Material Safety Data Sheet

Section 1: Identification
Product Name: Ammonium Polyphosphate
CAS#: 68333-79-9
Chemical Formula: \((\text{NH}_4\text{PO}_3)_n\), n>1000

Section 2: Composition and Information on Ingredients
Composition:

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS</th>
<th>% by Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonium Polyphosphate</td>
<td>68333-79-9</td>
<td>100%</td>
</tr>
</tbody>
</table>

Section 3: Hazards Identification
NFPA Ratings (SCALE 0-4): HEALTH=1 FIRE=0 REACTIVITY=0
Emergency Overview: Color: white Physical Form: crystals or powder
Major Health Hazards: No significant target effects reported.
Potential Health Effects:
Inhalation: Short term exposure: no information is available
Long term exposure: no information is available
Skin Contact: Short term exposure: no information on significant adverse effects
Long term exposure: no information on significant adverse effects
Eye Contact: Short term exposure: irritation
Long term exposure: same as effects reported in short term exposure
Ingestion: Short term exposure: no information is available
Long term exposure: no information is available
Carcinogen Status: OSHA: No     NTP: No    IARC: No

Section 4: First Aid Measures
Inhalation:
If adverse effects occur, remove to uncontaminated area. Give artificial respiration if not breathing. Get immediate medical attention.

Skin contact:
Wash skin with soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention, if needed. Thoroughly clean and dry contaminated clothing and shoes before reuse.

Eye Contact: Flush eyes with plenty of water for at least 15 minutes. Then get immediate medical attention.

Ingestion:
If a large amount is swallowed, get medical attention.

Section 5: Fire and Explosion Data
Fire and Explosion Hazards: Negligible fire hazard.
Extinguishing Media: Use extinguishing agents appropriate for surrounding fire.
Fire Fighting: Move container from fire area if it can be done without risk. Avoid inhalation of material or combustion by-products. Stay upwind and keep out of low areas.
Hazardous Combustion Products: Thermal decomposition products or combustion: ammonia, inorganic acids.
Section 6: Accidental Release Measures

Occupational Release: Collect spilled material in appropriate container for disposal.

Section 7: Handling and Storage

Storage: Store and handle in accordance with all current regulations and standards. Store with bases. Keep separated from incompatible substances.

Handling: Use methods to minimize dust.

Section 8: Exposure Controls/Personal Protection

Exposure limits:
AMMONIUM POLYPHOSPHATE: No occupational exposure limits established.

Ventilation: Provide local exhaust ventilation system. Ensure compliance with applicable exposure limits.

Eye Protection: Wear splash resistant safety goggles. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

Clothing: Wear appropriate chemical resistant clothing.

Gloves: Wear appropriate chemical resistant gloves.

Respirator: Under conditions of frequent use or heavy exposure, respiratory protection may be needed. Respiratory protection is ranked in order from minimum to maximum. Consider warning properties before use. Any dust, mist, and fume respirator. Any air-purifying respirator with a high-efficiency particulate filter. Any powered, air-purifying respirator with a dust, mist, and fume filter. Any powered, air-purifying respirator with a high-efficiency particulate filter.

For Unknown Concentrations or Immediately Dangerous to Life or Health Any supplied-air respirator with full facepiece and operated in a pressure-demand or other positive-pressure mode in combination with a separate escape supply. Any self-contained breathing apparatus with a full facepiece.

Section 9: Physical and Chemical Properties

Physical State: solid

Color: white

Texture: free-flowing

Physical Form: crystals or powder

Odor: Not available

Boiling Point: Not applicable

Melting Point: Not available

Vapor Pressure: Not applicable

Vapor Density: Not applicable

Specific Gravity: Not available

Density: 1.75-1.90 g/mL

Water Solubility: <=0.3 g/mL

PH: >=5.0 (9% slurry)

Volatility: Not applicable

Odor Threshold: Not available

Evaporation Rate: Not applicable

Coefficient of Water/Oil Distribution: Not available
Section 10: Stability and Reactivity Data

Reactivity: Stable at normal temperatures and pressure.
Conditions to Avoid: None reported.
Incompatibilities: oxidizing materials
Hazardous Decomposition: Thermal decomposition products or combustion: ammonia, inorganic acids
Polymerization: Will not polymerize.

Section 11: Toxicological Information

Ammonium Polyphosphate:
Toxicity Data: 5625 mg/kg oral-rat LD50
Acute Toxicity Level: Slightly Toxic: ingestion

Section 12: Ecological Information

Ecotoxicity Data:
Fish Toxicity: 123000 ug/L 96 day(s) LC50 (Mortality) Rainbow trout, donaldson trout (Oncorhynchus mykiss)

Section 13: Disposal Considerations
Dispose in accordance with all applicable regulations.

Section 14: Transport Information

IMO
Not regulated as a hazardous material.
US DOT
Not regulated as a hazardous material.
IATA
Not regulated as a hazardous material.

Section 15: Other Regulatory Information

U.S. Regulations:
CERCLA SECTIONS 102a/103 HAZARDOUS SUBSTANCES (40 CFR 302.4): Not regulated.
SARA TITLE III SARA SECTIONS 311/312 HAZARDOUS CATEGORIES (40 CFR 370.21):
Acute: No Chronic: No Fire: No Reactive: No Sudden Release: No
State Regulations: California
Proposition 65: Not regulated.

Canadian Regulations:

  WHMIS Classification: Not determined.

European Regulations:

EC Classification (calculated): Not determined.

U.S. Inventory (TSCA): Listed on inventory.

TSCA 12(b) Export Notification: Not listed.

Canada Inventory (DSL): Listed on inventory.

Canada Inventory (NDSL): Not determined.

Section 16: Other Information

References: Not available.

Other Special Considerations: Not available.

Created: 15/02/2006

Last Updated: 15/03/2009