

Common Name: **ALUMINUM PHOSPHATE**

Synonyms: Aluminum Monophosphate

CAS No: 7784-30-7

 Molecular Formula:  $\text{AlPO}_4$ 

RTK Substance No: 0062

Description: Solid, corrosive chemical which may be in a liquid or gel form

## HAZARD DATA

| Hazard Rating  | Firefighting  | Reactivity  |
|--|---|---|
| <b>2 - Health</b><br><b>0 - Fire</b><br><b>0 - Reactivity</b><br>DOT ID #: UN 1760<br>ERG Guide #: 154<br>Hazard Class: 8<br>(Corrosive) | Extinguish fire using an agent suitable for type of surrounding fire. <b>Aluminum Phosphate</b> itself does not burn.<br><br>POISONOUS GASES ARE PROCUED IN FIRE, including <i>Aluminum Oxides</i> and <i>Phosphorus Oxides</i> . | <b>Aluminum Phosphate</b> reacts violently with STRONG BASES (such as SODIUM HYDROXIDE and POTASSIUM HYDROXIDE) and STRONG ACIDS (such as HYDROCHLORIC, SULFURIC and NITRIC). |

## SPILL/LEAKS

**Isolation Distance:** 25 to 50 meters  
(80 to 150 feet)

Collect powdered material in the most convenient and safe manner and deposit in sealed containers.

Absorb liquids in vermiculite, dry sand, earth, or a similar material and deposit in sealed containers.

## PHYSICAL PROPERTIES

|                          |                        |
|--------------------------|------------------------|
| <b>Odor Threshold:</b>   | Odorless               |
| <b>Flash Point:</b>      | Not Combustible        |
| <b>LEL:</b>              | N/A                    |
| <b>UEL:</b>              | N/A                    |
| <b>Specific Gravity:</b> | 2.56 (water = 1)       |
| <b>Vapor Pressure:</b>   | 0 mm Hg at 68°F (20°C) |
| <b>Water Solubility:</b> | Insoluble              |
| <b>Melting Point:</b>    | >2,732°F (1,500°C)     |

## EXPOSURE LIMITS

|               |  |
|---------------|--|
| <b>OSHA:</b>  | 15 mg/m <sup>3</sup> 8-hr TWA (Total Dust)<br>5 mg/m <sup>3</sup> 8-hr TWA (Respirable Dust)   |
| <b>NIOSH:</b> | 10 mg/m <sup>3</sup> 10-hr TWA (Total Dust)<br>5 mg/m <sup>3</sup> 10-hr TWA (Respirable Dust) |
| <b>ACGIH:</b> | 1 mg/m <sup>3</sup> 8-hr TWA (Respirable Fraction)   |

## PROTECTIVE EQUIPMENT

|                    |  |
|--------------------|--|
| <b>Gloves:</b>     | No Information   |
| <b>Overall:</b>    | DuPont Tychem® Responder® for inorganic acid salts in solution, DuPont Tychem® for hazardous dusts |
| <b>Boot:</b>       | No Information   |
| <b>Respirator:</b> | >1 mg/m <sup>3</sup> N95<br>>10 mg/m <sup>3</sup> Supplied Air                                     |

## HEALTH EFFECTS

|                 |   |
|-----------------|---|
| <b>Eyes:</b>    | Irritation and burns                                      |
| <b>Skin:</b>    | Irritation and burns                                      |
| <b>Acute:</b>   | Nose and throat irritation with coughing and wheezing     |
| <b>Chronic:</b> | Bronchitis, coughing, wheezing and/or shortness of breath |

## FIRST AID AND DECONTAMINATION

Remove the person from exposure.  
 Flush eyes with large amounts of water for at least 15 minutes. Remove contact lenses if worn.  
 Immediate medical attention is necessary.  
 Remove contaminated clothing and wash contaminated skin with soap and water.  
 Begin artificial respiration if breathing has stopped and CPR if necessary.  
 Transfer to a medical facility.