

**MATERIAL SAFETY DATA SHEET****Product Name:** Sodium orthophosphate dodecahydrate**CAS No.:** 10101-89-0**Version:** 0**1. Identification**

**Product Code** : 90248, 90558  
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**2. Composition/Information on Ingredients**

<b>Ingredient</b>	<b>CAS No</b>	<b>Percent</b>
SODIUM ORTHOPHOSPHATE DODECAHYDRATE	10101-89-0	98-100 %

**3. Hazards Identification**

**Hazard classification** : Not classified  
**Labels elements**  
**Hazard symbol** : No symbol  
**Signal word** : Warning.  
**Potential Health Effects: General** : Irritating to eyes, respiratory system and skin. Aqueous, highly alkaline solutions may produce caustic burns.

**Precautionary statement**  
**Inhalation** : Irritating to respiratory system.  
**Skin** : Irritating to skin. Aqueous, highly alkaline solutions may produce caustic burns.  
**Eye** : Causes eye irritation. Aqueous, highly alkaline solutions may produce caustic burns.  
**Ingestion** : May cause irritation of the gastrointestinal tract.  
**Chronic Effects** : May cause permanent tissue damage to the eyes and skin.  
**Routes of Exposure** : Skin and/or eye contact. Inhalation, Ingestion.  
**OSHA Regulatory Status** : This product is hazardous according to OSHA 29CFR 1910.1200.  
**Environment** : The product may affect the acidity (pH-factor) in water with risk of harmful effects to aquatic organisms.

**MATERIAL SAFETY DATA SHEET****Product Name:** Sodium orthophosphate dodecahydrate**CAS No.:** 10101-89-0**Version:** 0**4. First Aid Measures**

- General information** : Get medical advice/attention if you feel unwell. If medical advice is needed, have product container or label at hand. Show this safety data sheet to the doctor in attendance.
- Ingestion** : Rinse mouth. Call a POISON CENTER or doctor/physician if you feel unwell.
- Inhalation** : Move to fresh air. Get medical attention if symptoms occur.
- Skin contact** : Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention immediately. Wash contaminated clothing before reuse. Destroy or thoroughly clean contaminated shoes.
- Eye contact** : Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention immediately.
- Ingestion** : Do NOT induce vomiting. Drink a few glasses of water or milk. Never give liquid to an unconscious person. Get medical attention.

**5. Fire fighting measures****Suitable (and unsuitable) extinguishing media**

- Suitable extinguishing media** : The product is non-combustible. Use fire-extinguishing media appropriate for surrounding materials.
- Unsuitable extinguishing media** : None known.
- Specific hazards arising from the chemical** : Aqueous solutions are highly caustic. Wear appropriate protective gear.
- Special protective equipment and precautions for firefighters**

- Special fire fighting procedures** : Move containers from fire area if you can do so without risk. Use water spray to keep fire-exposed containers cool. Cool containers exposed to flames with water until well after the fire is out.
- Special protective equipment for fire-fighters** : Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

**6. Accidental Release Measures**

- Personal precautions, protective equipment and emergency procedures** : Ventilate closed spaces before entering them. Keep unauthorized personnel away. Avoid inhalation of dust. Avoid contact with spilled material.
- Methods and material for containment and cleaning up** : Sweep up and place in a clearly labeled container for chemical waste. Clean surface thoroughly to remove residual contamination.
- Notification Procedures** : Prevent entry into waterways, sewer, basements or confined areas. Inform authorities if large amounts are involved.

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**Environmental precautions** : Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

**7. Handling and Storage**

**Precautions for safe handling** : Use personal protective equipment as required. Avoid contact with eyes, skin, and clothing. Avoid inhalation of dust. Wash thoroughly after handling.

**Conditions for safe storage, including any incompatibilities** : Keep containers tightly closed. Store in cool, dry place. Store in a well-ventilated place.

**8. Exposure Controls Personal Protection****Control parameters**

**Occupational exposure limits** : None of the components have assigned exposure limits

**Appropriate engineering controls** : No data available.

**Individual protection measures, such as personal protective equipment**

**General information** : Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

**Eye/face protection** : Use tight fitting goggles if dust is generated.

**Hand protection** : Wear protective gloves.

**Other** : Wear suitable protective clothing.

**Respiratory protection** : In case of inadequate ventilation use suitable respirator.

**Hygiene measures** : Provide eyewash station and safety shower. Observe good industrial hygiene practices. Wash hands before breaks and immediately after handling the product. Do not eat, drink or smoke when using the product. Take off contaminated clothing and wash before reuse.

**9. Physical and Chemical Properties**

**Appearance** : Solid white Crystalline Powder.

**Odor** : Odorless

**pH** : No data available.

**Melting point/freezing point** : 73 °C

**Initial boiling point and boiling range** : Decomposes

**Flash Point** : Not applicable

**Vapor pressure** : No data available

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**Vapor density** : No data available  
**Relative density** : 1.62  
**Solubility in water** : Appreciable  
**Solubility (other)** : No data available.  
**Formula** : Na<sub>3</sub>PO<sub>4</sub>.12H<sub>2</sub>O  
**Molecular Weight** : 380.12 g/mol

**10. Stability and Reactivity**

**Reactivity** : No dangerous reaction known under conditions of normal use.  
**Chemical stability** : Material is stable under normal conditions.  
**Possibility of hazardous reactions** : Hazardous polymerization does not occur.  
**Conditions to avoid** : Reacts violently with strong acids. Heat, sparks, flames.  
**Incompatible materials** : Acids.  
**Hazardous decomposition products** : Sodium oxides oxides of phosphorus

**11. Toxicological Information****Information on likely routes of exposure**

**Ingestion** : Irritating. May cause nausea, stomach pain and vomiting.  
**Inhalation** : May cause irritation to the respiratory system.  
**Skin contact** : Causes skin irritation.  
**Eye contact** : Causes serious eye irritation.

**Information on toxicological effects****Acute toxicity (list all possible routes of exposure)**

**Oral Product** : LD 50 (Rat): 7,400 mg/kg  
**Dermal Product** : No data available  
**Inhalation Product** : No data available  
**Repeated dose toxicity Product** : No data available.  
**Skin corrosion/irritation Product** : May cause skin irritation.  
**Serious eye damage/eye irritation Product** : May irritate eyes.  
**Respiratory or skin sensitization Product** : Not a skin sensitizer.  
**Carcinogenicity Product** : This substance has no evidence of carcinogenic properties.  
**IARC Monographs on the Evaluation of Carcinogenic Risks to Humans DIOXANE** : No carcinogenic components identified.  
**US. National Toxicology Program (NTP) Report on Carcinogens** : No carcinogenic components identified.

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- US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)** : No carcinogenic components identified.
- Germ cell mutagenicity**
- In vitro Product** : No mutagenic components identified.
- In vivo Product** : No mutagenic components identified.
- Reproductive toxicity Product** : No components toxic to reproduction.
- Specific target organ toxicity - single exposure Product** : No data available.
- Specific target organ toxicity - repeated exposure Product** : No data available.
- Aspiration hazard Product** : Not classified.
- Other effects** : None known.

**12. Ecological Information****Ecotoxicity****Acute hazards to the aquatic environment :**

- Fish Product** : No data available.
- Aquatic invertebrates Product** : No data available.

**Chronic hazards to the aquatic environment :**

- Fish Product** : No data available.
- Aquatic invertebrates Product** : No data available.
- Toxicity to Aquatic Plants Product:** : No data available.

**Persistence and degradability**

- Biodegradation Product** : There are no data on the degradability of this product.

- BOD/COD ratio Product** : No data available.

**Bioaccumulative potential**

- Bioconcentration factor (BCF) Product** : No data available on bioaccumulation.

**Product**

- Partition coefficient n-octanol / water (log Kow) Product** : No data available.

**Mobility in soil**

- Mobility in soil** : The product is water soluble and may spread in water systems.

- Other adverse effects** : The product may affect the acidity (pH-factor) in water with risk of harmful effects to aquatic organisms.

**13. Disposal consideration**

- Disposal instructions** : Discharge, treatment, or disposal may be subject to national, state, or local laws.

- Contaminated packaging** : Since emptied containers retain product residue, follow label warnings even after container is emptied.

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## 14. Transport Information

	UN No.	UN proper shipping name	Hazard Class(es)	Packaging group	Marine Pollutant
<b>DOT</b>			Not regulated.		
<b>IMDG</b>			Not regulated.		
<b>IATA</b>			Not regulated.		

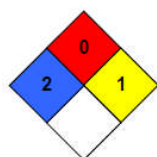
## 15. Regulatory Information

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

Safety, health and environmental regulations/legislation specific for the substance or mixture  
No Data Available.

## 16. Other Information

### NFPA Hazard ID



■ Flammability  
■ Health  
■ Reactivity  
 Special hazard.

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe

**Issue Date :**01/08/2014

**Version : 0**

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