

# Material Safety Data Sheet

Martrex, Inc.  
P.O. Box 1709  
Minnetonka, MN 55345-3793

## 1. CHEMICAL IDENTIFICATION

CHEMICAL NAME: D.A.P., Diammonium Phosphate

CHEMICAL FAMILY: Ammonium Phosphates

FORMULA:  $(\text{NH}_4)_2\text{HPO}_4$

CAS NO: 7783-28-0

TRADE NAME/SYNONYMS: Ammonium Phosphate Dibasic

## 2. PERSONAL PROTECTION INFORMATION

RESPIRATORY PROTECTION: A NIOSH - approved dust respirator (either single use or multiple use) should be worn when applicable dust standards are exceeded.

ENGINEERING CONTROLS: Adequate ventilation should be available to maintain dust levels below applicable dust standards.

SKIN PROTECTION: No protection normally required. If irritation occurs, long sleeves and impervious gloves should be worn.

EYE PROTECTION: When appropriate, suitable eye protection should be used.

OTHER PROTECTIVE EQUIPMENT: Washing facilities should be available.

## 3. HEALTH INFORMATION

OSHA PERMISSIBLE EXPOSURE LIMIT (PEL): None Listed\*

ACGIH THRESHOLD LIMIT VALUE (TLV): None Listed\*

STEL: None Listed

LISTED AS CARCINOGEN IN: IARC Monographs: No NTP List: NO OSHA: No

OSHA HAZARD CLASSIFICATION: None

PRIMARY ROUTE(S) OF ENTRY: Inhalation

SYMPTOMS OF OVEREXPOSURE:

Acute: At high dust concentrations, irritation of eyes, skin, and mucous membranes by chemical or mechanical action may occur.

Chronic: None found

AGGRAVATED MEDICAL CONDITION: Pre-existing respiratory disease including asthma and emphysema.

TOXIC DATA: None established

\*NUISANCE DUST: PEL: Total  $15 \text{ mg/m}^3$ ; Respirable  $5 \text{ mg/m}^3$  TLV:  $10 \text{ mg/m}^3$

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#### 4. EMERGENCY AND FIRST AID MEASURES

SKIN: If irritation occurs, wash skin with water and mild detergent. Get medical attention if irritation persists.

EYE: If eye irritation occurs, flush with copious amounts of water. Get medical attention if irritation persists.

INHALATION: If breathing difficulty occurs because of dust inhalation, remove to fresh air. If discomfort continues, seek medical attention.

INGESTION: If the person is conscious, give large amounts of water. Do **not** induce vomiting. Get medical attention.

NOTE TO THE PHYSICIAN: Symptomatic treatment only.

#### 5. INGREDIENTS

The composition of diammonium phosphate varies according to raw materials. Typical analysis shows:

<u>COMPOSITION</u>	<u>PERCENT (BY WEIGHT)</u>
(NH <sub>4</sub> ) <sub>2</sub> HPO <sub>4</sub>	Approx. 86%
F	1.4 - 1.7%
Water	1.8 - 2.2%
Iron	1.0 - 1.6%
Aluminum reported as Al <sub>2</sub> O <sub>3</sub>	0.6 - 1.0%
Sulfur	1.8 - 2.3%
Calcium	0.1 - 0.3%
Magnesium	0.3 - 0.6%

#### 6. PHYSICAL DATA

BOILING POINT (°F): 225

MELTING POINT (°F): 311

VAPOR PRESSURE (mmhg): NA<sup>3</sup>

SPECIFIC GRAVITY (H<sub>2</sub>O = 1): 1.619

% VOLATILE BY VOLUME: NA<sup>3</sup>

VAPOR DENSITY (AIR = 1): NA<sup>3</sup>

SOLUBILITY IN WATER: Soluble

EVAPORATION RATE (BUTYL ACETATE = 1): NA<sup>3</sup>

MOLECULAR WEIGHT: 132.05

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PHYSICAL STATE: Solid

DENSITY: 59 lbs. per cu ft (bulk)

pH: 8.5

APPEARANCE AND ODOR: Gray, granular solid, slight ammonia odor.

## 7. REACTIVITY

STABILITY: Stable

HAZARDOUS POLMERIZATION: Will not occur

CONDITIONS AND MATERIALS TO AVOID: Nitrites

HAZARDOUS DECOMPOSITION PRODUCTS: Decomposes to ammonia and monoammonium phosphate.

## 8. FIRE AND EXPLOSIONS HAZARDS

FLASH POINT AND METHOD USED: NA<sup>3</sup>

FLAMMABLE LIMITS - % VOLUME IN AIR: Lower: NA<sup>3</sup> Upper: NA<sup>3</sup>

EXTINGUISHING MEDIA: Use media needed to control surrounding fire.

SPECIAL FIRE FIGHTING PROCEDURES AND PRECAUTIONS: Wear self-contained positive pressure breathing apparatus and full protective clothing.

AUTOIGNITION TEMPERATURE: NA<sup>3</sup> °C NA<sup>3</sup> °F

UNUSUAL FIRE AND EXPLOSION HAZARDS: Nitrites may decompose violently when mixed with ammonium salts.

## 9. STORAGE AND SPECIAL PRECAUTIONS

HANDLING AND STORING PRECAUTIONS: None

OTHER PRECAUTIONS: None

## 10. TRANSPORTATION REQUIREMENTS

DOT CLASSIFICATION: NA<sup>3</sup>

OSHA LABEL REQUIRED: No

REPORTABLE QUANTITY: NA<sup>3</sup>

DOT PROPER SHIPPING NAME: NA<sup>3</sup>

UN/NA ID NUMBER: NA<sup>3</sup>

STCC NO.: NA<sup>3</sup>

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## 11. SARA TITLE III INFORMATION

NOTIFICATION: NA<sup>3</sup>

EHS: No

ACUTE: No

CHRONIC: No

FIRE: No

PRESSURE: No

REACTIVE: No

313: No

## **12. EMERGENCY ACTION - SPILL OR LEAK**

EMERGENCY ACTION: Prevent large quantities from contact with waterways or vegetation.

SMALL SPILLS: If uncontaminated, recover and reuse as product. Consult with federal or state environmental regulatory agencies for acceptable disposal procedures.

LARGE SPILLS: Consult with federal or state environmental regulatory agencies for acceptable disposal procedures.

### FOOTNOTES:

1. This NFPA rating applies only to short-term exposure such as might be encountered under fire or related emergency conditions.
2. Note: NR means Not Rated
3. Note: NA means Not Applicable

## **13. MSDS PREPARATION INFORMATION**

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