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**Safety Data Sheet**

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<b>Product Name</b>	<b>Sodium dihydrogen orthophosphate monohydrate</b>
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**SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**

**1.1. Product identification:**

**Product Description:** Sodium dihydrogen orthophosphate monohydrate

**Synonyms:** Dihydrogen sodium phosphate monohydrate, Sodium Phosphate Monobasic Monohydrate

**CAS-No:** 10049-21-5

**EC-No.:** 231- 449-2

**Molecular Formula:** NaH<sub>2</sub>PO<sub>4</sub>· H<sub>2</sub>O

**REACH Registration No:** A registration number is not available for this substance as the substance or its uses are exempted from registration according to Article 2 Reach Regulation (EC) No 1907/2006, the annual tonnage does not require a registration, or the registration is envisaged for a later registration deadline.

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

**Recommended Use:** Laboratory chemicals, Manufacture of substances

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

- **Company** **Finar Limited**  
184-186/P, Chacharwadi Vasna,  
Sarkhej-Bavla Highway,  
Ta.: Sanand, Dist.: Ahmedabad-382110, Gujarat, India.  
Web: [www.finarchemicals.com](http://www.finarchemicals.com)
- **E-Mail Address** [safety.finar@aceto.com](mailto:safety.finar@aceto.com); [info.finar@aceto.com](mailto:info.finar@aceto.com)

**1.4. Emergency Telephone Number:**

- For Emergency contact on: +91 - 2717 - 616 717

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**SECTION 2: HAZARDS IDENTIFICATION**

**2.1. Classification of the substance or mixture:**

This substance is not classified as dangerous according to European Union legislation.

**2.2. Label Elements:**

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

**2.3. Other Hazards:**

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.

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

**3.1. Substances:** Sodium dihydrogen orthophosphate monohydrate

**3.2. Mixtures:**

<b>Component</b>	<b>CAS-No</b>	<b>EC-No.</b>	<b>Weight %</b>
Sodium dihydrogen orthophosphate monohydrate	10049-21-5	231-449-2	>98%

**SECTION 4: FIRST AID MEASURES**

**4.1. Description of first aid measures:**

- General advice:**

Consult a physician. Show this safety data sheet to the doctor in attendance.

- If inhaled:**

Fresh air.

- If Contact with skin:**

Take off immediately all contaminated clothing. Rinse skin with water/ shower.

- In case of eye contact:**

Rinse out with plenty of water. Remove contact lenses.

- If swallowed:**

Make victim drink water (two glasses at most). Consult doctor if feeling unwell.

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**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-** Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable Extinguishing Media-** For this substance/mixture no limitations of extinguishing agents are given.

**5.2. Special hazards arising from the substance or mixture:**

Oxides of phosphorus

Sodium oxides

Not combustible.

Ambient fire may liberate hazardous vapours.

Fire may cause evolution of: Oxides of phosphorus

**5.3. Advice for firefighters:**

In the event of fire. Wear self-Contained breathing apparatus.

**5.4 Further Information:**

Suppress (knock down) gases/vapours/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

### **SECTION 6: ACCIDENTAL RELEASE MEASURES**

**6.1. Personal precautions, protective equipment and emergency procedures:**

Advice for non-emergency personnel: Avoid inhalation of dusts. Evacuate the danger area, observe emergency procedures, consult an expert.

Protective equipment see section 8.

**6.2. Environmental precautions:**

Do not let product enter drains.

**6.3. Methods and material for containment and cleaning up:**

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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 Sections 13.

## **SECTION 7: HANDLING AND STORAGE**

### 7.1. Precautions for safe handling:

Wear personal protective equipment. Ensure adequate ventilation. Avoid ingestion and inhalation. Avoid contact with skin, eyes and clothing. Avoid dust formation.

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

Keep containers tightly closed in a dry and well-ventilated place.

### 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.

### 8.2. Exposure Controls:

#### **Appropriate Engineering Controls:**

Change contaminated clothing. Wash hands after working with substance.

#### **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). Safety glasses.

##### **Hand Protection –**

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: [www.kcl.de](http://www.kcl.de)).

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Full contact: -

- Material: Nitrile rubber
- Minimum layer thickness: 0.11 mm
- Break through time: 480 min
- Material tested:KCL 741 Dermatril® L

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: [www.kcl.de](http://www.kcl.de)).

Splash contact: -

- Material: Nitrile rubber
- Minimum layer thickness: 0.11 mm
- Break through time: 480 min
- Material tested:KCL 741 Dermatril® L

- **Body Protection-**

Wear appropriate protective gloves and clothing to prevent skin exposure.

- **Respiratory Protection-**

Required when dusts are generated.

Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

Recommended Filter type: Filter type P1

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer.

These measures have to be properly documented.

- **Environmental Exposure Controls-**

Do not let product enter drains.

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**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES****9.1. Information on basic physical and chemical properties:**

- **Appearance:** White
- **Form:** Crystalline
- **Physical State:** Solid
- **Odor:** Odorless
- **Odor Threshold:** No data available
- **pH:** 4.1 - 4.5 at 20°C 5% aq. solution
- **Melting Point:** 100°C
- **Critical Temperature:** No data available
- **Vapor Pressure:** No data available
- **Relative Vapor Density:** No data available
- **Bulk Density:** Ca.880 kg/cm<sup>3</sup>
- **Specific Gravity:** No data available
- **Ignition Temperature:** Not combustible
- **Decomposition Temperature:** > 100°C
- **Volatility:** No data available
- **Viscosity, dynamic:** No data available
- **Viscosity, Kinematic:** No data available
- **Water/Oil Dist. Co eff.:** No data available
- **Ionicity (in Water):** No data available
- **Lower Explosion Limit:** No data available
- **Upper Explosion Limit:** No data available
- **Boiling Point/Range:** No data available
- **Flash Point:** No data available
- **Water Solubility:** Soluble

**9.2. Other information:**

- **Molecular Formula:** NaH<sub>2</sub>PO<sub>4</sub> . H<sub>2</sub>O
- **Molecular Weight:** 137.99 g/mol

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**SECTION 10: STABILITY AND REACTIVITY****10.1. Reactivity:**

No data available

**10.2. Chemical stability:**

The product is chemically stable under standard ambient conditions (room temperature) .

**10.3. Possibility of hazardous reactions:**

No data available

**10.4. Conditions to avoid:**

Incompatible products. Excess heat. Avoid dust formation. Hygroscopic

**10.5. Incompatible materials:**

Strong oxidizing agents, Strong acids.

**10.6. Hazardous decomposition products:**

Sodium oxides, Oxides of phosphorus.

**SECTION 11: TOXICOLOGICAL INFORMATION****11.1 Information on toxicological effects:****Acute Oral toxicity**

LD50 Oral - Rat - > 2.000 mg/kg

(OECD Test Guideline 401)

LC50 Inhalation - Rat - male and female - 4 h - > 0.83 mg/l

(OECD Test Guideline 403)

Remarks: (highest concentration to be prepared)

LD50 Dermal - Rabbit - > 7.940 mg/kg

Remarks: (anhydrous substance) (IUCLID)

**Skin irritation**

Skin - Rabbit

Result: No skin irritation - 4 h

(OECD Test Guideline 404)

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**Eye irritation**

Eyes - Rabbit

Result: slight irritation

Remarks: (IUCLID)

**Sensitisation**

Sensitisation test: - Mouse

(OECD Test Guideline 429)

**Germ cell mutagenicity**

No data available

Mutagenicity (mammal cell test): micronucleus.

Human lymphocytes

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.

**Reproductive toxicity**

No data available

**Teratogenicity**

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

**11.2 Further Information:**

RTECS: Not available

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



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**SECTION 12: ECOLOGICAL INFORMATION****12.1. Toxicity:****Toxicity to fish**

LC0 - Leuciscus idus (Golden orfe) - ca. 2.400 mg/l - 48 h

(OECD Test Guideline 203)

Remarks: (anhydrous substance)

**Toxicity to daphnia and other aquatic invertebrates**

No data available

**Toxicity to algae**

No data available

**Toxicity to bacteria**

No data available

**12.2 Persistence and degradability:**

No data available

**12.3 Bioaccumulate potential:**

No data available

**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

Discharge into the environment must be avoided.

Depending on the concentration, phosphates may contribute to the eutrophication of water supplies.

**SECTION 13: Disposal considerations****13.1 Waste treatment methods:**

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

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**SECTION 14: Transport information**

	Land transport (ADR/RID)	Air transport (IATA)	Sea transport (IMDG)
14.1 UN number	-		
14.2 Proper shipping name	Not dangerous goods		
14.3 Class	-		
14.4 Packing group	-		
14.5 Environmentally hazardous	-		
14.6 Special precautions for user	-		
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not Relevant		

**SECTION 15: Regulatory information**

**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:**

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

**National legislation**

Seveso III: Directive 2012/18/EU of the : Not applicable

European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

**15.2 Chemical safety assessment:**

For this product a chemical safety assessment was not carried out.

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**SECTION 16: Other information****Training advice**

Provide adequate information, instruction and training for operators.

**References:** Not available

**Created:** 30/07/2021

**Updated On:** 27/09/2021

- **Disclaimer:**

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