

# **SAFETY DATA SHEET**

Creation Date 24-Nov-2009 Revision Date 24-Dec-2021 Revision Number 4

1. Identification

Product Name Ammonium dihydrogen phosphate

Cat No.: AC193700000; AC193700025; AC193701000; AC193705000

**CAS No** 7722-76-1

**Synonyms** Ammonium phosphate, monobasic

Recommended Use Laboratory chemicals.

Uses advised against Food, drug, pesticide or biocidal product use.

## Details of the supplier of the safety data sheet

Company

Fisher Scientific Company
One Reagent Lane
Fair Lawn, NJ 07410
Acros Organics
One Reagent Lane
Fair Lawn, NJ 07410
Fair Lawn, NJ 07410

Tel: (201) 796-7100

Emergency Telephone Number For information US call: 001-800-ACROS-01 / Europe call: +32 14 57 52 11

Emergency Number **US**:001-201-796-7100 / **Europe**: +32 14 57 52 99 **CHEMTREC** Tel. No.**US**:001-800-424-9300 / **Europe**:001-703-527-3887

## 2. Hazard(s) identification

### Classification

Classification under 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

### Label Elements

None required

### Hazards not otherwise classified (HNOC)

None identified

# 3. Composition/Information on Ingredients

| Component              | CAS No    | Weight % |  |
|------------------------|-----------|----------|--|
| Monoammonium phosphate | 7722-76-1 | >95      |  |

## 4. First-aid measures

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get

medical attention if symptoms occur.

**Skin Contact** Wash off immediately with plenty of water for at least 15 minutes. Get medical attention if

symptoms occur.

**Inhalation** Remove to fresh air. Get medical attention if symptoms occur. If not breathing, give artificial

respiration.

**Ingestion** Do NOT induce vomiting. Get medical attention.

Most important symptoms and

effects

and No information available.

**Notes to Physician** 

Treat symptomatically

No information available

## 5. Fire-fighting measures

Suitable Extinguishing Media Substance is nonflammable; use agent most appropriate to extinguish surrounding fire.

Unsuitable Extinguishing Media No information available

Flash Point Not applicable

Method - No information available

**Autoignition Temperature** 

**Explosion Limits** 

UpperNo data availableLowerNo data available

Sensitivity to Mechanical Impact No information available Sensitivity to Static Discharge No information available

# **Specific Hazards Arising from the Chemical**

Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes.

### **Hazardous Combustion Products**

Oxides of phosphorus. Nitrogen oxides (NOx). Ammonia.

#### **Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**NFPA** 

HealthFlammabilityInstabilityPhysical hazards100N/A

## 6. Accidental release measures

Personal Precautions Use personal protective equipment as required. Ensure adequate ventilation. Avoid dust

formation.

**Environmental Precautions** Avoid release to the environment.

**Methods for Containment and Clean** Sweep up and shovel into suitable containers for disposal. Avoid dust formation. **Up** 

# 7. Handling and storage

Handling Wear personal protective equipment/face protection. Ensure adequate ventilation. Avoid

contact with skin, eyes or clothing. Avoid ingestion and inhalation. Avoid dust formation.

**Storage.** Keep containers tightly closed in a dry, cool and well-ventilated place. Incompatible

Materials. Strong oxidizing agents.

## 8. Exposure controls / personal protection

Exposure Guidelines This product does not contain any hazardous materials with occupational exposure

limitsestablished by the region specific regulatory bodies.

Engineering Measures Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations

and safety showers are close to the workstation location.

Personal Protective Equipment

**Eye/face Protection**Wear appropriate protective eyeglasses or chemical safety goggles as described by

OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard

EN166.

**Skin and body protection**Wear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory Protection 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 if irritation or other symptoms are experienced.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice.

## 9. Physical and chemical properties

Physical State Solid
Appearance White
Odor Odorless

Odor Threshold No information available

pH 3.8 - 4.4 0.2M aq.sol Melting Point/Range 190 °C / 374 °F Boiling Point/Range No information available

Flash Point Not applicable Evaporation Rate Not applicable

Flammability (solid,gas) No information available

Flammability or explosive limits

UpperNo data availableLowerNo data availableVapor PressureNo information available

Vapor DensityNot applicableSpecific GravityNo information available

Solubility Soluble in water

Partition coefficient; n-octanol/water No data available

Autoignition Temperature No information available

Decomposition Temperature> 190°CViscosityNot applicableMolecular FormulaH6 N O4 P

Molecular FormulaH6 N O4Molecular Weight115.03

# 10. Stability and reactivity

### Ammonium dihydrogen phosphate

Reactive Hazard None known, based on information available

**Stability** Stable under normal conditions.

Conditions to Avoid Incompatible products. Excess heat. Avoid dust formation.

Incompatible Materials Strong oxidizing agents

Hazardous Decomposition Products Oxides of phosphorus, Nitrogen oxides (NOx), Ammonia

Hazardous Polymerization Hazardous polymerization does not occur.

**Hazardous Reactions** None under normal processing.

# 11. Toxicological information

## **Acute Toxicity**

### **Product Information**

Component Information

| Component              | LD50 Oral               | LD50 Dermal                | LC50 Inhalation |
|------------------------|-------------------------|----------------------------|-----------------|
| Monoammonium phosphate | LD50 = 5750 mg/kg (Rat) | LD50 > 7940 mg/kg (Rabbit) | Not listed      |
|                        |                         |                            |                 |

**Toxicologically Synergistic** 

No information available

Products

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation No information available

Sensitization No information available

**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

| Component    | CAS No    | IARC       | NTP        | ACGIH      | OSHA       | Mexico     |
|--------------|-----------|------------|------------|------------|------------|------------|
| Monoammonium | 7722-76-1 | Not listed |
| phosphate    |           |            |            |            |            |            |

Mutagenic Effects No information available

**Reproductive Effects** No information available.

**Developmental Effects**No information available.

**Teratogenicity** No information available.

STOT - single exposure None known STOT - repeated exposure None known

Aspiration hazard No information available

Symptoms / effects,both acute and No information available

delayed

Endocrine Disruptor Information No information available

Other Adverse Effects The toxicological properties have not been fully investigated.

# 12. Ecological information

**Ecotoxicity** 

No information available.

| Component | Freshwater Algae | Freshwater Fish | Microtox | Water Flea |
|-----------|------------------|-----------------|----------|------------|

# Ammonium dihydrogen phosphate

| Monoammonium phosphate | Not listed | LC50: > 85.9 mg/L, 96h       | Not listed | Not listed |
|------------------------|------------|------------------------------|------------|------------|
|                        |            | static (Oncorhynchus mykiss) |            |            |
|                        |            | Hiykiss)                     |            |            |

Persistence and Degradability Soluble in water Persistence is unlikely based on information available.

**Bioaccumulation/ Accumulation** No information available.

**Mobility** Will likely be mobile in the environment due to its water solubility.

#### 13. Disposal considerations Chemical waste generators must determine whether a discarded chemical is classified as a **Waste Disposal Methods**

hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

|                    | 14. Transport information  |
|--------------------|----------------------------|
| DOT<br>TDG<br>IATA | Not regulated              |
| <u>TDG</u>         | Not regulated              |
| <u>IATA</u>        | Not regulated              |
| IMDG/IMO           | Not regulated              |
|                    | 15. Regulatory information |

#### United States of America Inventory

| Component              | CAS No    | TSCA | TSCA Inventory notification - Active-Inactive | TSCA - EPA Regulatory Flags |  |
|------------------------|-----------|------|---|-----------------------------|--|
| Monoammonium phosphate | 7722-76-1 | Χ    | ACTIVE  | -                           |  |

#### Legend:

TSCA US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

X - Listed

'-' - Not Listed

TSCA 12(b) - Notices of Export Not applicable

### **International Inventories**

Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), China (IECSC), Korea (KECL).

| Component              | CAS No    | DSL | NDSL | EINECS    | PICCS | ENCS | ISHL | AICS | IECSC | KECL     |
|------------------------|-----------|-----|------|-----------|-------|------|------|------|-------|----------|
| Monoammonium phosphate | 7722-76-1 | X   | -    | 231-764-5 | X     | X    | X    | Х    | X     | KE-01656 |

KECL - NIER number or KE number (http://ncis.nier.go.kr/en/main.do)

#### U.S. Federal Regulations

### **SARA 313**

| Component              | CAS No    | Weight % | SARA 313 - Threshold<br>Values % |
|------------------------|-----------|----------|----------------------------------|
| Monoammonium phosphate | 7722-76-1 | >95      | 1.0                              |

SARA 311/312 Hazard Categories See section 2 for more information

Not applicable **CWA (Clean Water Act)** Not applicable Clean Air Act **OSHA** - Occupational Safety and

Health Administration

Not applicable

CERCLA Not applicable

California Proposition 65 This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know

Regulations

Not applicable

**U.S. Department of Transportation** 

Reportable Quantity (RQ): N
DOT Marine Pollutant N
DOT Severe Marine Pollutant N

**U.S. Department of Homeland** 

Security

This product does not contain any DHS chemicals.

Other International Regulations

Component

Mexico - Grade No information available

### Authorisation/Restrictions according to EU REACH

| Component              | REACH (1907/2006) - Annex XIV -<br>Substances Subject to | REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous |  |
|------------------------|--|--|--|
|                        | Authorization  | Substances   | List of Substances of Very High Concern (SVHC) |
| Monoammonium phosphate | -  | Use restricted. See item 65. (see link for restriction details)    | -  |

https://echa.europa.eu/substances-restricted-under-reach

## Safety, health and environmental regulations/legislation specific for the substance or mixture

|                        |           |   | Pollutant  | Potential                     | Hazardous<br>Substances (RoHS)        |
|------------------------|-----------|---|--|-------------------------------|---------------------------------------|
| Monoammonium phosphate | 7722-76-1 | Listed  | Not applicable   | Not applicable                | Not applicable                        |
|                        |           |   |  |                               |                                       |
| Component              | CAS No    | Seveso III Directive<br>(2012/18/EC) -<br>Qualifying Quantities<br>for Major Accident<br>Notification | Seveso III Directive<br>(2012/18/EC) -<br>Qualifying Quantities<br>for Safety Report<br>Requirements | Rotterdam<br>Convention (PIC) | Basel Convention<br>(Hazardous Waste) |
| Monoammonium phosphate | 7722-76-1 | Not applicable  | Not applicable   | Not applicable                | Not applicable                        |

## 16. Other information

CAS No

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**OECD HPV** 

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Revision Summary This document has been updated to comply with the US OSHA HazCom 2012 Standard

replacing the current legislation under 29 CFR 1910.1200 to align with the Globally

**Persistent Organic** 

**Ozone Depletion** 

Restriction of

Harmonized System of Classification and Labeling of Chemicals (GHS).

## Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the

date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

**End of SDS**