Material Safety Data Sheet
Ammonium phosphate, monobasic

ACC# 01345

Section 1 - Chemical Product and Company Identification

**MSDS Name:** Ammonium phosphate, monobasic

**Catalog Numbers:** AC193700000, AC193701000, AC193705000, AC201830000, AC201830010, AC201832500, AC423380000, AC423380050, AC423385000, A684-3, A684-500, A685-500, A685J500, BP2427-500, NC9179990, NC9179993

**Synonyms:** Ammonium dihydrogen phosphate; Phosphoric acid, monoammonium salt; Dihydrogen ammonium phosphate.

**Company Identification:**
Fisher Scientific
1 Reagent Lane
Fair Lawn, NJ 07410

**For information, call:** 201-796-7100
**Emergency Number:** 201-796-7100

**For CHEMTREC assistance, call:** 800-424-9300
**For International CHEMTREC assistance, call:** 703-527-3887

Section 2 - Composition, Information on Ingredients

<table>
<thead>
<tr>
<th>CAS#</th>
<th>Chemical Name</th>
<th>Percent</th>
<th>EINECS/ELINCS</th>
</tr>
</thead>
<tbody>
<tr>
<td>7722-76-1</td>
<td>Ammonium dihydrogen phosphate</td>
<td>&gt;98</td>
<td>231-764-5</td>
</tr>
</tbody>
</table>

Section 3 - Hazards Identification

**EMERGENCY OVERVIEW**

Appearance: white crystals.

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

**Target Organs:** None.

**Potential Health Effects**

**Eye:** Causes mild eye irritation.

**Skin:** Causes slight skin irritation.

**Ingestion:** May cause gastrointestinal irritation with nausea, vomiting and diarrhea.

**Inhalation:** May cause respiratory tract irritation.

**Chronic:** Prolonged or repeated skin contact may cause dermatitis.

Section 4 - First Aid Measures
**Eyes:** In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical aid.

**Skin:** In case of contact, flush skin with plenty of water. Remove contaminated clothing and shoes. Get medical aid if irritation develops and persists. Wash clothing before reuse.

**Ingestion:** If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical aid.

**Inhalation:** If inhaled, remove to fresh air. 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. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Use extinguishing media appropriate to the surrounding fire. Substance is noncombustible.

**Extinguishing Media:** Substance is noncombustible; use agent most appropriate to extinguish surrounding fire. Use water spray, dry chemical, carbon dioxide, or appropriate foam.

**Flash Point:** Not applicable.

**Autoignition Temperature:** Not applicable.

**Explosion Limits, Lower:** Not available.

**Upper:** Not available.

**NFPA Rating:** (estimated) Health: 2; Flammability: 0; Instability: 0

### 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. Reduce airborne dust and prevent scattering by moistening with water. Clean up spills immediately, observing precautions in the Protective Equipment section. Avoid generating dusty conditions. Provide ventilation.

### Section 7 - Handling and Storage

**Handling:** Wash thoroughly after handling. Wash thoroughly after handling. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation. Use with adequate ventilation. Wash clothing before reuse.

**Storage:** Keep container closed when not in use. 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 ventilation to keep airborne concentrations low.

**Exposure Limits**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>NIOSH</th>
<th>OSHA - Final PELs</th>
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<tbody>
<tr>
<td>Ammonium dihydrogen phosphate</td>
<td>none listed</td>
<td>none listed</td>
<td>none listed</td>
</tr>
</tbody>
</table>

**OSHA Vacated PELs:** Ammonium dihydrogen phosphate: No OSHA Vacated PELs are listed for this chemical.

**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 or European Standard EN166.

**Skin:** Wear appropriate protective gloves to prevent skin exposure.

**Clothing:** Wear appropriate protective clothing to prevent skin exposure.

**Respirators:** A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

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**Section 9 - Physical and Chemical Properties**

**Physical State:** Crystals

**Appearance:** white

**Odor:** odorless

**pH:** 3.8-4.4 (5% soln)

**Vapor Pressure:** Not available.

**Vapor Density:** Not available.

**Evaporation Rate:** Not available.

**Viscosity:** Not applicable.

**Boiling Point:** Not available.

**Freezing/Melting Point:** 190 deg C

**Decomposition Temperature:** > 190 deg C

**Solubility:** Soluble in water.

**Specific Gravity/Density:** 1.8

**Molecular Formula:** NH4H2PO4

**Molecular Weight:** 115.03

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**Section 10 - Stability and Reactivity**

**Chemical Stability:** Stable at room temperature in closed containers under normal storage and handling conditions. Stable in air.

**Conditions to Avoid:** Dust generation, excess heat.

**Incompatibilities with Other Materials:** Strong bases, sodium hypochlorite.

**Hazardous Decomposition Products:** Oxides of phosphorus, nitrogen oxides (NOx) and ammonia (NH3).

**Hazardous Polymerization:** Has not been reported.

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**Section 11 - Toxicological Information**
**RTECS#:**
**CAS# 7722-76-1 unlisted.**

**LD50/LC50:**
Not available.
Dermal LD50 (rabbit): >7940 mg/kg, Oral LD50 (rat): 5750 mg/kg.

**Carcinogenicity:**
**CAS# 7722-76-1:** Not listed by ACGIH, IARC, NTP, or CA Prop 65.

**Epidemiology:** No information available.
**Teratogenicity:** No information available.
**Reproductive Effects:** No information available.
**Mutagenicity:** No information available.
**Neurotoxicity:** No information available.

**Other Studies:**

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**Section 12 - Ecological Information**

**Ecotoxicity:** No data available. No information available.
**Environmental:** No information available.
**Physical:** No information available.

**Other:** When too many nutrients such as phosphorus are in the water, algae grows maniacally. Algae blooms are followed by a die-off, and as material decays, it consumes oxygen like a forest fire. No fish, plants or insects can live in oxygen-free zones.

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**Section 13 - Disposal Considerations**

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

**RCRA P-Series:** None listed.
**RCRA U-Series:** None listed.

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**Section 14 - Transport Information**

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<tr>
<th></th>
<th>US DOT</th>
<th>Canada TDG</th>
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<tbody>
<tr>
<td><strong>Shipping Name:</strong></td>
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<tr>
<td><strong>Hazard Class:</strong></td>
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<td></td>
</tr>
<tr>
<td><strong>UN Number:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Packing Group:</strong></td>
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</tr>
</tbody>
</table>

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**Section 15 - Regulatory Information**
US FEDERAL

TSCA
  CAS# 7722-76-1 is listed on the TSCA inventory.

Health & Safety Reporting List
  None of the chemicals are on the Health & Safety Reporting List.

Chemical Test Rules
  None of the chemicals in this product are under a Chemical Test Rule.

Section 12b
  None of the chemicals are listed under TSCA Section 12b.

TSCA Significant New Use Rule
  None of the chemicals in this material have a SNUR under TSCA.

CERCLA Hazardous Substances and corresponding RQs
  None of the chemicals in this material have an RQ.

SARA Section 302 Extremely Hazardous Substances
  None of the chemicals in this product have a TPQ.

SARA Codes
  CAS # 7722-76-1: immediate.

Section 313
  No chemicals are reportable under Section 313.

Clean Air Act:
  This material does not contain any hazardous air pollutants.
  This material does not contain any Class 1 Ozone depletors.
  This material does not contain any Class 2 Ozone depletors.

Clean Water Act:
  None of the chemicals in this product are listed as Hazardous Substances under the CWA.
  None of the chemicals in this product are listed as Priority Pollutants under the CWA.
  None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

OSHA:
  None of the chemicals in this product are considered highly hazardous by OSHA.

STATE
  CAS# 7722-76-1 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

California Prop 65

California No Significant Risk Level: None of the chemicals in this product are listed.

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols:
  Not available.

Risk Phrases:

Safety Phrases:
  S 24/25 Avoid contact with skin and eyes.

WGK (Water Danger/Protection)
  CAS# 7722-76-1: 1

Canada - DSL/NDSL
  CAS# 7722-76-1 is listed on Canada's DSL List.

Canada - WHMIS
  This product has a WHMIS classification of Not controlled..
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

**Canadian Ingredient Disclosure List**
CAS# 7722-76-1 is not listed on the Canadian Ingredient Disclosure List.

## Section 16 - Additional Information

**MSDS Creation Date:** 3/29/1999  
**Revision #6 Date:** 2/11/2008

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Fisher be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Fisher has been advised of the possibility of such damages.