**IDENTIFICATION**

**MSDS Record Number:** 5617408  
**Product Name(s):** Ammonium Acetate Solution  
**Product Identification:** MSDS NUMBER: A5506  
PRODUCT CODE: 3336  
C.A.S. NUMBER: 631-61-8  
**Date of MSDS:** 2007-05-04  
**Currency Note:** This MSDS was acquired from the supplier on 2007-09-06.

**MANUFACTURER/SUPPLIER INFORMATION**

**Company:** MALLINCKRODT BAKER INC

**MATERIAL SAFETY DATA**

**Effective Date:** 05/04/07  
**Supercedes:** 07/27/04

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**MSDS MATERIAL SAFETY DATA SHEET**

**CHEMTREC:** 800-424-9300 (USA)  
703-527-3897 (Outside USA & CANADA)  
**CANUTEC:** 613-996-6666

**From:** Mallinckrodt Baker, Inc.  
222 Red School Lane  
Phillipsburg, NJ 08865

**Emergency Telephone Number:** 908-859-2151

NOTE: Use CHEMTREC and CANUTEC phone numbers only in the event of a chemical emergency.

All non-emergency questions should be directed to Customer Service (1-800-582-2537) for assistance.

**J. T. BAKER**

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**Ammonium Acetate Solution**

1. **Product Identification**

   **Synonyms:** Ammonium Acetate, 46-50%
   **CAS No:** 631-61-8  
   **Molecular Weight:** 77.08  
   **Chemical Formula:** CH3COONH4
Product Codes: 3336

2. Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS No</th>
<th>Percent</th>
<th>Hazardous</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonium Acetate</td>
<td>631-61-8</td>
<td>45 - 51%</td>
<td>Yes</td>
</tr>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>49 - 55%</td>
<td>No</td>
</tr>
</tbody>
</table>

3. Hazards Identification

Emergency Overview

WARNING! HARMFUL IF SWALLOWED OR INHALED. CAUSES SEVERE EYE IRRITATION. MAY CAUSE IRRITATION TO SKIN AND RESPIRATORY TRACT.

SAF-T-DATA™ Ratings (Provided here for your convenience)

| Health Rating: | 2 - Moderate |
| Flammability Rating: | 0 - None |
| Reactivity Rating: | 1 - Slight |
| Contact Rating: | 3 - Severe |
| Lab Protective Equip: | GOGGLES & SHIELD; LAB COAT & APRON; VENT HOOD; PROPER GLOVES |
| Storage Color Code: | Green (General Storage) |

Potential Health Effects

Inhalation:
May cause irritation to the respiratory tract. Symptoms may include coughing and shortness of breath.

Ingestion:
May irritate the G. I. tract. Abdominal pain, nausea, and vomiting may occur. Ingestion of large amounts may result in diuresis and systemic ammonia poisoning. Normal human subjects infused with ammonium acetate exhibit flaccidity of facial muscles, tremor, generalized discomfort, anxiety and impairment of motor performance.

Skin Contact:
May cause irritation with redness and pain.

Eye Contact:
May cause irritation, redness and pain. Splashes from solutions may produce severe eye damage.

Chronic Exposure:
Chronic ammonium acetate ingestion may cause some liver dysfunction.

Aggravation of Pre-existing Conditions:
Persons with impaired liver or kidney function may be more susceptible to the effects of this substance.

4. First Aid Measures

Inhalation:
Remove to fresh air. Get medical attention for any breathing difficulty.
Ingestion:
Induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person.

Skin Contact:
Immediately flush skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention if irritation develops.

Eye Contact:
Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

5. Fire Fighting Measures

Fire:
Not considered to be a fire hazard.

Explosion:
Not considered to be an explosion hazard.

Fire Extinguishing Media:
Use any means suitable for extinguishing surrounding fire.

Special Information:
In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

6. Accidental Release Measures

Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Contain and recover liquid when possible. Collect liquid in an appropriate container or absorb with an inert material (e.g., vermiculite, dry sand, earth), and place in a chemical waste container. Do not use combustible materials, such as saw dust. Do not flush to sewer! US Regulations (CERCLA) require reporting spills and releases to soil, water and air in excess of reportable quantities. The toll-free number for the US Coast Guard National Response Center is (800) 424-8802.

7. Handling and Storage

Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage. Isolate from incompatible substances. Containers of this material may be hazardous when empty since they retain product residues (vapors, liquid); observe all warnings and precautions listed for the product.

8. Exposure Controls/Personal Protection

Airborne Exposure Limits:
None established.
Ventilation System:
A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, "Industrial Ventilation, A Manual of Recommended Practices", most recent edition, for details.

Personal Respirators (NIOSH Approved):
For conditions of use where exposure to the substance is apparent and engineering controls are not feasible, consult an industrial hygienist. For emergencies, or instances where the exposure levels are not known, use a full-facepiece positive-pressure, air-supplied respirator. WARNING: Air purifying respirators do not protect workers in oxygen-deficient atmospheres.

Skin Protection:
Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

Eye Protection:
Use chemical safety goggles and/or full face shield where dusting or splashing of solutions is possible. Maintain eye wash fountain and quick-drench facilities in work area.

9. Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Clear, colorless solution.</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>No information found</td>
</tr>
<tr>
<td>Odor</td>
<td>Slight acetic acid odor.</td>
</tr>
<tr>
<td>Melting Point</td>
<td>No information found</td>
</tr>
<tr>
<td>Solubility</td>
<td>Very soluble in water.</td>
</tr>
<tr>
<td>Vapor Density (Air=1)</td>
<td>No information found</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>No information found</td>
</tr>
<tr>
<td>Vapor Pressure (mm Hg)</td>
<td>No information found</td>
</tr>
<tr>
<td>pH</td>
<td>6.7-7.3</td>
</tr>
<tr>
<td>% Volatiles by volume @ 21C (70F)</td>
<td>No information found</td>
</tr>
</tbody>
</table>

10. Stability and Reactivity

Stability:
Stable under ordinary conditions of use and storage.

Hazardous Decomposition Products:
Burning may produce ammonia, nitrogen oxides.

Hazardous Polymerization:
Will not occur.

Incompatibilities:
Decomposes on contact with Sodium Hypochlorite, strong acids.

Conditions to Avoid:
No information found.
11. Toxicological Information

---\Cancer Lists\---

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>NTP Carcinogen</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonium Acetate (631-61-8)</td>
<td>No</td>
</tr>
<tr>
<td>Water (7732-18-5)</td>
<td>No</td>
</tr>
</tbody>
</table>

12. Ecological Information

Environmental Fate:
When released into water, this material is expected to readily biodegrade. When released into the water, this material is expected to have a half-life between 1 and 10 days.

Environmental Toxicity:
Ammonium acetate:
24 Hr LC50 mosquito fish: 238 mg/L.
48 Hr LC50 carp: 1.06 mg/L.

13. Disposal Considerations

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations.

Dispose of container and unused contents in accordance with federal, state and local requirements.

14. Transport Information

Not regulated.

15. Regulatory Information

---\Chemical Inventory Status - Part 1\---

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>TSCA</th>
<th>EC</th>
<th>Japan</th>
<th>Australia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonium Acetate (631-61-8)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Water (7732-18-5)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

---\Chemical Inventory Status - Part 2\---

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Korea</th>
<th>DSL</th>
<th>NDSL</th>
<th>Phil.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonium Acetate (631-61-8)</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Water (7732-18-5)</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

---\Federal, State & International Regulations - Part 1\---

-SARA 302- -SARA 313--
Ingredient | RQ | TPQ | List | Chemical Catg.
--- | --- | --- | --- | ---
Ammonium Acetate (631-61-8) Water (7732-18-5) | No | No | No | No

--- Federal, State & International Regulations - Part 2 ---
Ingredient
--- | --- | --- | --- | ---
Ammonium Acetate (631-61-8) Water (7732-18-5) | CERCLA 5000 | No | No | No

Chemical Weapons Convention: No TSCA 12(b): No CDTA: No SARA 311/312: Acute: Yes Chronic: Yes Fire: No Pressure: No Reactivity: No (Mixture / Liquid)

Australian Hazchem Code: None allocated.
Australian Poison Schedule: None allocated.

WHMIS: This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

16. Other Information

NFPAs: Health: 1 Flammability: 0 Reactivity: 0

Label Hazard Warning:
WARNING! HARMFUL IF SWALLOWED OR INHALED. CAUSES SEVERE EYE IRRITATION. MAY CAUSE IRRITATION TO SKIN AND RESPIRATORY TRACT.

Label Precautions:
Avoid breathing vapor.
Keep container closed.
Avoid contact with eyes, skin and clothing.
Wash thoroughly after handling.
Use with adequate ventilation.

Label First Aid:
In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes. If swallowed, induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person. If inhaled, remove to fresh air. Get medical attention for any breathing difficulty. In all cases, get medical attention.

Product Use: Laboratory Reagent.

Revision Information:
No Changes.

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