

# Material Safety Data Sheet



## Martrex, Inc.

### Section 1: Chemical Product and Company Information

**Product name:** Ammonium Pyrophosphate

**Reference Number:** n/a

**Web:** [www.martrexinc.com](http://www.martrexinc.com)

**Supplier/ Further Information:** Martrex, Inc.

P. O. Box 1709

**Phone:** 952/933-5000

14525 Highway 7

**Toll Free:** 800/328-3627

Minnetonka, Minnesota 55345-3793

**FAX:** 952/933-1889

**EPA Registration Number:** n/a

**CAS#:** 68333-79-9

**Chemical Name:** Ammonium Pyrophosphate

**Synonyms:** Ammonium Polyphosphate; Polyphosphoric Acids;

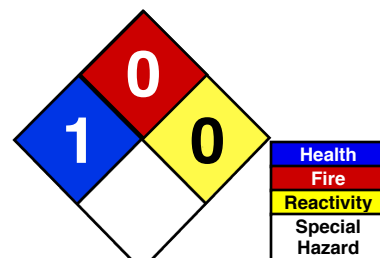
Ammonium Salts; Urea-Ammonium Polyphosphate; APP;

Phos-Chek(R) P-30 Fire Retardant; BT101375

**Chemical Family:** Inorganic salt, phosphate

**Product Use:** flame retardant

**MSDS Number:** n/a



For Rating Explanation see Section 16

**24 Hour Emergency Phone - Chemtrec Transport: 1-800-424-9300; Medical: 1-800-441-3637**

### Section 2: Composition/Information on Ingredients

Hazardous Component	CAS#	%	OSHA Limits	ACGIH Limits	OTHER Limits
Ammonium Pyrophosphate	68333-79-9	100%	no data	no data	EC/EINECS Number 269-789-9

### Section 3: Hazards Identification

**Emergency Overview:** No significant target effects reported.

**NFPA Ratings:** Health: **1** Flammability: **0** Reactivity: **0**

**Potential Health Effects:**

**Primary Routes of Exposure / Entry:** no data

**Target Organs:** no significant target effects reported

**Inhalation (breathing):**

**Short Term Exposure:** no information is available

**Long Term Exposure:** no information is available

**Eye Contact:**

**Short Term Exposure:** irritation

**Long Term Exposure:** same as effects reported in short term exposure

**Skin Contact:**

**Short Term Exposure:** no information on significant adverse effects

**Long Term Exposure:** no information on significant adverse effects

**Ingestion (swallowing):**

**Short Term Exposure:** no information is available

**Long Term Exposure:** no information is available

**Carcinogenicity Data:**

See Section 11 for more Toxicological information

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1-800-441-3637 Medical**

#### Section 4: First Aid Measures

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

**Skin Exposure:** 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.

**Ingestion:** If a large amount is swallowed, **Get Medical Attention.**

**Inhalation:** If adverse effects occur, remove to uncontaminated area. Give artificial respiration if not breathing. **Get immediate medical attention.**

**NOTE TO THE PHYSICIAN:** Treat symptomatically and supportively.

#### Section 5: Fire Fighting Measures

**Flammability Classification:** no data

**Fire:** Negligible fire hazard.

**Explosion:** See **Section 10 Reactivity** Incompatibilities.

**Fire Extinguishing Media:** Use extinguishing agents appropriate for surrounding fire.

**Special Fire Fighting Information:** 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

**Procedure to be Followed in Case of Leak or Spill:**

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

**Spill and Leak Personal Procedures:** See Section 8.

**Cleanup and Disposal of Spill:** Consult local waste regulators for proper disposal. Do not discharge.

**Environmental and Regulatory Reporting:** See Sections 12, 13 and 15

#### Section 7: Handling and Storage

**Minimum/maximum Storage Temperature:** no data.

**Handling:** Use methods to minimize dust.

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

**REGULATORY REQUIREMENTS:** Obey all Federal, State and Local regulations when storing or disposing of Ammonium Pyrophosphate. See Section 15.

#### Section 8: Exposure Controls / Personal Protection

**Ammonium Pyrophosphate:** No occupational exposure limits established.

**Ventilation/Engineering Protection:** 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.

**Skin Protection:** Wear appropriate chemical resistant gloves.

**Protective Clothing and Equipment:** Wear appropriate chemical resistant clothing.

**Respiratory Protection:** 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:**

Use supplied-air respirator with full face piece and operated in a pressure-demand or other positive-pressure mode in combination with a separate escape supply.

Use self-contained breathing apparatus with a full face piece.

**Hygienic Work Practices:** Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

**Section 9: Physical and Chemical Properties**

**Chemical Name:** Ammonium Pyrophosphate

**Percent Equivalent:** 100%

**Physical State:** Solid, Free-flowing

**Color and Appearance:** White, Crystals or Powder

**Odor:** no data

**Odor Threshold:** no data

**pH (9% slurry):**  $\geq 5.0$

**Specific Gravity (water=1):** no data

**Vapor Pressure:** Not applicable

**Vapor Density (Air = 1):** Not applicable

**Density:** 1.75-1.80 g/mL

**Bulk Density:** no data

**Volatility:** Not applicable

**Boiling Point:** Not applicable

**Melting Point:** Not applicable

**Evaporation Rate (Butyl Acetate=1):** Not applicable

**Solubility in water:**  $\leq 0.3$  g/mL

**Viscosity:** no data

**Other Solubilities:** no data

**Chemical Formula:** no data

**Formula Wt:** no data

**Section 10: Stability and Reactivity**

**Chemical Stability** (stable under normal temperature and pressures): Stable  Unstable

**Hazardous Polymerization:** May Occur  Will Not Occur

**Conditions to Avoid:** None reported.

**Chemical Incompatibility and Materials to Avoid:** oxidizing materials

**Hazardous Decomposition Products:** Thermal decomposition products or combustion: ammonia, inorganic acids

**Section 11: Toxicological Information****Toxicity Data:**

5625 mg/kg oral-rat LD50 (Monsanto Company MSDS)

**Acute toxicity**

Slightly Toxic: ingestion

**Other Effects on Humans:** no data

**Carcinogen Status:**

**OSHA:** No

**NTP:** No

**IARC:** No

**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****Disposal Procedures:**

Dispose in accordance with all applicable regulations.

**Section 14: Transport Information****US DOT Shipping Name:**

U.S. Department of Transportation: No classification assigned.

**Section 15: Regulatory Information****U.S. Regulations:**

**CERCLA Sections 102a/103 Hazardous Substances (40 CFR 302.4):** Not regulated.

**SARA Title III SECTION 302 Extremely Hazardous Substances (40 CFR 355.30):** Not regulated.

**SARA Title III Section 304 Extremely Hazardous Substances (40 CFR 355.40):** 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

**SARA Title III Section 313 (40 CFR 372.65):** Not regulated.

**OSHA Process Safety (29CFR1910.119):** Not regulated.

**State Regulations:**

**California Proposition 65:** Not regulated.

**Canadian Regulations:**

**WHMIS Classification:** Not determined.

**European Regulations:**

**EC Classification (Calculated):** Not determined.

**National Inventory Status:**

**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**

**ACGIH** - American Conference of Governmental Industrial Hygienists

**ANSI** - American National Standards Institute

**CAS** - Chemical Abstracts Service

**CERCLA** - Comprehensive Environmental Response, Compensation & Liability Act of 1980

**CFR** - Code of Federal Regulations

**CHEMTREC** - Chemical Transportation Emergency Center

**CPR** - Controlled Products Regulations

**CWC** - Chemical Weapons Convention




**DOT** - U.S. Department of Transportation

**DSL** - Canadian Domestic Substance List

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1-800-441-3637 Medical**

**EHS** - Extremely Hazardous Substance  
**EPA** - U.S. Environmental Protection Agency  
**HMIS** - Hazardous Material Identification System  
**IARC** - International Agency for Research on Cancer  
**LEL/UEL** - Lower and Upper Explosive Limit  
**mg/m<sup>3</sup>** - Milligrams per cubic meter  
**MSDS** - Material Safety Data Sheet  
**NAERG** - North American Emergency Response Guidebook  
**NIOSH** - National Institute of Occupational Safety and Health  
**NFPA** - National Fire Protection Association  
**NTP** - National Toxicology Program  
**OSHA** - Occupational Safety and Health Administration  
**PEL** - Permissible Exposure Limit (set by OSHA)  
**PPE** - Personal Protective Equipment  
**RCRA** - Resource Conservation and Recovery Act of 1976  
**SARA** - Superfund Amendments and Reauthorization Act  
**TDG (Canadian)**: Transport of Dangerous Goods Regulations  
**TLV** - Threshold Limit Value (set by ACGIH)  
**TWA** - 8-hour Time Weighted Average  
**TSCA** - US Toxic Substance Control Act  
**WHMIS** - Workplace Hazardous Material Information System

**MSDS Issue Date:** n/a  
**Revised Date:** 9-2-2011  
**Supersedes:** n/a

 <b>NFPA Rating Explanation Guide</b> 					
Rating Number	Health Hazard	Flamibility Hazard	Instability Hazard	Rating Symbol	Special Hazard
4	Can be lethal	Will vaporize and readily burn at normal temperatures	May explode at normal temperatures and pressures	ALK	Alkaline
3	Can cause serious or permanent injury	Can be ignited under almost all ambient temperatures	May explode at high temperature or shock	ACID	Acidic
2	Can cause temporary incapacitation or residual injury	Must be heated or high ambient temperature to burn	Violent chemical change at high temperatures or pressures	BIO	BioHazard
1	Can cause significant irritation	Must be preheated before ignition can occur	Normally stable. High temperatures make unstable	COR	Strong Corrosive
0	No Hazard	Will not burn	Stable	CRYO	Cryogenic
				OXY	Oxidizer
					Radioactive
				W	Reacts violently or explosively with water
				W OX	Reacts violently or explosively with water or oxidizer

*This chart for reference only - For complete specifications consult the NFPA Standard*

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