

Manufacturer: Sinchem Industry Co., Limited  
Add: No.500 Xinglong Road, Xiamen, China  
Contact: Mr. Wang Tel:0086-592-2237696  
E-mail:market@sinchemind.com  
www.sinchemind.com

# Trisodium Phosphate **MSDS**

## 1. Product Identification

### 1.1. Identification of the substance or preparation

Product name : [Trisodium Phosphate](#)

Synonyms: 12-Hydrate; Phosphoric Acid, Trisodium Salt, Dodecahydrate

CAS No.: 7601-54-9 (Anhydrous) 10101-89-0 (Dodecahydrate)

Molecular Weight: 380.12

Chemical Formula: Na<sub>3</sub>PO<sub>4</sub> · 12H<sub>2</sub>O

Product Codes: 3836, 3840

### 1.2. Company/Undertaking Identification

Address : P.O.Box. 139 Gulou Post Office

Nanjing, 210008 China

### 1.3. Emergency and contact telephone numbers

Emergency telephone: +86-25-8471 2605

Contact telephone number : +86-25-8471 5120 (Product information)

## 2. Composition/Information on Ingredients

Ingredient	CAS No	Percent	Hazardous
-----	-----	-----	-----
Sodium Phosphate, Tribasic	7601-54-9	98 - 100%	Yes

## 3. Hazards Identification

### 3.1 Emergency Overview

WARNING! HARMFUL IF SWALLOWED OR INHALED. CAUSES IRRITATION TO SKIN, EYES AND RESPIRATORY TRACT. SAF-T-DATA(tm) Ratings (Provided here for your convenience)

[It's worth it, safety comes first.](#)

**Manufacturer: Sinchem Industry Co., Limited**  
**Add: No.500 Xinglong Road, Xiamen, China**  
**Contact: Mr. Wang Tel:0086-592-2237696**  
**E-mail:market@sinchemind.com**  
**www.sinchemind.com**

**3.2Health Rating: 2** - Moderate

**3.3Flammability Rating: 0** - None

**3.4Reactivity Rating: 1** - Slight

**3.5Contact Rating: 2** - Moderate

**3.6Lab Protective Equip:** GOGGLES; LAB COAT; VENT HOOD; PROPER GLOVES

**3.7Storage Color Code:** Green (General Storage)

### **3.8Potential Health Effects**

Inhalation:

Causes irritation to the respiratory tract. Symptoms may include coughing, shortness of breath.

Behaves as a moderately strong alkali; intense exposure may result in the destruction of mucous membranes. May cause asthmatic bronchitis, chemical pneumonitis, or pulmonary edema.

Ingestion:

Causes irritation to the gastrointestinal tract. Symptoms may include nausea, vomiting and diarrhea. May cause mild burning of mouth, throat, and stomach. Its alkaline nature may injure the esophagus and digestive tract. Aqueous, highly alkaline solutions may produce caustic burns.

Skin Contact:

Causes irritation to skin. Symptoms include redness, itching, and pain. Extent of damage depends on duration of contact. More serious effects may occur if the skin is moist. Aqueous, highly alkaline solutions may produce caustic burns.

Eye Contact:

Causes irritation to eyes, may be severe with possible corneal damage. Aqueous, highly alkaline solutions may produce caustic burns.

Chronic Exposure:

Repeated exposure may cause symptoms similar to those listed for acute effects. May cause permanent tissue damage to the skin and eyes.

Aggravation of Pre-existing Conditions:

No information found.

*It's worth it, safety comes first.*

**Manufacturer: Sinchem Industry Co., Limited**  
**Add: No.500 Xinglong Road, Xiamen, China**  
**Contact: Mr. Wang Tel:0086-592-2237696**  
**E-mail:market@sinchemind.com**  
**www.sinchemind.com**

## **4. First Aid Measures**

### **4.1 Inhalation:**

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

### **4.2 Ingestion:**

Do NOT induce vomiting. Give large amounts of water. Never give anything by mouth to an unconscious person. Get medical attention.

### **4.3 Skin Contact:**

Immediately flush skin with plenty of soap and water for at least 15 minutes. Remove contaminated clothing and shoes. Get medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse.

### **4.4 Eye Contact:**

Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

## **5. Fire Fighting Measures**

## **6. Accidental Release Measures**

Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Spills: Sweep up and containerize for reclamation or disposal. Vacuuming or wet sweeping may be used to avoid dust dispersal. US Regulations (CERCLA) require reporting spills and releases to soil, water and air in excess of reportable quantities. The toll free number for the US Coast Guard National Response Center is (800) 424-8802.

## **7. Handling and Storage**

Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage. Containers of this material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings and precautions listed for the product.

## **8. Exposure Controls/Personal Protection**

### **8.1 Airborne Exposure Limits:**

*It's worth it, safety comes first.*

**Manufacturer: Sinchem Industry Co., Limited**  
**Add: No.500 Xinglong Road, Xiamen, China**  
**Contact: Mr. Wang Tel:0086-592-2237696**  
**E-mail:market@sinchemind.com**  
**www.sinchemind.com**

Trisodium phosphate:

-AIHA Workplace Environmental Exposure Limit:5 mg/m<sup>3</sup> (15-minute STEL)

### **8.2 Ventilation System:**

A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, Industrial Ventilation, A Manual of Recommended Practices, most recent edition, for details.

### **8.3 Personal Respirators (NIOSH Approved):**

If the exposure limit is exceeded and engineering controls are not feasible, a full facepiece respirator with high efficiency particulate filter (NIOSH type N100 filter) may be worn up to 50 times the exposure limit or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is lowest. If oil particles (e.g. lubricants, cutting fluids, glycerine, etc.) are present, use a NIOSH type Ror P filter. For emergencies or instances where the exposure levels are not known, use a full-facepiece positive-pressure, air-supplied respirator. WARNING: Air purifying respirators do not protect workers in oxygen-deficient atmospheres.

### **8.4 Skin Protection:**

Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

### **8.5 Eye Protection:**

Use chemical safety goggles and/or full face shield where dusting or splashing of solutions is possible. Maintain eye wash fountain and quick-drench facilities in work area.

## **9. Physical and Chemical Properties**

### **9.1 Appearance:**

White crystalline solid.

### **9.2 Odor:**

Odorless.

### **9.3 Solubility:**

Appreciable (> 10%)

[It's worth it, safety comes first.](#)

**Manufacturer: Sinchem Industry Co., Limited**  
**Add: No.500 Xinglong Road, Xiamen, China**  
**Contact: Mr. Wang Tel:0086-592-2237696**  
**E-mail:market@sinchemind.com**  
**www.sinchemind.com**

**9.4 Specific Gravity:**

1.62

**9.5 pH:**

Strongly alkaline.

**9.6% Volatiles by volume @ 21C (70F):**

0

**9.7 Boiling Point:**

Decomposes.

**9.8 Melting Point:**

73.3 - 76.7C (163 - 171F)

**9.9 Vapor Density (Air=1):**

Not applicable.

**9.10 Vapor Pressure (mm Hg):**

Not applicable.

**9.11 Evaporation Rate (BuAc=1):**

No information found.

## **10. Stability and Reactivity**

**10.1 Stability:**

Stable under ordinary conditions of use and storage.

**10.2 Hazardous Decomposition Products:**

Sodium and phosphorus oxides may form when heated to decomposition.

**10.3 Hazardous Polymerization:**

Will not occur.

**10.4 Incompatibilities:**

Reacts violently with water and acids to liberate heat.

**10.5 Conditions to Avoid:**

Heat, flames, ignition sources and incompatibles.

## **11. Ecological Information**

.Environmental Fate:

No information found.

Environmental Toxicity:

No information found.

*It's worth it, safety comes first.*

**Manufacturer: Sinchem Industry Co., Limited**  
**Add: No.500 Xinglong Road, Xiamen, China**  
**Contact: Mr. Wang Tel:0086-592-2237696**  
**E-mail:market@sinchemind.com**  
**www.sinchemind.com**

## 12. Disposal Considerations

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

## 13. Transport Information

Not regulated

## 14. Regulatory Information

**Australian Hazchem Code:** None allocated.

**Poison Schedule:** None allocated.

## 15. Other Information

NFPA Ratings: Health: 2 Flammability: 0 Reactivity: 1

Label Hazard Warning:

WARNING! HARMFUL IF SWALLOWED OR INHALED. CAUSES IRRITATION TO SKIN, EYES AND RESPIRATORY TRACT.

Label Precautions:

Avoid contact with eyes, skin and clothing.

Wash thoroughly after handling.

Avoid breathing dust.

Keep container closed.

Use only with adequate ventilation.

Label First Aid:

If swallowed, DO NOT INDUCE VOMITING. Give large quantities of water. Never give anything by mouth to an unconscious person. If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes.

Wash clothing before reuse. In all cases, get medical attention.

*It's worth it, safety comes first.*

**Manufacturer: Sinchem Industry Co., Limited**  
**Add: No.500 Xinglong Road, Xiamen, China**  
**Contact: Mr. Wang Tel:0086-592-2237696**  
**E-mail:market@sinchemind.com**  
**www.sinchemind.com**

Product Use:

Laboratory Reagent.

Revision Information:

No Changes.

-General revision

-Distribute new edition to clients

The previous information is based upon our current knowledge and experience of our product and is not exhaustive. It applies to the product as defined by the specifications. In case of combinations or mixtures, one must confirm that no new hazards are likely to exist. In any case, the user is not exempt from observing all legal, administrative and regulatory procedures relating to the product, personal hygiene, and integrity of the work environment. (Unless noted to the contrary, the technical information applies only to pure product). To our actual knowledge, the information contained herein is accurate as of the date of this document. However, neither the company nor any of its affiliates makes any warranty, express or implied, including merchantability or fitness for use, or accepts any liability in connection with this information or its use. This information is for use by technically skilled persons at their own discretion and risk and does not relate to the use of this product in combination with any other substance or any other process. This is not a license under any patent or other proprietary right. The user alone must finally determine suitability of any information or material for any contemplated use in compliance with applicable law, the manner of use and whether any patents are infringed. This information gives typical properties only and is not to be used for specification purposes. The company reserves the right to make additions, deletions or modifications to the information at any time without prior notification. Trademarks and/or other products of the company referenced herein are either trademarks or registered trademarks of the company or its affiliates, unless otherwise indicated.

Copyright 2010. All Rights Reserved.

[It's worth it, safety comes first.](#)