

Shanghai Aladdin Biochemical Technology Co., Ltd.  
No. 809, Chuhua Branch Road, Fengxian District, Shanghai

# SAFETY DATA SHEET

Version: v1  
Revision Date: 2024-01-26  
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## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifiers

Product name : Potassium phosphate monobasic  
Product Number : P113041  
Brand : aladdin  
CAS-No. : 7778-77-0

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

Identified uses : Laboratory chemicals, Manufacture of substances.

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

Company : Shanghai Aladdin Biochemical Tech Co., Ltd  
Address : 36 Xinjinqiao Road, Shanghai  
Telephone : 400-620-6333  
Fax : no data available

### 1.4 Emergency telephone number

Emergency Phone : 0532-83889090

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

### 2.2 GHS Label elements, including precautionary statements

Pictogram : no data available  
Signal word : no data available  
Hazard statement(s)  
Precautionary statement(s)

### 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

Synonyms : Monopotassium phosphate Potassium dihydrogen phosphate prim.-

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Potassium phosphate  
Formula : KH<sub>2</sub>PO<sub>4</sub>  
Molecular weight : 136.09  
CAS No. : 7778-77-0  
EC-NO. : 231-913-4

| Component                     | Classification    | Concentration                                 |
|-------------------------------|-------------------|-----------------------------------------------|
| Potassium phosphate monobasic | no data available | for cell culture,for insect cell culture,≥99% |

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

General advice

Show this material safety data sheet to the doctor in attendance.

If inhaled

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

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Flush eyes with water as a precaution.

If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

### 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

no data available

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

Suitable extinguishing media

Water,Foam,Carbon dioxide (CO<sub>2</sub>),Dry powder

Unsuitable extinguishing media

no data available

### 5.2 Special hazards arising from the substance or mixture

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Phosphorus oxide potassium oxide is not combustible.

### 5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

### 5.4 Further information

Use water spray to cool unopened containers.

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## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Avoid inhalation of dusts. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8.

### 6.2 Environmental precautions

Do not let product enter drains.

### 6.3 Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

### 6.4 Reference to other sections

For disposal see section 13.

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## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

For precautions see section 2.2.

### 7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed. Store in a cool, dark, well-ventilated place. moisture Sensitive.

### 7.3 Specific end use(s)

no data available

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## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

### 8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

#### Personal protective equipment

##### Eye/face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN166(EU).

##### Skin protection

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 with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it.

##### Body Protection

Complete suit protecting against chemicals, Flame retardant antistatic protective clothing., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

##### Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a fullface respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

##### Control of environmental exposure

If safety requires, prevent further leakage or spillage. Do not let the product enter the sewer.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

|                                                 |                   |
|-------------------------------------------------|-------------------|
| a) Appearance                                   | no data available |
| b) Odour                                        | no data available |
| c) Odour Threshold                              | no data available |
| d) pH                                           | no data available |
| e) Melting point/freezing point                 | no data available |
| f) Initial boiling point and boiling range      | no data available |
| g) Flash point                                  | no data available |
| h) Evaporation rate                             | no data available |
| i) Flammability (solid, gas)                    | no data available |
| j) Upper/lower flammability or explosive limits | no data available |
| k) Vapour pressure                              | no data available |

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|                                           |                   |
|-------------------------------------------|-------------------|
| l) Vapour density                         | no data available |
| m) Relative density                       | no data available |
| n) Water solubility                       | no data available |
| o) Partition coefficient: n-octanol/water | no data available |
| p) Auto-ignition temperature              | no data available |
| q) Decomposition temperature              | no data available |
| r) Viscosity                              | no data available |
| s) Explosive properties N                 | no data available |
| t) Oxidizing properties N                 | no data available |

## 9.2 Other safety information

no data available

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## 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

Strong heating (decomposition)

### 10.5 Incompatible materials

Strong oxidants

### 10.6 Hazardous decomposition products

no data available

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## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

Acute toxicity

LD50 Oral-Rat-Female-> 2,000 mg/kg

(OECD Test Guideline 420)

Remarks: Corresponding values are specified for the following substances: Dipotassium phosphate

LC50 inhalation-rat-male and female-4 h-> 0.83 mg/l

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(OECD Test Guideline 403)

Remarks: (Compared with similar products)

Corresponding values are specified for the following substances: monosodium phosphate

LD50 percutaneous-rabbit-male and female-> 2,000 mg/kg

(OECD Test Guideline 402)

Skin corrosion/irritation

Skin-Rabbit Results: No skin irritation-4 hours (Draize Test) Remarks: (ECHA)

Serious eye damage/eye irritation

Eyes-Rabbit Results: No eye irritation-30 S (Draize Test) Remarks: (ECHA)

Respiratory or skin sensitisation

no data available

Germ cell mutagenicity

Test Type: Micronucleus Test Test System: Human Lymphocyte Metabolism Activation: With or Without Metabolic

Activation Method: OECD Test Guideline 487 Result: Negative Test Type: In Vitro Mammalian Cell Gene Mutation

Test Test System: Mouse Lymphoma Cells Metabolism activation: With or without metabolic activation Result:

Negative Remarks: (ECHA)

Carcinogenicity

no data available

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

Irritation, malaise, nausea, diarrhea, vomiting, stomach pain

As far as we know, the chemical, physical and toxic properties have not been fully studied.

The nature of the hazard cannot be ruled out, but it should not happen if handled correctly.

Avoid inhaling dust, even if non-reactive dust is inhaled, it will still hinder the function of the respiratory organs.

## SECTION 12: Ecological information

### 12.1 Toxicity

Toxicity to fish semi-static test LC50-Oncorhynchus mykiss (rainbow trout)-> 100 mg/l-96 h

(OECD Test Guideline 203)

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No ridge to water flea and other aquatic species

Toxicity of Vertebral Animals

Static test EC50-Daphnia magna (Water flea)-> 100 mg/l-48 h

(OECD Test Guideline 202)

Toxicity to algae static test ErC50-Desmodesmus subspicatus (green algae)-> 100 mg/l-72 h

(OECD Test Guideline 201)

Toxicity to bacteria static test EC50-activated sludge-> 1,000 mg/l-3 h

(OECD Test Guideline 209)

Static test NOEC-activated sludge-> 1,000 mg/l-3 h

(OECD Test Guideline 209)

## 12.2 Persistence and degradability

no data available

## 12.3 Bioaccumulative potential

No bioaccumulation.

## 12.4 Mobility in soil

no data available

## 12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

## 12.6 Other adverse effects

no data available

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## SECTION 13:

### 13.1 Disposal considerations

Product

Recycle to process, if possible. Consult your local regional authorities and an expert of disposal. You may be able to dissolve or mix material with a combustible solvent and little by little burn in a chemical incinerator equipped with an afterburner and scrubber system. If a large amount of the substance is burned at a time, an explosion may occur. Observe all federal, state and local regulations when disposing of the substance.

Contaminated packaging

Dispose of as unused product.

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## SECTION 14: Transport information

### DOT (US)

|                                           |                                            |                                             |
|-------------------------------------------|--------------------------------------------|---------------------------------------------|
| UN number: no data available              | Packing group: no data available           | Class: no data available                    |
| Proper shipping name: Not dangerous goods | Reportable Quantity(RQ): no data available | Poison Inhalation Hazard: no data available |
| Environmental Hazards: No                 |                                            |                                             |

### IMDG

|                                           |                                  |                           |
|-------------------------------------------|----------------------------------|---------------------------|
| UN number: no data available              | Packing group: no data available | EMS-No: no data available |
| Proper shipping name: Not dangerous goods |                                  |                           |

### IATA

|                                           |                                  |                          |
|-------------------------------------------|----------------------------------|--------------------------|
| UN number: no data available              | Packing group: no data available | Class: no data available |
| Proper shipping name: Not dangerous goods |                                  |                          |

## SECTION 15: Regulatory information

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

## SECTION 16: Other information

### Further information

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