

Product Name Sodium dihydrogen O-phosphate dihydrate

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identification:

Product Description: Sodium dihydrogen O-phosphate dihydrate

Synonyms: Sodium phosphate monobasic dihydrate

Monosodium phosphate dihydrate

Sodium phosphate, monobasic, dihydrate

CAS-No: 13472-35-0 **EC-No.:** 231-449-2

Molecular Formula: NaH₂PO₄. 2H₂O

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 reagents, pharmaceutical excipients

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

• E-Mail Address <u>safety.finar@aceto.com</u>; <u>info.finar@aceto.com</u>

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:

Labelling (REGULATION (EC) No 1272/2008)

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

2.3. Other Hazards:

None Known

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances: Sodium dihydrogen O-phosphate dihydrate

3.2. Mixtures:

Component	CAS-No	EC-No.	Weight %
Sodium dihydrogen O-phosphate dihydrate	13472-35-0	231-449-2	100%

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.

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:

Irritant effect.

4.3. Indication of any immediate medical attention and special treatment needed:

No information 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:

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.

Advice for emergency responders: 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:

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.



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6.4. Reference to other sections:

For disposal see Sections 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling:

Observe label precautions. Keep container dry. Do not ingest. Do not breathe dust.

In case of insufficient ventilation, wear suitable respiratory equipment.

If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes

Hygiene measures

Change contaminated clothing. Wash hands after working with substance.

7.2. Conditions for safe storage, including any incompatibilities:

Tightly closed. Dry

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:

Contains no substances with occupational exposure limit values.

8.2. Exposure Controls:

Appropriate Engineering Controls:

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.

See section 7.1.

Personal Protective Equipment:

Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of the hazardous substances handled. The chemical resistance of the protective equipment should be enquired at the respective supplier.

Eye & Face Protection-

Safety Goggles.



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Hand Protection -

Full contact:

Glove material: Nitrile Rubber

Glove thickness: 0.11 mm

Break through time: >480 min

Splash contact:

Glove material: Nitrile Rubber

Glove thickness: 0.11 mm

Break through time: >480 min

The protective gloves to be used must comply with the specifications of EC Directive 89/686/EEC and the related standard EN374, for example KCL 741 Dermatril® L (full contact), KCL 741 Dermatril® L (splash contact).

The breakthrough times stated above were determined by KCL in laboratory tests acc. to EN374 with samples of the recommended glove types.

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).

- Body Protection-

Wear appropriate protective gloves to prevent skin exposure.

- Respiratory Protection-

Required when dusts are generated.

Recommended Filter type: Filter P 1 (acc. to DIN 3181) for solid particles of inert substances

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: Crystal

• **Physical State:** Solid (Powder)

• Odor: Odorless

• Odor Threshold: No data available

pH: 4.5 at 12 g/l 25 °C
Melting Point: 60 °C

• Critical Temperature: No data available

• Vapor Pressure: No data available

• Relative Vapor Density: No data available

• Specific Gravity / Density: 1.915 g/cm³ at 20 °C

• Ignition Temperature: Not combustible

• **Decomposition Temperature:** > 60 °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: 850 g/l at 20 °C

• **Molecular Weight:** 156.01 g/mol

9.2. Other information:

Molecular Formula: NaH₂PO₄ . 2H₂O



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SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity:

See section 10.3

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:

Strong heating (decomposition)

10.5. Incompatible materials:

No data available

10.6. Hazardous decomposition products:

In the event of fire: see section 5.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects:

Acute Oral toxicity

LD50 Rat: 8,290 mg/kg

(anhydrous substance) (IUCLID)

Acute inhalation toxicity

No data available

Acute dermal toxicity

LD50 Rabbit: > 7,940 mg/kg

(anhydrous substance) (IUCLID)

Skin irritation

slight irritation

Eye irritation

No data available

Sensitisation



No data available

Germ cell mutagenicity

No data available

Carcinogenicity

No data available

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:

Hazardous properties cannot be excluded but are unlikely when the product is handled appropriately.

Handle in accordance with good industrial hygiene and safety practice.

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

(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:

Partition coefficient: n-octanol/water

log Pow: -3.96

(calculated)

(anhydrous substance) (Lit.) Bioaccumulation is not expected.

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:

Additional ecological information

Discharge into the environment must be avoided.

SECTION 13: Disposal considerations

13.1 Waste treatment methods:

Waste material must be disposed of in accordance with the national and local regulations.

Leave chemicals in original containers. No mixing with other waste.

Handle uncleaned containers like the product itself.

SECTION 14: Transport information

	Land transport (ADR/RID)	Air transport (IATA)	Sea transport (IMDG)
14.1 UN number	Not classified as d	Not classified as dangerous in the meaning of transport regulations.	
14.2 Proper shipping name	Not classified as d	angerous in the mea regulations.	nning of transport
14.3 Class	Not classified as dangerous in the meaning of transport regulations.		
14.4 Packing group	Not classified as d	angerous in the mea regulations.	nning of transport



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14.5 Environmentally hazardous	Not classified as dangerous in the meaning of transport regulations.	
14.6 Special precautions for user	Not classified as dangerous in the meaning of transport regulations.	
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:

National legislation

Storage class 10 - 13

15.2 Chemical safety assessment:

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

SECTION 16: Other information

Training advice

Provide adequate information, instruction and training for operators.

Labelling (67/548/EEC or 1999/45/EC)

The product does not need to be labelled in accordance with EC directives or respective national laws.

References: Not available

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