

## Monoammonium Phosphate

**Section 1 - Product and Company Identification**

<b>Material Name</b>	▪ <b>Monoammonium Phosphate</b>
<b>CAS Number</b>	▪ 7722-76-1
<b>EINECS</b>	▪ 231-764-5
<b>Molecular Formula</b>	▪ NH <sub>4</sub> H <sub>2</sub> PO <sub>4</sub>
<b>Molecular Weight</b>	▪ 115.03
<b>Product Description</b>	▪ White powder solid with no odor.
<b>Synonyms</b>	▪ Ammonium Phosphate, Monobasic; Ammonium Phosphate, Primary
<b>Manufacturer</b>	▪ Innophos PO Box 8000 259 Prospect Plains Road Cranbury, NJ 08512-8000 United States
<b>Telephone</b>	
<b>Technical</b>	▪ 609-495-2495
<u><b>Emergency</b></u>	▪ 800-424-9300 - Chemtrec
<u><b>Emergency</b></u>	▪ 615-386-7816 - Innophos Emergency Communication Team (ECT)
<u><b>Emergency</b></u>	▪ 703-527-3887 - Chemtrec - International Collect Calls
<b>Preparation Date</b>	▪ 08/13/2004
<b>Last Revision Date</b>	▪ 10/27/2010

**Section 2 - Hazards Identification****Emergency Overview****WARNING**

Causes mild skin irritation. Causes eye irritation.

<b>Prevention</b>	Avoid breathing dust, fume, gas, mist, vapours and/or spray. Wear protective gloves and eye/face protection -safety glasses, . Wash : thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well -ventilated area.
<b>Response</b>	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If skin irritation occurs: Get medical advice/attention. Wash with plenty of soap and water. Take off contaminated clothing and wash before reuse. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
<b>Storage/Disposal</b>	Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

- OSHA
  - WHMIS
  - EU
  - GHS
- None
  - None
  - None
  - Skin Corrosion/Irritation - Category 3, Serious Eye Damage, Eye Irritation - Category 2B
- Route Of Entry
- Inhalation, Ingestion
- Medical Conditions Aggravated by Exposure
- Disorders of the lungs, Skin



**Potential Health Effects**

**Inhalation**

- Acute (Immediate)**
  - May cause mild irritation.
- Chronic (Delayed)**
  - No data available.

**Skin**

- Acute (Immediate)**
  - May cause mild irritation.
- Chronic (Delayed)**
  - Prolonged or repeated exposure may cause dermatitis.

**Eye**

- Acute (Immediate)**
  - May cause mild irritation.
- Chronic (Delayed)**
  - No data available.

**Ingestion**

- Acute (Immediate)**
  - May cause mild irritation. Low acute oral toxicity. Ingestion of large quantities may cause abdominal pain, abdominal cramps, nausea, vomiting, diarrhea.
- Chronic (Delayed)**
  - No data available.

**Carcinogenic Effects**

- This product does not contain any ingredient designated by IARC, NTP, ACGIH or OSHA as probable or suspected human carcinogens.

See Section 12 for Ecological Information.

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

Hazardous Components						
Chemical Name	CAS	%(weight)	UN;EINECS	LD50/LC50	EU Classification & R Phrases	Other
Phosphoric acid, ammonium salt (1:1)	7722-76-1	100%	231-764-5	NDA	NDA	NDA

Under United States Regulations (29 CFR 1900.1200 - Hazard Communication Standard), this product is considered hazardous. In Canada, the product mentioned above is considered hazardous under the Workplace Hazardous Materials Information System (WHMIS). This product is considered dangerous according to the European Directive 67/548/EEC. According to the Globally Harmonized Standard for Classification and Labeling (GHS) this product is considered hazardous.

See Section 11 for Toxicological Information.

## Section 4 - First Aid Measures

- |                           |   |
|---------------------------|---|
| <b>Inhalation</b>         | <ul style="list-style-type: none"><li>▪ Move victim to fresh air. Administer oxygen if breathing is difficult. Give artificial respiration if victim is not breathing. If signs/symptoms continue, get medical attention.</li></ul>   |
| <b>Skin</b>               | <ul style="list-style-type: none"><li>▪ IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.</li></ul>  |
| <b>Eye</b>                | <ul style="list-style-type: none"><li>▪ Flush eyes with water for at least 15 minutes while holding eyelids open. Remove contact lenses if worn. If eye irritation persists: Get medical advice/attention.</li></ul>  |
| <b>Ingestion</b>          | <ul style="list-style-type: none"><li>▪ Do NOT induce vomiting. Do not give anything by mouth to an unconscious person. Rinse mouth. Vomiting may occur spontaneously. To prevent aspiration of swallowed product, lay victim on side with head lower than waist. If vomiting occurs and the victim is conscious, give water to further dilute the chemical.</li></ul>  |
| <b>Notes to Physician</b> | <ul style="list-style-type: none"><li>▪ All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred. Ingestion of large quantities of phosphate salts (over 1.0 grams for an adult) may cause an osmotic catharsis resulting in diarrhea and probable abdominal cramps. Larger doses such as 4 -8 grams will almost certainly cause these effects in everyone. In healthy individuals most of the ingested salt will be excreted in the feces with the diarrhea and, thus, not cause any systemic toxicity. Doses greater than 10 grams hypothetically may cause systemic toxicity. Treatment should take into consideration both anionic and cation portion of the molecule. Ammonium salts have a hypothetical risk of ammonia toxicity. In addition to calcium levels, ammonia and phosphate levels should be monitored. Potassium salts have a hypothetical risk of hyperkalemia which can cause cardiac arrhythmia. In addition to calcium levels, potassium and phosphate levels should be monitored. Also consider continuous EKG monitoring to detect hyperkalemia. Sodium salts have a hypothetical risk of hypernatremia. In addition to calcium levels, sodium and phosphate levels should be monitored.</li></ul> |
| <b>Other Information</b>  | <ul style="list-style-type: none"><li>▪ Call 911 or emergency medical service. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.</li></ul>   |

## Section 5 - Fire Fighting Measures

- |   |  |
|---|--|
| <b>Extinguishing Media</b>                | <ul style="list-style-type: none"><li>▪ Not combustible. Use extinguishing media suitable for surrounding fire.</li></ul>  |
| <b>Unsuitable Extinguishing Media</b>     | <ul style="list-style-type: none"><li>▪ None known.</li></ul>  |
| <b>Firefighting Procedures</b>            | <ul style="list-style-type: none"><li>▪ LARGE FIRES: Move containers from fire area if you can do it without risk.</li><li>▪ LARGE FIRES: Do not scatter spilled material with high pressure water streams.</li><li>▪ LARGE FIRES: Dike fire-control water for later disposal.</li></ul> |
| <b>Unusual Fire and Explosion Hazards</b> | <ul style="list-style-type: none"><li>▪ Non-combustible.</li></ul>   |
| <b>Hazardous Combustion Products</b>      | <ul style="list-style-type: none"><li>▪ Oxides of nitrogen, oxides of phosphorus.</li></ul>  |
| <b>Protection of Firefighters</b>         | <ul style="list-style-type: none"><li>▪ Wear positive pressure self-contained breathing apparatus (SCBA). Structural firefighters' protective clothing will only provide limited protection.</li></ul>   |

## Section 6 - Accidental Release Measures

- |                                      |  |
|--------------------------------------|--|
| <b>Personal Precautions</b>          | <ul style="list-style-type: none"><li>▪ Do not touch or walk through spilled material.</li></ul>   |
| <b>Emergency Procedures</b>          | <ul style="list-style-type: none"><li>▪ Keep unauthorized personnel away.</li></ul>  |
| <b>Environmental Precautions</b>     | <ul style="list-style-type: none"><li>▪ Prevent entry into waterways, sewers, basements or confined areas. Spills may be reportable to the National Response Center (800 -424-8802) and to state and/or local agencies.</li></ul>  |
| <b>Containment/Clean-up Measures</b> | <ul style="list-style-type: none"><li>▪ Sweep or vacuum up and place in an appropriate closed container. Avoid generating dust. LARGE SPILLS: Cover powder spill with plastic sheet or tarp to minimize spreading. Clean up residual material by washing area with water and detergent. Collect washings for disposal.</li></ul> |
| <b>Prohibited Materials</b>          | <ul style="list-style-type: none"><li>▪ None known.</li></ul>  |

## Section 7 - Handling and Storage

- Handling**
- Keep containers closed when not in use. Avoid breathing dust. Avoid direct or prolonged contact with skin and eyes. Do not ingest. Do not use in areas without adequate ventilation.
- Storage**
- Store in a cool/low-temperature, well-ventilated, dry place. Store in a tightly closed container.
- Special Packaging Materials**
- None known.
- Incompatible Materials or Ignition Sources**
- Strong bases, sodium hypochlorite.

## Section 8 - Exposure Controls/Personal Protection

### Personal Protective Equipment

**Pictograms**



**Respiratory**

- For limited exposure use an N95 dust mask. For prolonged exposure use an air-purifying respirator with high efficiency particulate air (HEPA) filters. Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or symptoms are experienced.

**Eye/Face**

- Wear safety glasses.

**Hands**

- Wear appropriate gloves.

**General Industrial Hygiene Considerations**

- Do not use, and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored. Wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics, or using the toilet.

**Engineering Measures/Controls**

- Adequate ventilation systems as needed to control concentrations of airborne contaminants below applicable threshold limit values.

Exposure Limits/Guidelines						
	Result	ACGIH	Argentina	Canada Ontario	Canada Quebec	China
Monoammonium Phosphate	STELs	Not established	Not established	Not established	Not established	16 mg/m3 STEL (free SiO2 <10%, except asbestos and toxic substances. Use PC-STEL of silica When free SiO2 >10%, total)  <i>as Particulates not otherwise classified (PNOC)</i>
	TWAs	10 mg/m3 TWA (inhalable particles, recommended); 3 mg/m3 TWA (respirable particles, recommended)  <i>as Particulates not otherwise classified (PNOC)</i>	10 mg/m3 TWA (inhalable fraction, particulate matter containing no asbestos and less than 1% crystalline silica); 3 mg/m3 TWA (respirable fraction, particulate matter containing no asbestos and less than 1% crystalline silica)  <i>as Particulates not otherwise classified (PNOC)</i>	10 mg/m3 TWAEV (inhalable particulate); 3 mg/m3 TWAEV (respirable particulate)  <i>as Particulates not otherwise classified (PNOC)</i>	10 mg/m3 TWAEV (total dust, containing no asbestos and less than 1% crystalline silica)  <i>as Particulates not otherwise classified (PNOC)</i>	8 mg/m3 TWA (free SiO2 <10%, except asbestos and toxic substances. Use PC-TWA of silica When free SiO2 >10%, total)  <i>as Particulates not otherwise classified (PNOC)</i>

Exposure Limits/Guidelines (Con't.)					
	Result	Malaysia	New Zealand	OSHA	Singapore
Monoammonium Phosphate	TWAs	10 mg/m3 TWA (particulate matter containing no asbestos and <1% crystalline silica, inhalable fraction); 3 mg/m3 TWA (particulate matter containing no asbestos and <1% crystalline silica, respirable fraction)  <i>as Particulates not otherwise classified (PNOC)</i>	10 mg/m3 TWA (inspirable dust); 3 mg/m3 TWA (respirable dust)  <i>as Particulates not otherwise classified (PNOC)</i>	15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction)  <i>as Particulates not otherwise classified (PNOC)</i>	10 mg/m3 PEL  <i>as Particulates not otherwise classified (PNOC)</i>

**Key to abbreviations**

NIOSH = National Institute of Occupational Safety and Health

PEL = Permissible Exposure Level determined by the Occupational Safety and Health Administration (OSHA)

STEL = Short Term Exposure Limits are based on 15-minute exposures

TWA = Time-Weighted Averages are based on 8h/day, 40h/week exposures

TWAEV = Time-Weighted Average Exposure Value

ACGIH = American Conference of Governmental Industrial Hygiene

OSHA = Occupational Safety and Health Administration

## Section 9 - Physical and Chemical Properties

- Physical Form**                      ▪ Solid  
**Appearance/Description**      ▪ White powder with no odor.

<b>Color :</b> White		<b>Odor :</b> Odorless	
<b>Taste :</b> NDA		<b>Odor Threshold :</b> NDA	
<b>Boiling Point:</b>	NDA	<b>Vapor Pressure:</b>	NDA
<b>Melting Point:</b>	NDA	<b>Vapor Density:</b>	NDA
<b>Specific Gravity:</b>	1.8	<b>Evaporation Rate:</b>	NDA
<b>Density:</b>	112.3738 lb(s)/ft <sup>3</sup>	<b>VOC (Wt.):</b>	NDA
<b>Bulk Density:</b>	NDA	<b>VOC (Vol.):</b>	NDA
<b>pH:</b>	4.4 to 4.9 (@ 1% wt/wt)	<b>Volatiles (Wt.):</b>	NDA
<b>Water Solubility:</b>	Soluble 29.4 %	<b>Volatiles (Vol.):</b>	NDA
<b>Solvent Solubility:</b>	NDA	<b>Flash Point:</b>	NDA
<b>Viscosity:</b>	NDA	<b>Flash Point Test Type:</b>	NDA
<b>Half-Life:</b>	NDA	<b>UEL:</b>	NDA
<b>Octanol/Water Partition coefficient:</b>	NDA	<b>LEL:</b>	NDA
<b>Coefficient of water/oil distribution:</b>	NDA	<b>Autoignition:</b>	NDA
<b>Bioaccumulation Factor:</b>	NDA	<b>Bioconcentration Factor:</b>	NDA
<b>Biochemical Oxygen Demand BOD/BOD5:</b>	NDA	<b>Chemical Oxygen Demand:</b>	NDA
<b>Persistence:</b>	NDA	<b>Degradation:</b>	NDA

## Section 10 - Stability and Reactivity

- Stability**                                      ▪ Stable under normal temperatures and pressures.  
**Hazardous Polymerization**              ▪ Hazardous polymerization will not occur.  
**Conditions to Avoid**                        ▪ Dusting conditions, extreme heat, extreme humidity.  
**Incompatible Materials**                    ▪ Strong bases, sodium hypochlorite.  
**Hazardous Decomposition Products**    ▪ None known.

## Section 11 - Toxicological Information

- Other Material Information**              ▪ May cause mild irritation to skin and eyes.

Monoammonium Phosphate				7722-76-1					
Test Type	Dosage	Units	Route	Species	Duration	Results	Test Class	Target Organs	Comments
Irritation	500		Skin	Rabbit	NDA	NDA	Mild irritation	NDA	NDA
Acute Toxicity	> 1000	mg/kg	Ingestion/Oral	Rat	NDA	LD50	NDA	NDA	NDA

## Section 12 - Ecological Information

- Ecological Fate**                                      ▪ No data found for product.  
**Persistence/Degradability**                ▪ No data found for product.  
**Bioaccumulation Potential**                ▪ No data found for product.  
**Mobility in Soil**                                    ▪ No data found for product.

## Section 13 - Disposal Considerations

- Product**
- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

## Section 14 - Transportation Information

The listed Transportation Classification does not address regulatory variations due to changes in package size, mode of shipment or other regulatory descriptors.

### DOT - United States - Department of Transportation

**Shipping Name:** Not Regulated

### TDG - Canada - Transport of Dangerous Goods

**Shipping Name:** Not Regulated

### IMO/IMDG - International Maritime Transport

**Shipping Name:** Not Regulated

### ADN - Europe Transport of Dangerous Goods by Road/Inland Waterway

**Shipping Name:** Not Regulated

### IATA - International Air Transport Association

**Shipping Name:** Not Regulated

### ADR - Europe Transport of Dangerous Goods by Road/Inland Waterway

**Shipping Name:** Not Regulated

### RID - Europe Transport of Dangerous Goods by Railways

**Shipping Name:** Not Regulated

## Section 15 - Regulatory Information

**SARA Hazard Classifications** - None

Inventory						
Component	CAS	Australia AICS	Canada DSL	Canada NDSL	China	EU EINECS
Phosphoric acid, ammonium salt (1:1)	7722-76-1	Yes	Yes	No	Yes	Yes
Inventory (Con't.)						
Component	CAS	EU ELNICS	Japan ENCS	Korea KECL	New Zealand	Philippines PICCS
Phosphoric acid, ammonium salt (1:1)	7722-76-1	No	Yes	Yes	Yes	Yes
Inventory (Con't.)						
Component	CAS	Switzerland SWISS	TSCA			
Phosphoric acid, ammonium salt (1:1)	7722-76-1	No	Yes			

## Australia

### Environment

#### Australia - National Pollutant Inventory (NPI) Substance List

- |  |           |      |            |
|--|-----------|------|------------|
| ● Monoammonium Phosphate   | 7722-76-1 |      | Not Listed |
| ● Monoammonium Phosphate as Particulates not otherwise classified (PNOC) |           |      | Not Listed |
| ● Phosphoric acid, ammonium salt (1:1)                                   | 7722-76-1 | 100% | Not Listed |

#### Australia - Priority Existing Chemical Program

- |  |           |      |            |
|--|-----------|------|------------|
| ● Monoammonium Phosphate   | 7722-76-1 |      | Not Listed |
| ● Monoammonium Phosphate as Particulates not otherwise classified (PNOC) |           |      | Not Listed |
| ● Phosphoric acid, ammonium salt (1:1)                                   | 7722-76-1 | 100% | Not Listed |

### Other

#### The Australia Group - Export Control List - Chemical Weapons Precursors

- |  |           |      |            |
|--|-----------|------|------------|
| ● Monoammonium Phosphate   | 7722-76-1 |      | Not Listed |
| ● Monoammonium Phosphate as Particulates not otherwise classified (PNOC) |           |      | Not Listed |
| ● Phosphoric acid, ammonium salt (1:1)                                   | 7722-76-1 | 100% | Not Listed |

## Canada

### Labor

#### Canada - List of Prohibited and Restricted Cosmetic Ingredients (The Cosmetic Ingredient Hotlist)

- |  |           |      |            |
|--|-----------|------|------------|
| ● Monoammonium Phosphate   | 7722-76-1 |      | Not Listed |
| ● Monoammonium Phosphate as Particulates not otherwise classified (PNOC) |           |      | Not Listed |
| ● Phosphoric acid, ammonium salt (1:1)                                   | 7722-76-1 | 100% | Not Listed |

#### Canada - WHMIS - Classifications of Substances

- |  |           |      |            |
|--|-----------|------|------------|
| ● Monoammonium Phosphate   | 7722-76-1 |      | Not Listed |
| ● Monoammonium Phosphate as Particulates not otherwise classified (PNOC) |           |      | Not Listed |
| ● Phosphoric acid, ammonium salt (1:1)                                   | 7722-76-1 | 100% | Not Listed |

#### Canada - WHMIS - Ingredient Disclosure List

- |  |           |      |            |
|--|-----------|------|------------|
| ● Monoammonium Phosphate   | 7722-76-1 |      | Not Listed |
| ● Monoammonium Phosphate as Particulates not otherwise classified (PNOC) |           |      | Not Listed |
| ● Phosphoric acid, ammonium salt (1:1)                                   | 7722-76-1 | 100% | Not Listed |

### Environment

#### Canada - CEPA - Priority Substances List

- |  |           |      |            |
|--|-----------|------|------------|
| ● Monoammonium Phosphate   | 7722-76-1 |      | Not Listed |
| ● Monoammonium Phosphate as Particulates not otherwise classified (PNOC) |           |      | Not Listed |
| ● Phosphoric acid, ammonium salt (1:1)                                   | 7722-76-1 | 100% | Not Listed |

## China

### Other

#### China - Annex I & II - Controlled Chemicals Lists

- |  |           |      |            |
|--|-----------|------|------------|
| ● Monoammonium Phosphate   | 7722-76-1 |      | Not Listed |
| ● Monoammonium Phosphate as Particulates not otherwise classified (PNOC) |           |      | Not Listed |
| ● Phosphoric acid, ammonium salt (1:1)                                   | 7722-76-1 | 100% | Not Listed |

#### China - Dangerous Goods List

- |  |           |      |            |
|--|-----------|------|------------|
| ● Monoammonium Phosphate   | 7722-76-1 |      | Not Listed |
| ● Monoammonium Phosphate as Particulates not otherwise classified (PNOC) |           |      | Not Listed |
| ● Phosphoric acid, ammonium salt (1:1)                                   | 7722-76-1 | 100% | Not Listed |



## Croatia

### Environment

#### Croatia - Air Quality - Emission Limits for Stationary Sources

- |  |           |      |            |
|--|-----------|------|------------|
| ● Monoammonium Phosphate   | 7722-76-1 |      | Not Listed |
| ● Monoammonium Phosphate as Particulates not otherwise classified (PNOC) |           |      | Not Listed |
| ● Phosphoric acid, ammonium salt (1:1)                                   | 7722-76-1 | 100% | Not Listed |

#### Croatia - Air Quality - Limit Values for Gaseous Pollutants

- |  |           |      |            |
|--|-----------|------|------------|
| ● Monoammonium Phosphate   | 7722-76-1 |      | Not Listed |
| ● Monoammonium Phosphate as Particulates not otherwise classified (PNOC) |           |      | Not Listed |
| ● Phosphoric acid, ammonium salt (1:1)                                   | 7722-76-1 | 100% | Not Listed |

#### Croatia - Air Quality - Recommended Values for Gaseous Pollutants

- |  |           |      |            |
|--|-----------|------|------------|
| ● Monoammonium Phosphate   | 7722-76-1 |      | Not Listed |
| ● Monoammonium Phosphate as Particulates not otherwise classified (PNOC) |           |      | Not Listed |
| ● Phosphoric acid, ammonium salt (1:1)                                   | 7722-76-1 | 100% | Not Listed |

#### Croatia - Ozone Depleting Substances - Annex A, Group I

- |  |           |      |            |
|--|-----------|------|------------|
| ● Monoammonium Phosphate   | 7722-76-1 |      | Not Listed |
| ● Monoammonium Phosphate as Particulates not otherwise classified (PNOC) |           |      | Not Listed |
| ● Phosphoric acid, ammonium salt (1:1)                                   | 7722-76-1 | 100% | Not Listed |

## Egypt

### Environment

#### Egypt - Air Pollutants - Emissions Limits - Overall Particles

- |  |           |      |            |
|--|-----------|------|------------|
| ● Monoammonium Phosphate   | 7722-76-1 |      | Not Listed |
| ● Monoammonium Phosphate as Particulates not otherwise classified (PNOC) |           |      | Not Listed |
| ● Phosphoric acid, ammonium salt (1:1)                                   | 7722-76-1 | 100% | Not Listed |

#### Egypt - Air Pollutants - Maximum Limits

- |  |           |      |            |
|--|-----------|------|------------|
| ● Monoammonium Phosphate   | 7722-76-1 |      | Not Listed |
| ● Monoammonium Phosphate as Particulates not otherwise classified (PNOC) |           |      | Not Listed |
| ● Phosphoric acid, ammonium salt (1:1)                                   | 7722-76-1 | 100% | Not Listed |

## Europe

### Environment

#### EU - Substances Depleting the Ozone layer (1005/2009) - Annex I Substances

- |  |           |      |            |
|--|-----------|------|------------|
| ● Monoammonium Phosphate   | 7722-76-1 |      | Not Listed |
| ● Monoammonium Phosphate as Particulates not otherwise classified (PNOC) |           |      | Not Listed |
| ● Phosphoric acid, ammonium salt (1:1)                                   | 7722-76-1 | 100% | Not Listed |

#### EU - Seveso II Directive (96/82/EC) - Qualifying Quantities for Major Accident Notification

- |  |           |      |            |
|--|-----------|------|------------|
| ● Monoammonium Phosphate   | 7722-76-1 |      | Not Listed |
| ● Monoammonium Phosphate as Particulates not otherwise classified (PNOC) |           |      | Not Listed |
| ● Phosphoric acid, ammonium salt (1:1)                                   | 7722-76-1 | 100% | Not Listed |

#### EU - Seveso II Directive (96/82/EC) - Qualifying Quantities for Safety Report Requirements

- |  |           |      |            |
|--|-----------|------|------------|
| ● Monoammonium Phosphate   | 7722-76-1 |      | Not Listed |
| ● Monoammonium Phosphate as Particulates not otherwise classified (PNOC) |           |      | Not Listed |
| ● Phosphoric acid, ammonium salt (1:1)                                   | 7722-76-1 | 100% | Not Listed |

## Other

### EU - CLP (1272/2008) - Annex VI - Table 3.2 - Classification

● Monoammonium Phosphate	7722-76-1		Not Listed
● Monoammonium Phosphate as Particulates not otherwise classified (PNOC)			Not Listed
● Phosphoric acid, ammonium salt (1:1)	7722-76-1	100%	Not Listed

### EU - CLP (1272/2008) - Annex VI - Table 3.2 - Concentration Limits

● Monoammonium Phosphate	7722-76-1		Not Listed
● Monoammonium Phosphate as Particulates not otherwise classified (PNOC)			Not Listed
● Phosphoric acid, ammonium salt (1:1)	7722-76-1	100%	Not Listed

### EU - CLP (1272/2008) - Annex VI - Table 3.2 - Labelling

● Monoammonium Phosphate	7722-76-1		Not Listed
● Monoammonium Phosphate as Particulates not otherwise classified (PNOC)			Not Listed
● Phosphoric acid, ammonium salt (1:1)	7722-76-1	100%	Not Listed

### EU - CLP (1272/2008) - Annex VI - Table 3.2 - Notes - Substances and Preparations

● Monoammonium Phosphate	7722-76-1		Not Listed
● Monoammonium Phosphate as Particulates not otherwise classified (PNOC)			Not Listed
● Phosphoric acid, ammonium salt (1:1)	7722-76-1	100%	Not Listed

### EU - CLP (1272/2008) - Annex VI - Table 3.2 - Safety Phrases

● Monoammonium Phosphate	7722-76-1		Not Listed
● Monoammonium Phosphate as Particulates not otherwise classified (PNOC)			Not Listed
● Phosphoric acid, ammonium salt (1:1)	7722-76-1	100%	Not Listed

### EU - Hazardous Substances Restricted or Prohibited in Electrical Equipment (2002/95/EC) (RoHS)

● Monoammonium Phosphate	7722-76-1		Not Listed
● Monoammonium Phosphate as Particulates not otherwise classified (PNOC)			Not Listed
● Phosphoric acid, ammonium salt (1:1)	7722-76-1	100%	Not Listed

## India

### Environment

#### India - Hazardous Chemical Rules - List of Hazardous and Toxic Chemicals

● Monoammonium Phosphate	7722-76-1		Not Listed
● Monoammonium Phosphate as Particulates not otherwise classified (PNOC)			Not Listed
● Phosphoric acid, ammonium salt (1:1)	7722-76-1	100%	Not Listed

#### India - Ozone Depleting Substances - Schedule I

● Monoammonium Phosphate	7722-76-1		Not Listed
● Monoammonium Phosphate as Particulates not otherwise classified (PNOC)			Not Listed
● Phosphoric acid, ammonium salt (1:1)	7722-76-1	100%	Not Listed

## Indonesia

### Environment

#### Indonesia - Hazardous Waste from Non-Specific Sources

● Monoammonium Phosphate	7722-76-1		Not Listed
● Monoammonium Phosphate as Particulates not otherwise classified (PNOC)			Not Listed
● Phosphoric acid, ammonium salt (1:1)	7722-76-1	100%	Not Listed

#### Indonesia - Hazardous Waste from Specific Sources

● Monoammonium Phosphate	7722-76-1		Not Listed
● Monoammonium Phosphate as Particulates not otherwise classified (PNOC)			Not Listed

- Phosphoric acid, ammonium salt (1:1) 7722-76-1 100% Not Listed

## Japan

### Labor

#### Japan - ISHL Dangerous Substances

- Monoammonium Phosphate 7722-76-1 Not Listed
- Monoammonium Phosphate as Particulates not otherwise classified (PNOC) Not Listed
- Phosphoric acid, ammonium salt (1:1) 7722-76-1 100% Not Listed

#### Japan - ISHL Designated Carcinogens

- Monoammonium Phosphate 7722-76-1 Not Listed
- Monoammonium Phosphate as Particulates not otherwise classified (PNOC) Not Listed
- Phosphoric acid, ammonium salt (1:1) 7722-76-1 100% Not Listed

#### Japan - ISHL Harmful Substances Prohibited for Manufacture

- Monoammonium Phosphate 7722-76-1 Not Listed
- Monoammonium Phosphate as Particulates not otherwise classified (PNOC) Not Listed
- Phosphoric acid, ammonium salt (1:1) 7722-76-1 100% Not Listed

### Environment

#### Japan - Air Pollution Control Law - Emission Standards for Air Pollutants

- Monoammonium Phosphate 7722-76-1 Not Listed
- Monoammonium Phosphate as Particulates not otherwise classified (PNOC) Not Listed
- Phosphoric acid, ammonium salt (1:1) 7722-76-1 100% Not Listed

#### Inventory - Japan - Industrial Safety and Health Law Substances (ISHL)

- Monoammonium Phosphate 7722-76-1 Not Listed
- Monoammonium Phosphate as Particulates not otherwise classified (PNOC) Not Listed
- Phosphoric acid, ammonium salt (1:1) 7722-76-1 100% Not Listed

## Korea

### Labor

#### Korea - MOE - Harmful Substances

- Monoammonium Phosphate 7722-76-1 Not Listed
- Monoammonium Phosphate as Particulates not otherwise classified (PNOC) Not Listed
- Phosphoric acid, ammonium salt (1:1) 7722-76-1 100% Not Listed

#### Korea - ISHA - Name, Toxicity and Protective Measures of New Chemical Substances

- Monoammonium Phosphate 7722-76-1 Not Listed
- Monoammonium Phosphate as Particulates not otherwise classified (PNOC) Not Listed
- Phosphoric acid, ammonium salt (1:1) 7722-76-1 100% Not Listed

### Environment

#### Korea - MOE - Toxic Chemicals Control Act (TCCA) - Observational Chemicals

- Monoammonium Phosphate 7722-76-1 Not Listed
- Monoammonium Phosphate as Particulates not otherwise classified (PNOC) Not Listed
- Phosphoric acid, ammonium salt (1:1) 7722-76-1 100% Not Listed

## Malaysia

### Labor

#### Malaysia - Occupational Safety & Health - Risk Phrases

- Monoammonium Phosphate 7722-76-1 Not Listed

- Monoammonium Phosphate as Particulates not otherwise classified (PNOC) Not Listed
- Phosphoric acid, ammonium salt (1:1) 7722-76-1 100% Not Listed

**Malaysia - Occupational Safety & Health - Safety Phrases**

- Monoammonium Phosphate 7722-76-1 Not Listed
- Monoammonium Phosphate as Particulates not otherwise classified (PNOC) Not Listed
- Phosphoric acid, ammonium salt (1:1) 7722-76-1 100% Not Listed

**Environment**

**Malaysia - Clean Air Regulations - Noxious and Offensive Substances**

- Monoammonium Phosphate 7722-76-1 Not Listed
- Monoammonium Phosphate as Particulates not otherwise classified (PNOC) Not Listed
- Phosphoric acid, ammonium salt (1:1) 7722-76-1 100% Not Listed

**Mexico**

**Environment**

**Mexico - Pollutant Release and Transfer Register - Reporting Emissions - Threshold Quantities**

- Monoammonium Phosphate 7722-76-1 Not Listed
- Monoammonium Phosphate as Particulates not otherwise classified (PNOC) Not Listed
- Phosphoric acid, ammonium salt (1:1) 7722-76-1 100% Not Listed

**Other**

**Mexico - Hazard Classifications**

- Monoammonium Phosphate 7722-76-1 Not Listed
- Monoammonium Phosphate as Particulates not otherwise classified (PNOC) Not Listed
- Phosphoric acid, ammonium salt (1:1) 7722-76-1 100% Not Listed

**Mexico - Regulated Substances**

- Monoammonium Phosphate 7722-76-1 Not Listed
- Monoammonium Phosphate as Particulates not otherwise classified (PNOC) Not Listed
- Phosphoric acid, ammonium salt (1:1) 7722-76-1 100% Not Listed

**New Zealand**

**Other**

**New Zealand - Ozone Depleting Substances**

- Monoammonium Phosphate 7722-76-1 Not Listed
- Monoammonium Phosphate as Particulates not otherwise classified (PNOC) Not Listed
- Phosphoric acid, ammonium salt (1:1) 7722-76-1 100% Not Listed

**Other Agency Information**

**Other**

**AIHA - Emergency Response Planning Guidelines - ERPG-1 Values**

- Monoammonium Phosphate 7722-76-1 Not Listed
- Monoammonium Phosphate as Particulates not otherwise classified (PNOC) Not Listed
- Phosphoric acid, ammonium salt (1:1) 7722-76-1 100% Not Listed

**AIHA - Emergency Response Planning Guidelines - ERPG-2 Values**

- Monoammonium Phosphate 7722-76-1 Not Listed
- Monoammonium Phosphate as Particulates not otherwise classified (PNOC) Not Listed
- Phosphoric acid, ammonium salt (1:1) 7722-76-1 100% Not Listed

**AIHA - Emergency Response Planning Guidelines - ERPG-3 Values**

● Monoammonium Phosphate	7722-76-1	Not Listed
● Monoammonium Phosphate as Particulates not otherwise classified (PNOC)		Not Listed
● Phosphoric acid, ammonium salt (1:1)	7722-76-1	100% Not Listed

**Philippines****Environment****Philippines - Ozone Depleting Substances - Annex A - Group I**

● Monoammonium Phosphate	7722-76-1	Not Listed
● Monoammonium Phosphate as Particulates not otherwise classified (PNOC)		Not Listed
● Phosphoric acid, ammonium salt (1:1)	7722-76-1	100% Not Listed

**Other****Philippines - Priority Chemical List**

● Monoammonium Phosphate	7722-76-1	Not Listed
● Monoammonium Phosphate as Particulates not otherwise classified (PNOC)		Not Listed
● Phosphoric acid, ammonium salt (1:1)	7722-76-1	100% Not Listed

**Singapore****Environment****Singapore - Air Impurities Emission Limits**

● Monoammonium Phosphate	7722-76-1	Not Listed
● Monoammonium Phosphate as Particulates not otherwise classified (PNOC)		Not Listed
● Phosphoric acid, ammonium salt (1:1)	7722-76-1	100% Not Listed

**Singapore - List of Hazardous Substances**

● Monoammonium Phosphate	7722-76-1	Not Listed
● Monoammonium Phosphate as Particulates not otherwise classified (PNOC)		Not Listed
● Phosphoric acid, ammonium salt (1:1)	7722-76-1	100% Not Listed

**South Africa****Labor****South Africa - General Machinery Regulations - Notifiable Substances**

● Monoammonium Phosphate	7722-76-1	Not Listed
● Monoammonium Phosphate as Particulates not otherwise classified (PNOC)		Not Listed
● Phosphoric acid, ammonium salt (1:1)	7722-76-1	100% Not Listed

**Taiwan****Environment****Taiwan - Toxic Chemical Substances Control Act - Threshold Regulated Quantities**

● Monoammonium Phosphate	7722-76-1	Not Listed
● Monoammonium Phosphate as Particulates not otherwise classified (PNOC)		Not Listed
● Phosphoric acid, ammonium salt (1:1)	7722-76-1	100% Not Listed

**Taiwan - Toxic Chemical Substances Control Act - Classification and Control Levels**

● Monoammonium Phosphate	7722-76-1	Not Listed
● Monoammonium Phosphate as Particulates not otherwise classified (PNOC)		Not Listed
● Phosphoric acid, ammonium salt (1:1)	7722-76-1	100% Not Listed

**Thailand**

## Labor

### Thailand - Air Contaminant Standards

● Monoammonium Phosphate	7722-76-1		Not Listed
● Monoammonium Phosphate as Particulates not otherwise classified (PNOC)			Not Listed
● Phosphoric acid, ammonium salt (1:1)	7722-76-1	100%	Not Listed

## Environment

### Thailand - Quantities of Chemicals

● Monoammonium Phosphate	7722-76-1		Not Listed
● Monoammonium Phosphate as Particulates not otherwise classified (PNOC)			Not Listed
● Phosphoric acid, ammonium salt (1:1)	7722-76-1	100%	Not Listed

## Other

### Thailand - Hazardous Substances

● Monoammonium Phosphate	7722-76-1		Not Listed
● Monoammonium Phosphate as Particulates not otherwise classified (PNOC)			Not Listed
● Phosphoric acid, ammonium salt (1:1)	7722-76-1	100%	Not Listed

## United States

### Environment

#### U.S. - CAA (Clean Air Act) - 1990 Hazardous Air Pollutants

● Monoammonium Phosphate	7722-76-1		Not Listed
● Monoammonium Phosphate as Particulates not otherwise classified (PNOC)			Not Listed
● Phosphoric acid, ammonium salt (1:1)	7722-76-1	100%	Not Listed

#### U.S. - CAA (Clean Air Act) - Class I Ozone Depletors

● Monoammonium Phosphate	7722-76-1		Not Listed
● Monoammonium Phosphate as Particulates not otherwise classified (PNOC)			Not Listed
● Phosphoric acid, ammonium salt (1:1)	7722-76-1	100%	Not Listed

#### U.S. - CAA (Clean Air Act) - Class II Ozone Depletors

● Monoammonium Phosphate	7722-76-1		Not Listed
● Monoammonium Phosphate as Particulates not otherwise classified (PNOC)			Not Listed
● Phosphoric acid, ammonium salt (1:1)	7722-76-1	100%	Not Listed

#### U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities

● Monoammonium Phosphate	7722-76-1		Not Listed
● Monoammonium Phosphate as Particulates not otherwise classified (PNOC)			Not Listed
● Phosphoric acid, ammonium salt (1:1)	7722-76-1	100%	Not Listed

#### U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA RQs

● Monoammonium Phosphate	7722-76-1		Not Listed
● Monoammonium Phosphate as Particulates not otherwise classified (PNOC)			Not Listed
● Phosphoric acid, ammonium salt (1:1)	7722-76-1	100%	Not Listed

#### U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs

● Monoammonium Phosphate	7722-76-1		Not Listed
● Monoammonium Phosphate as Particulates not otherwise classified (PNOC)			Not Listed
● Phosphoric acid, ammonium salt (1:1)	7722-76-1	100%	Not Listed

#### U.S. - CERCLA/SARA - Section 313 - PBT Chemical Listing

● Monoammonium Phosphate	7722-76-1		Not Listed
● Monoammonium Phosphate as Particulates not otherwise classified (PNOC)			Not Listed

- Phosphoric acid, ammonium salt (1:1) 7722-76-1 100% Not Listed

**U.S. - RCRA (Resource Conservation & Recovery Act) - List for Hazardous Constituents**

- Monoammonium Phosphate 7722-76-1 Not Listed
- Monoammonium Phosphate as Particulates not otherwise classified (PNOC) Not Listed
- Phosphoric acid, ammonium salt (1:1) 7722-76-1 100% Not Listed

**U.S. - SDWA (Safe Drinking Water Act) - CCL (Contaminant Candidate List)**

- Monoammonium Phosphate 7722-76-1 Not Listed
- Monoammonium Phosphate as Particulates not otherwise classified (PNOC) Not Listed
- Phosphoric acid, ammonium salt (1:1) 7722-76-1 100% Not Listed

**Vietnam**

**Environment**

**Vietnam - Air Quality - Ambient Air Quality Standards**

- Monoammonium Phosphate 7722-76-1 Not Listed
- Monoammonium Phosphate as Particulates not otherwise classified (PNOC) Not Listed
- Phosphoric acid, ammonium salt (1:1) 7722-76-1 100% Not Listed

**Vietnam - Air Quality - Industrial Emission Standards**

- Monoammonium Phosphate 7722-76-1 Not Listed
- Monoammonium Phosphate as Particulates not otherwise classified (PNOC) Not Listed
- Phosphoric acid, ammonium salt (1:1) 7722-76-1 100% Not Listed

**Vietnam - Air Quality - Maximum Allowable Concentration of Highly Hazardous Chemicals**

- Monoammonium Phosphate 7722-76-1 Not Listed
- Monoammonium Phosphate as Particulates not otherwise classified (PNOC) Not Listed
- Phosphoric acid, ammonium salt (1:1) 7722-76-1 100% Not Listed

**Section 16 - Other Information**

- Preparation Date**
  - 08/13/2004
- Last Revision Date**
  - 10/27/2010
- Disclaimer/Statement of Liability**
  - The information herein is given in good faith but no warranty, expressed or implied, is made.