



## MATERIAL SAFETY DATA SHEET

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

**1.1** Product identifiers

Product Name : Monoammonium Phosphate (MAP)  
CAS-No. : 7722-76-1

**1.2** Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Synthesis of substances

**1.3** Details of the supplier of the safety data sheet

Contact Information:

Company: Aurora Industry Co.,Ltd.

Address: Room 7033, No.9-1, Haifu Road, Dalian Free Trade Zone, China

Tel: 0411-82288674

### SECTION 2: Hazards identification

**2.1** Classification of the substance or mixture

Not a hazardous substance or mixture.

**2.2** GHS Label elements, including precautionary statements

Not a hazardous substance or mixture.

**2.3** Hazards not otherwise classified (HNOC) or not covered by GHS - none

### SECTION 3: Composition/information on ingredients

**3.1** Substances

Molecular weight : 115.03 g/mol  
CAS-No. : 7722-76-1

No components need to be disclosed according to the applicable regulations.

### SECTION 4: First aid measures

**4.1** Description of first-aid measures If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration.

In case of skin contact

Wash off with soap and plenty of water.

In case of eye contact

Flush eyes with water as a precaution.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water.

**4.2** Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

**4.3** Indication of any immediate medical attention and special treatment needed

**4.4** No data available



## SECTION 5: Firefighting measures

- 5.1** Extinguishing media Suitable  
extinguishing media  
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
- 5.2** Special hazards arising from the substance or mixture  
Nitrogen oxides (NO<sub>x</sub>), Oxides of phosphorus Not combustible.
- 5.3** Advice for firefighters  
Wear self-contained breathing apparatus for firefighting if necessary.
- 5.4** Further information  
No data available

## SECTION 6: Accidental release measures

- 6.1** Personal precautions, protective equipment and emergency procedures  
Avoid dust formation. Avoid breathing vapors, mist or gas. For personal protection see section 8.
- 6.2** Environmental precautions  
No special environmental precautions required.
- 6.3** Methods and materials for containment and cleaning up  
Sweep up and shovel. Keep in suitable, closed containers for disposal.
- 6.4** Reference to other sections  
For disposal see section 13.

## SECTION 7: Handling and storage

- 7.1** Precautions for safe handling  
Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs. Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.2.
- 7.2** Conditions for safe storage, including any incompatibilities  
Keep container tightly closed in a dry and well-ventilated place. Storage class (TRGS 510): 13: Non Combustible Solids
- 7.3** Specific end use(s)  
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### Ingredients with workplace control parameters

Contains no substances with occupational exposure limit values.

### 8.2 Exposure controls

#### Appropriate engineering controls

General industrial hygiene practice.

Personal protective equipment Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact



## Skin protection

with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

## Body Protection

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

## Respiratory protection

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

## Control of environmental exposure

No special environmental precautions required.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

a) Appearance	Form: crystalline Color: white
b) Odor	odorless
c) Odor Threshold	No data available
d) pH	3.8 - 4.4 at 50 g/l at 25 °C (77 °F)
e) Melting point/freezing point	Melting point/freezing point: 197 °C (387 °F) at 1,013.25 hPa - OECD Test Guideline 102
f) Initial boiling point and boiling range	No data available
g) Flash point	()Not applicable
h) Evaporation rate	No data available
i) Flammability (solid, gas)	The product is not flammable. No
j) Upper/lower flammability or explosive limits	data available
k) Vapor pressure	< 0.001 hPa at 20 °C (68 °F) - OECD Test Guideline 104
l) Vapor density	No data available
m) Relative density	1.81 g/cm <sup>3</sup> at 20 °C (68 °F) - OECD Test Guideline 109
n) Water solubility	soluble
o) Partition coefficient: n-octanol/water	- Not applicable for inorganic substances No data
p) Autoignition temperature	available
q) Decomposition temperature	No data available



- |                         |                   |
|-------------------------|-------------------|
| r) Viscosity            | No data available |
| s) Explosive properties | No data available |
| t) Oxidizing properties | No data available |

## 9.2 Other safety information

Bulk density 1,000 kg/m<sup>3</sup>

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

No data available

### 10.2 Chemical stability

Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

No data available

### 10.4 Conditions to avoid

No data available

### 10.5 Incompatible materials

Strong oxidizing agents, Strong acids, sodium hypochlorite

### 10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Nitrogen oxides (NO<sub>x</sub>), Oxides of phosphorus  
Other decomposition products - No data available In the event of fire: see section 5

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects Acute toxicity

LD50 Oral - Rat - male and female - > 2,000 mg/kg (OECD Test Guideline 425)

LC50 Inhalation - Rat - male and female - 4 h - > 5 mg/l (OECD Test Guideline 403)

Remarks: (in analogy to similar products)

LD50 Dermal - Rat - male and female - > 5,000 mg/kg (OECD Test Guideline 402)

No data available

Skin corrosion/irritation

Skin - Rabbit

Result: No skin irritation - 24 h (OECD Test Guideline 404)

Serious eye damage/eye irritation

Eyes - Rabbit

Result: No eye irritation (OECD Test Guideline 405)

**Respiratory or skin sensitization** Local lymph node assay (LLNA) - Mouse Result: negative (OECD Test Guideline 429)

Germ cell mutagenicity

No data available

In vitro mammalian cell gene mutation test mouse lymphoma cells

Result: negative

Ames test



S. typhimurium

Result: negative

Chromosome aberration test in vitro Chinese hamster ovary cells

Result: negative

Carcinogenicity

IARC: No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

NTP: No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

Additional Information

Repeated dose toxicity - Rat - male and female - Oral - NOAEL (No observed adverse effect level) - 250 mg/kg (in analogy to similar products) RTECS:

Not available

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

After uptake of large quantities:

Stomach/intestinal disorders, disturbed electrolyte balance., drop in blood pressure The following applies to ammonium salts in general: after swallowing: local irritation symptoms, nausea, vomiting, diarrhoea. Systemic effect: after the uptake of very large quantities: drop in blood pressure, collapse, CNS disorders, spasms, narcotic conditions, respiratory paralysis, haemolysis.

However, when the product is handled appropriately, hazardous effects are unlikely to occur.

Handle in accordance with good industrial hygiene and safety practice.

## SECTION 12: Ecological information

### 12.1 Toxicity

Toxicity to fish	static test LC50 - Oncorhynchus mykiss (rainbow trout) - > 100 mg/l - 96 h (OECD Test Guideline 203)
Toxicity to daphnia and other aquatic invertebrates	static test EC50 - Daphnia magna (Water flea) - > 100 mg/l - 48 h (OECD Test Guideline 202)
Toxicity to algae	static test ErC50 - Pseudokirchneriella subcapitata (green algae) - > 100 mg/l - 72 h (OECD Test Guideline 201)



Toxicity to bacteria static test EC50 - activated sludge - > 100 mg/l - 3 h (OECD Test Guideline 209)

**12.2 Persistence and degradability**

The methods for determining the biological degradability are not applicable to inorganic substances.

**12.3 Bioaccumulative potential**

No data available

**12.4 Mobility in soil**

No data available

**12.5 Results of PBT and vPvB assessment**

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

**12.6 Other adverse effects**

Depending on the concentration, phosphorus and/or nitrogen compounds may contribute to the eutrophication of drinking- water supplies.

Discharge into the environment must be avoided.

**SECTION 13: Disposal considerations**

**13.1 Waste treatment**

**methods Product**

Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging

Dispose of as unused product.

**SECTION 14: Transport information DOT (US)**

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

**SECTION 15: Regulatory information SARA 302 Components**

This material does not contain any components with a section 302 EHS TPQ.

SARA 313 Components

The following components are subject to reporting levels established by SARA Title III, Section 313:

SARA 311/312 Hazards

No SARA Hazards

Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.



## **SECTION 16: Other information**

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The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes.