
Safety Data Sheet

Product Name	di-Sodium hydrogen orthophosphate dihydrate
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Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identification:**Product Description:** di-Sodium hydrogen orthophosphate dihydrate**Synonyms:** Sodium hydrogen phosphate dihydrate, Sodium phosphate dibasic dihydrate, Dibasic sodium phosphate dihydrate**CAS-No:** 10028-24-7**EC-No.:** 231-448-7**Molecular Formula:** $\text{Na}_2\text{HP O}_4 \cdot 2 \text{H}_2\text{O}$ **REACH Registration No:** A registration number is not available for this substance as the substance or its use 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 and Pharmaceutical excipient.**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** safety.finar@aceto.com; 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:****Classification according to Regulation (EC) No 1272/2008**

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

2.2. Label Elements:**Labeling according 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:** di-Sodium hydrogen orthophosphate dihydrate**3.2. Mixtures:**

Component	CAS-No	EC-No.	Weight %
di-Sodium hydrogen orthophosphate dihydrate	10028-24-7	231-448-7	>95

SECTION 4: FIRST AID MEASURES**4.1. Description of first aid measures:****• If inhaled**

Fresh air.

• In case of skin contact

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

• In case of eye contact

Rinse out with plenty of water.

• Ingestion

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

- **Most important symptoms and effects**

No information available.

- **Notes to Physician**

No information available.

4.2. Most important symptoms and effects, both acute and delayed:

Irritant effects

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:

Wear Self-contained breathing apparatus for firefighting if necessary.

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.

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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.

6.4. Reference to other sections:

For disposal see Sections 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Advice on safe handling
 Observe label precautions.
 Hygiene measures
 Change contaminated clothing. Wash hands after working with substance.

7.2. Conditions for safe storage:

Keep in a dry, cool and well-ventilated place. Keep container tightly closed.

7.3. Specific end use(s):

Apart from the uses mention 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.

- Individual protection measures: -**

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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.

- **Personal Protective Equipment:**

- **Eye & Face Protection-**

Safety Goggles

- **Skin Protection:** -Wear appropriate protective gloves and clothing to prevent skin exposure.

Full contact

Material:	Nitrile rubber
Minimum layer thickness:	0.11 mm
Break through time:	> 480 min

Splash contact

Material:	Nitrile rubber
Minimum layer 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).

- **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
- **Physical State:** Solid
- **Odor:** Odorless
- **pH:** 9.0 to 9.4 at 50 g/l 20°C
- **Molecular Weight:** 177.99 g/mol
- **Melting Point:** 92.5 °C
- **Critical Temperature:** No data available
- **Vapor Pressure:** No data available
- **Vapor Density:** No data available
- **Bilk Density:** ca. 850 - 1,000 kg/m³
- **Volatility:** No data available
- **Odor Threshold:** No data available
- **Partition Coefficient n-octanol/water:** No data available
- **Ionicity (in Water):** No data available
- **Boiling Point/Range:** No data available
- **Flash Point:** No data available
- **Specific Gravity / Density:** 2.1 g/cm³ at 20 °C
- **Solubility:** 93 g/l at 20 °C
- **Decomposition Temp.:** ca. 95 °C

9.2. Other information:

Molecular Formula: Na₂HP O₄* 2 H₂O

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity: See Section 10.3

10.2. Chemical stability: Releases water of crystallization when heated.

10.3. Possibility of hazardous reactions:

Exothermic reaction with: Strong acids, antipyrine, acetates

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- 10.4. **Conditions to avoid:** Strong Heating.
- 10.5. **Incompatible materials:** No information available
- 10.6. **Hazardous decomposition products:** In the event of fire: See section 5.
- 10.7. **Hazardous Polymerization:** No information available

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

LD50 Rat: > 2,000 mg/kg

OECD Test Guideline 401

(anhydrous substance)

Acute inhalation toxicity

No information available

Acute dermal toxicity

No information available

Skin irritation

Possible damages:

After long-term exposure to the chemical: slight irritation

Eye irritation

Possible damages:

After long-term exposure to the chemical: slight irritation

Sensitization

No information available

Germ cell mutagenicity

Genotoxicity in vitro

Ames test

Result: negative

(anhydrous substance) (National Toxicology Program)

Carcinogenicity

No information available

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Reproductive toxicity

No information available

Teratogenicity

No information available

Specific target organ toxicity - single exposure

No information available

Specific target organ toxicity - repeated exposure

No information available

Aspiration hazard

No information 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**LC50 *Gambusia affinis* (Mosquito fish): 467 mg/l; 48 h
(anhydrous substance) (Lit.)**Toxicity to daphnia and other aquatic invertebrates**EC50 *Daphnia magna* (Water flea): 1,089 mg/l; 48 h
(anhydrous substance) (Lit.)**12.2 Persistence and degradability:**

Biodegradability

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

12.3 Bio accumulative potential:

No information available.

12.4 Mobility in soil:

No information available.

12.5 Results of PBT and vPvB assessment:

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

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12.6 Other adverse effects:

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 dangerous in the meaning of transport regulations.		
14.2 Proper shipping name	Not classified as dangerous in the meaning of transport regulations.		
14.3 Class	Not classified as dangerous in the meaning of transport regulations.		
14.4 Packing group	Not classified as dangerous in the meaning of transport regulations.		
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.

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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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Disclaimer:

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