in this MSDS is from available published sources and is believed to be accurate. No warranty, express or implied, is made and LabChem Inc. assumes no liability resulting from the use of this MSDS. The user must determine suitability of this information for his application.