

# Safety Data Sheet



# Martrex, Inc.

## Section 1: Chemical Product and Company Information

**Product name:** Diammonium Phosphate

**Reference Number:**

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

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

1107 Hazeltine Blvd,

**Phone:** 952/933-5000

Suite 535 MD 27,

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

Chaska, Minnesota 55318

**FAX:** 952/933-1889

**EPA Registration Number:** n/a

**CAS#:** 7783-28-0

**Chemical Name:** Diammonium Phosphate

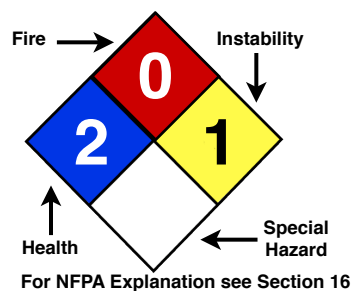
**Synonyms:** Phosphoric acid, diammonium salt; ammonium phosphate;

DAP; diammonium phosphate, diammonium salt

**Chemical Family:** Ammonium Phosphates

**Product Use:** n/a

**SDS Number:** n/a



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

## Section 2: Hazards Identification

**Emergency Overview**

**Warning!** Causes serious eye irritation, skin irritation, respiratory tract irritation. Harmful if swallowed or inhaled. Harmful to aquatic life.

**GHS Classification** (Global Harmonized Classification see Section 16):

**Skin corrosion/irritation.** Category 2 (H315)

**Serious eye damage/eye irritation.** Category 2A (H319)

**Specific target organ toxicity, single exposure; Respiratory tract irritation** Category 3 (H335)

**Hazardous to the aquatic environment, acute hazard** Category 3 (H402)

**GHS Label, Hazards and Precautionary Statements**

**GHS Pictogram:**



(GHS Pictogram Hazards Definitions See Section 16)

**Label Signal Word:** **Warning**

**Hazard Statements:**

**Causes Skin Irritation.** (H315)

**Causes Serious Eye Irritation.** (H319)

**May cause respiratory irritation.** (H335)

**Harmful to Aquatic Life.** (H402)

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**Precautionary Statements:****Prevention:**

Avoid breathing dust, fume, gas, mist, vapors, spray. (P261)  
 Use only outdoors or in well-ventilated area. (P271)  
 Wash thoroughly after handling. (P264)  
 Wear protective gloves. (P280)  
 Avoid release to the environment. (P273)

**Response:**

**IF ON SKIN:** Wash with plenty of water. (P302+P352)

**Specific Treatment** see Section 4: First Aid Measures, Skin Exposure. (P321)

**If Skin irritation or rash occurs:** Get Medical Advice / Attention. (P332+P333+P313)

**Take off contaminated clothing** and wash it before reuse. (P362+P364)

**IF IN EYES:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. (P305+P351+P338)

**If eye irritation persists:** Get medical advice/ attention. (P337+P313)

**IF INHALED:** Remove person to fresh air and keep comfortable for breathing (P304+P340)

**Call a POISON CENTER/doctor:** if you feel unwell. (P312)

**Storage:**

Store in well-ventilated place. P403)  
 Keep container tightly closed. (P233)  
 Store locked up. (P405)

**Disposal Considerations:**

Dispose of content/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation. (P501)

**Potential Health Effects:**

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

**Target Organs:** no data

**Inhalation (breathing):** Causes irritation to the respiratory tract. Symptoms may include coughing, shortness of breath.

**Eye Contact:** Causes irritation, redness, and pain.

**Skin Contact:** Causes irritation to skin. Symptoms include redness, itching, and pain.

**Ingestion (swallowing):** Causes irritation to the gastrointestinal tract. Symptoms may include nausea, vomiting and diarrhea.

**NFPA Ratings:** Health: **2** Flammability: **0** Reactivity: **1**

**Carcinogenicity Data:**

See Section 11 for more Toxicological information

**Section 3: Composition/Information on Ingredients**

Hazardous Component	CAS#	%	OSHA Limits	ACGIH Limits	OTHER Limits
Diammonium Phosphate	7783-28-0	86%	TWA 5 mg/cu m	no data	no data

**Section 4: First Aid Measures**

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

**Skin Exposure:** Immediately flush skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. **Get Medical Attention.** Wash clothing before reuse. Thoroughly clean shoes before reuse.

**Ingestion:** Induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person. **Get Medical Attention.**

**Inhalation:** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. **Get Medical Attention.**

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**Medical Conditions Possibly Aggravated by Exposure:** Inhalation of product may aggravate existing chronic respiratory problems such as asthma, emphysema or bronchitis. Skin contact may aggravate existing skin disease.

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

### Section 5: Fire Fighting Measures

**Flammability Classification:** Not considered to be a fire hazard.

**Fire:** Not considered to be a fire hazard.

**Explosion:** Not considered to be an explosion hazard. See **Section 10 Reactivity Incompatibilities.**

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

**Special Fire Fighting Information:** Use protective clothing and breathing equipment appropriate for the surrounding fire.

**Hazardous Combustion Products:** See **Section 10 Reactivity Incompatibilities.**

### Section 6: Accidental Release Measures

**Procedure to be Followed in Case of Leak or Spill:** Ventilate area of leak or spill.

**Spill and Leak Personal Procedures:** Wear appropriate personal protective equipment as specified in Section 8.

**Cleanup and Disposal of Spill:** Spills: Sweep up and containerize for reclamation or disposal. Vacuuming or wet sweeping may be used to avoid dust dispersal. Consult local waste regulators for proper disposal.

**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:** 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 (dust, solids); observe all warnings and precautions listed for the product.

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

### Section 8: Exposure Controls / Personal Protection

**Exposure Limits:** OSHA TWA 5 mg/cu m

**Ventilation/Engineering Protection:** In general, dilution ventilation is a satisfactory health hazard control for this substance. However, if conditions of use create discomfort to the worker, a local exhaust system should be considered.

**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.**

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

**Protective Clothing and Equipment:** Wear impervious protective clothing.

**Respiratory Protection:** (NIOSH Approved): For conditions of use where exposure to dust or mist is apparent and engineering controls are not feasible, a particulate respirator (NIOSH type N95 or better filters) may be worn. If oil particles (e.g. lubricants, cutting fluids, glycerine, etc.) are present, use a NIOSH type R or P filter. For emergencies or instances where the exposure levels are not known, use a full-face positive-pressure, air-supplied respirator. **WARNING: Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.**

**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:** Diammonium Phosphate  
**Percent Equivalent:** 86%  
**Physical State:** Solid  
**Color and Appearance:** White Crystals or powder  
**Odor:** slight ammonia-like odor  
**Odor Threshold:** no data  
**pH:** ca. 8.0  
**Specific Gravity:** 1.62  
**Vapor Pressure:** no data  
**Vapor Density (Air = 1):** no data  
**Density:** no data  
**Bulk Density:** no data  
**Volatilities by Volume @ 21°C (70°F):** 0  
**Boiling Point:** not applicable  
**Melting Point:** 155°C (311°F) Decomposes  
**Evaporation Rate (Butyl Acetate=1):** no data  
**Solubility in water:** 1g/1.7ml water  
**Viscosity:** no data  
**Other Solubilities:** no data  
**Chemical Formula:**  $(\text{NH}_4)_2\text{HPO}_4$   
**Formula Wt:** 132.06

**Section 10: Stability and Reactivity**

**Chemical Stability** (stable under normal temperature and pressures): Stable X Unstable \_\_\_\_\_  
**Hazardous Polymerization:** May Occur \_\_\_\_\_  
Will Not Occur X  
**Conditions to Avoid:** dusting conditions, extreme heat, extreme humidity. Will gradually lose about 8% ammonia on exposure to air.  
**Chemical Incompatibility and Materials to Avoid:** Strong Bases, Sodium hypochlorite.  
**Hazardous Decomposition Products:** Burning may produce ammonia and oxides of phosphorus

**Section 11: Toxicological Information**

**Acute Toxicity:**  
**Eye Irritation:** No data  
**Skin Irritation:**  
**Toxicological Information and Interpretation:**  
Skin - skin irritation, rabbit. Mildly irritating.  
**Dermal Toxicity:** No data  
**Respiratory Irritation:** No data  
**Inhalation Toxicity:** No data  
**Oral Toxicity:**  
**Toxicological Information and Interpretation:**  
LD50 - lethal dose 50% of test species, > 1000 mg/kg, rat.  
**Other Effects on Humans:** no data  
**Carcinogen Status:**  
**OSHA:** No **NTP:** No  
**ACGIH:** No **IARC:** No

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**Section 12: Ecological Information****Ecotoxicity Data:**

**Fish Toxicity:** LC50 - lethal concentration 50% of test species, 155 mg/l/96 hr, fish: Pimephales promelas.

**Chemical Fate Information:** No data found for product.

**Section 13: Disposal Considerations**

**Disposal Procedures:** 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.

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

No classification assigned.

**Section 15: Regulatory Information****Inventory Status:**

**UNITED STATES (TSCA) Y**

**CANADA (DSL) Y**

**EUROPE (EINECS/ELINCS) Y**

**AUSTRALIA (AICS) Y**

**JAPAN (MITI) Y**

**SOUTH KOREA (KECL) Y**

Y = All ingredients are on the inventory.

E = All ingredients are on the inventory or exempt from listing.

P = One or more ingredients fall under the polymer exemption or are on the no longer polymer list. All other ingredients are on the inventory or exempt from listing.

N = Not determined or one or more ingredients are not on the inventory and are not exempt from listing.

**FEDERAL REGULATIONS**

**Inventory Issues:** All functional components of this product are listed on the TSCA Inventory.

**SARA Title III Hazard Classes:**

**Fire Hazard - NO**

**Reactive Hazard - NO**

**Release of Pressure - NO**

**Acute Health Hazard - YES**

**Chronic Health Hazard - NO**

**STATE REGULATIONS:**

This product does not contain any components that are regulated under California Proposition 65.

**Section 16: Other Information****National Paint & Coating Hazardous Materials Identification System--HMIS(R):**

1 - Health Hazard Rating--Slight

0 - Flammability Rating--Minimal

0 - Reactivity Rating--Minimal

**Acronyms**

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

**ANSI** - American National Standards Institute





**CAS** - Chemical Abstracts Service

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**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  
**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  
**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  
**SDS** - Safety Data Sheet  
**STEL** - Concentration to which workers can be exposed continuously for a **short** period of time without suffering from irritation, irreversible tissue damage or narcosis of sufficient degree to increase the likelihood of accidental injury, impair self-rescue or materially reduce work efficiency.

**TDG** (Canadian): Transport of Dangerous Goods Regulations  
**TLV** - Threshold Limit Value (set by ACGIH)

### GHS Pictograms and Hazards

<p><b>Health Hazard</b></p>  <ul style="list-style-type: none"> <li>• Carcinogen</li> <li>• Mutagenicity</li> <li>• Reproductive Toxicity</li> <li>• Respiratory Sensitizer</li> <li>• Target Organ Toxicity</li> <li>• Aspiration Toxicity</li> </ul>	<p><b>Flame</b></p>  <ul style="list-style-type: none"> <li>• Flammables</li> <li>• Pyrophorics</li> <li>• Self-Heating</li> <li>• Emits Flammable Gas</li> <li>• Self-Reactives</li> <li>• Organic Peroxides</li> </ul>	<p><b>Exclamation Mark</b></p>  <ul style="list-style-type: none"> <li>• Irritant (skin and eye)</li> <li>• Skin Sensitizer</li> <li>• Acute Toxicity (harmful)</li> <li>• Narcotic Effects</li> <li>• Respiratory Tract Irritant</li> <li>• Hazardous to Ozone Layer (Non-Mandatory)</li> </ul>
<p><b>Gas Cylinder</b></p>  <ul style="list-style-type: none"> <li>• Gases Under Pressure</li> </ul>	<p><b>Corrosion</b></p>  <ul style="list-style-type: none"> <li>• Skin Corrosion/ Burns</li> <li>• Eye Damage</li> <li>• Corrosive to Metals</li> </ul>	<p><b>Exploding Bomb</b></p>  <ul style="list-style-type: none"> <li>• Explosives</li> <li>• Self-Reactives</li> <li>• Organic Peroxides</li> </ul>
<p><b>Flame Over Circle</b></p>  <ul style="list-style-type: none"> <li>• Oxidizers</li> </ul>	<p><b>Environment (Non-Mandatory)</b></p>  <ul style="list-style-type: none"> <li>• Aquatic Toxicity</li> </ul>	<p><b>Skull and Crossbones</b></p>  <ul style="list-style-type: none"> <li>• Acute Toxicity (fatal or toxic)</li> </ul>

NFPA Rating Explanation Guide					
Rating Number	Health Hazard	Flammability 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*

**TWA** - 8-hour Time Weighted Average  
**TSCA** - US Toxic Substance Control Act  
**WHMIS** - Workplace Hazardous Material Information System

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