

Material Safety Data Sheet



Martrex, Inc.

Section 1: Chemical Product and Company Information

Product name: Diammonium Phosphate

Reference Number:

Web: 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#: 7783-28-0

Chemical Name: Diammonium Phosphate

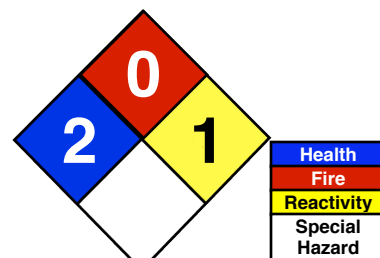
Synonyms: Phosphoric acid, diammonium salt; ammonium phosphate;

DAP; diammonium phosphate, diammonium salt

Chemical Family: Ammonium Phosphates

Product Use: n/a

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
Diammonium Phosphate	7783-28-0	86%	TWA 5 mg/cu m	no data	no data

Section 3: Hazards Identification

Emergency Overview: WARNING! CAUSES IRRITATION TO SKIN, EYES AND RESPIRATORY TRACT. HARMFUL IF SWALLOWED OR INHALED..

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

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.

Carcinogenicity Data:

See Section 11 for more Toxicological information

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.

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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.**

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.**

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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 Unstable
Hazardous Polymerization: May Occur
Will Not Occur
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

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

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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/m³ - 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: 5-1-2011

Supersedes: n/a

 NFPA Rating Explanation Guide 					
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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