

# SAFETY DATA SHEET

**Trisodium Phosphate, Dodecahydrate**

Prepared to U.S. OSHA, CMA, ANSI, Canadian WHMIS Standards, Australian WorkSafe, Japanese Industrial Standard JIS Z 7250:2000, Uruguay (Decree 307/2009 as amended by Decree 346/2011), SDS standards for Brazil (ABNT NRB 14725-4: 2014), and European Directives

## SECTION 1. PRODUCT IDENTIFICATION

### 1.1 TRADE NAME (AS LABELED):

**Trisodium Phosphate, Dodecahydrate**

#### SYNONYMS:

Phosphoric acid, trisodium salt dodecahydrate; Sodium Orthophosphate Dodecahydrate; Tribasic sodium phosphate

#### CAS#

10101-89-0

#### EC NUMBER:

600-151-8

#### REACH REGISTRATION #:

N/A

### 1.2 PRODUCT USE:

Emulsifier for processed cheese. Baking agent for cereals. Buffer for processed foods. Water Treatment: To precipitate hardness salts and to adjust alkalinity in boiling water. Corrosion control. Widely used in cleaning compounds of all types as a source of alkali and for its free rinsing properties.

### 1.3 MANUFACTURER'S NAME:

**Alliance Chemical**

#### ADDRESS:

204 South Edmond

#### BUSINESS PHONE:

512-365-6838

#### WEB SITE INFORMATION:

[www.alliancechemical.com](http://www.alliancechemical.com)

#### RESPONSIBLE PARTY - EU

### 1.4 EMERGENCY PHONE NUMBERS:

CHEMTEL (800) 255-3924 (24 Hours/Day, 7 Days/Week)

#### DATE OF PRIOR REVISION:

#### DATE OF LATEST REVISION:

## SECTION 2. HAZARD IDENTIFICATION

**EMERGENCY OVERVIEW:** This product is a white powder with no odor.

**Health Hazards:** May cause eye damage. May cause skin and / or respiratory irritation.

**Flammability Hazards:** This product is not flammable.

**Reactivity Hazards:** None.

**Environmental Hazards:** This product is not expected to have adverse effects to the aquatic environment.

### 2.1 GHS LABELING AND CLASSIFICATION:

This product does meet the definition of a hazardous substance or preparation as defined by 29 CFR 1910. 1200 and regulation (EU) No. 2015/830 and regulation (EC) No. 1272/2008.

#### **Index Number:**

Components are not listed in Annex VI

Substances not listed either individually or in group entries must be self-classified.

#### **Component(s) Contributing to Classification(s)**

Phosphoric acid, trisodium salt, dodecahydrate

### 2.2 LABEL ELEMENTS

GHS Hazard Symbol(s)



Signal Word: **Danger**

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## **GHS Hazard Classification(s):**

Skin Irritation Category 2

Eye Damage Category 1

Specific Target Organ Toxicity – Single Exposure – Category 3 (Respiratory Irritation)

## **Hazard Statement(s):**

H316 Causes skin irritation

H318 Causes serious eye damage

H335 May cause respiratory irritation

## **Prevention Statement(s):**

P261 Avoid breathing dusts/fume/gas/mist/vapours or spray.

P264 Wash thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves and eye/face protection.

## **Response Statement(s):**

P302+P352 IF ON SKIN: Wash with plenty of water.

P321 Specific treatment (see SDS Section 4 First-Aid Measures)

P332+P313 If skin irritation occurs: Get medical advice/attention.

P362+P364 Take off contaminated clothing and wash it before reuse.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER/doctor.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P312 Call a POISON CENTER/doctor if you feel unwell.

## **Storage Statement(s):**

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

## **Disposal Statement(s):**

P501 Dispose of contents/container in accordance with local/ regional/ national/ international regulations.

## **2.3 OTHER HAZARDS:**

None Applicable

## SECTION 3. COMPOSITION AND INFORMATION ON INGREDIENTS

Hazardous Ingredients:	WT %	CAS#	EINECS #	Hazard Classification
Phosphoric acid, trisodium salt, dodecahydrate	100%	10101-89-0	600-151-8	Eye Dam 1, Skin Irrit 2, STOT SE 3 (Resp Irrit)

## 4. FIRST-AID MEASURES

### **4.1 DESCRIPTION OF FIRST AID MEASURES:**

**EYE CONTACT:** If product enters the eyes, open eyes while under gentle running water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing for at least 15 minutes. Seek medical attention.

**SKIN CONTACT:** Wash skin thoroughly after handling. Seek medical attention if irritation develops and persists. Remove contaminated clothing. Launder before re-use.

**INHALATION:** If breathing becomes difficult, remove victim to fresh air. If necessary, use artificial respiration to support vital functions. Seek medical attention.

**INGESTION:** If large quantities of this product is swallowed, call physician or poison control center for most current information. If professional advice is not available, do not induce vomiting. Never induce vomiting or give diluents (milk or water) to someone who is unconscious, having convulsions, or who cannot swallow. Seek medical advice. Take a copy of the label and/or SDS with the victim to the health professional.

**MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:** Pre-existing skin, respiratory system or eye problems may be aggravated by prolonged contact.

### **4.2 SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED:**

Contact with eyes may cause damage. Inhalation may cause upper respiratory irritation. May cause skin irritation.

### **4.3 RECOMMENDATIONS TO PHYSICIANS:**

Treat symptoms and eliminate overexposure.

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## SECTION 5. FIRE-FIGHTING MEASURES

### 5.1 FIRE EXTINGUISHING MATERIALS:

Use fire extinguishing methods below:

Water Spray:	Yes	Carbon Dioxide:	Yes
Foam:	Yes	Dry Chemical:	Yes
Halon:	Yes	Other:	Any "C" Class

### 5.2 UNUSUAL FIRE AND EXPLOSION HAZARDS:

Under normal use, no special measures are required.

Explosion Sensitivity to Mechanical Impact: No

Explosion Sensitivity to Static Discharge: No

### 5.3 SPECIAL FIRE-FIGHTING PROCEDURES:

Incipient fire responders should wear eye protection. Structural firefighters must wear Self-Contained Breathing Apparatus and full protective equipment. Isolate materials not yet involved in the fire and protect personnel. Move containers from fire area if this can be done without risk; otherwise, cool with carefully applied water spray. If possible, prevent runoff water from entering storm drains, bodies of water, or other environmentally sensitive areas.

## SECTION 6. ACCIDENTAL RELEASE MEASURES

### 6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES:

To prevent skin and eye contact under the foreseeable conditions of use, wear appropriate protective clothing and safety eyewear. When handling, do not eat, drink, or smoke. Wash thoroughly after handling. Handle in a well-ventilated work area.

### 6.2 ENVIRONMENTAL PRECAUTIONS:

If possible, prevent entry to sewers, storm drains, surface waters, and soils.

### 6.3 SPILL AND LEAK RESPONSE:

Spilled product should be removed immediately to avoid formation of dust. Remove by mechanical means (i.e. vacuuming). Dilute remainder with plenty of water (avoid formation of aerosols). Ensure sufficient ventilation. Wash contaminated clothing.

## SECTION 7. HANDLING and STORAGE

### 7.1 PRECAUTIONS FOR SAFE HANDLING:

Use only with adequate ventilation. Handle and open container with care. Wear appropriate personal protective equipment, avoid direct contact. Avoid breathing dust. Avoid direct or prolonged contact with skin and eyes. Do not ingest. Potentially deadly carbon monoxide gas can form in enclosed areas or tanks when alkaline products contact materials that contain sugars. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco.

### 7.2 STORAGE AND HANDLING PRACTICES:

Keep away from incompatible materials. Keep in a dry, well-ventilated area in closed containers. Protect containers from physical damage.

### 7.3 SPECIFIC USES:

See Section 1.2.

## SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### 8.1 EXPOSURE PARAMETERS:

Chemical Name	CAS#	ACGIH TLV	OSHA TWA	EH40 TWA
Phosphoric acid, trisodium salt, dodecahydrate	10101-89-0	Not Listed	Not Listed	Not Listed

#### PARTICULATES NOT OTHERWISE REGULATED RESPIRABLE FRACTION

OSHA	$\frac{\text{TWA}}{5 \text{ mg/m}^3}$	NOM 010 STPS 2015	$\frac{\text{TWA}}{3 \text{ mg/m}^3}$
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#### PARTICULATES NOT OTHERWISE REGULATED TOTAL DUST

OSHA	$\frac{\text{TWA}}{15 \text{ mg/m}^3}$	NOM 010 STPS 2015	$\frac{\text{TWA}}{10 \text{ mg/m}^3}$
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## **8.2 EXPOSURE CONTROLS:**

**VENTILATION AND ENGINEERING CONTROLS:** Use with adequate ventilation to ensure exposure levels are maintained below the limits provided above.

*The following information on appropriate Personal Protective Equipment is provided to assist employers in complying with OSHA regulations found in 29 CFR Subpart I (beginning at 1910.132) or equivalent standard of Canada, or standards of EU member states (including EN 149 for respiratory PPE, and EN 166 for face/eye protection), and those of Japan. Please reference applicable regulations and standards for relevant details.*

**RESPIRATORY PROTECTION:** Not required for properly ventilated areas. Maintain airborne contaminant concentrations below guidelines listed above, if applicable. If necessary, use only respiratory protection authorized in the U.S. Federal OSHA Respiratory Protection Standard (29 CFR 1910.134), equivalent U.S. State standards, Canadian CSA Standard Z94.4-93, the European Standard EN149, or EU member states.

**EYE PROTECTION:** Safety glasses or goggles are recommended. If necessary, refer to U.S. OSHA 29 CFR 1910.133, Canadian Standards, and the European Standard EN166, Australian Standards, or relevant Japanese Standards.

**HAND PROTECTION:** Gloves are recommended to prevent skin contact. If necessary, refer to U.S. OSHA 29 CFR 1910.138, the European Standard DIN EN 374, the appropriate Standards of Canada, Australian Standards, or relevant Japanese Standards.

**BODY PROTECTION:** Use body protect appropriate to task being performed. If necessary, refer to appropriate Standards of Canada, or appropriate Standards of the EU, Australian Standards, or relevant Japanese Standards. If a hazard of injury to the feet exists due to falling objects, rolling objects, where objects may pierce the soles of the feet or where employee's feet may be exposed to electrical hazards, use foot protection, as described in U.S. OSHA 29 CFR 1910.136.

## **SECTION 9. PHYSICAL and CHEMICAL PROPERTIES**

### **9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES:**

**APPEARANCE (Physical State) and COLOR:** This product is a white powder

**ODOR:** Odorless

**ODOR THRESHOLD:** Not Available

**pH:** 11.8

**MELTING/FREEZING POINT:** Not Available

**BOILING POINT:** Not Available

**FLASH POINT:** Not available

**EVAPORATION RATE (n-BuAc=1):** Not Available

**FLAMMABILITY (SOLID, GAS):** Not Applicable

**UPPER/LOWER FLAMMABILITY OR EXPLOSION LIMITS:** Not Available

**VAPOR PRESSURE (mm Hg @ 20°C (68°F):** Not Available

**VAPOR DENSITY:** Not Available

**RELATIVE DENSITY:** Not Available

**SPECIFIC GRAVITY:** Not Available

**SOLUBILITY IN WATER:** Soluble

**WEIGHT PER GALLON:** Not Available

**PARTITION COEFFICIENT (n-octanol/water):** Not Available

**AUTO-IGNITION TEMPERATURE:** Not Available

**DECOMPOSITION TEMPERATURE:** Not Available

**VISCOSITY:** Not Available

**OXIDIZING PROPERTIES:** Not an Oxidizer

**EXPLOSIVE PROPERTIES:** Not explosive.

### **9.2 OTHER INFORMATION:**

No additional information available at this time.

## **SECTION 10. STABILITY and REACTIVITY**

### **10.1 REACTIVITY:**

No data available.

### **10.2 STABILITY:**

Stable under conditions of normal storage and use.

### **10.3 POSSIBILITY OF HAZARDOUS REACTIONS:**

Will not occur.

### **10.4 CONDITIONS TO AVOID:**

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Dusting conditions. Moisture. Incompatible materials.

## **10.5 MATERIALS WITH WHICH SUBSTANCE IS INCOMPATIBLE:**

Strong acids, magnesium.

## **10.6 HAZARDOUS DECOMPOSITION PRODUCTS:**

Oxides of phosphorus. Oxides of sodium.

## SECTION 11. TOXICOLOGICAL INFORMATION

### **11.1 INFORMATION ON TOXICOLOGICAL EFFECTS:**

**TOXICITY DATA:** No specific data available for this product.

Acute toxicity	Based on available data, the classification criteria are not met
Skin corrosion / irritation	Skin Irritation Category 2
Serious eye damage / irritation	Eye Damage Category 1
Respiratory or skin sensitization	Based on available data, the classification criteria are not met
Germ cell mutagenicity	Based on available data, the classification criteria are not met
Carcinogenicity	Based on available data, the classification criteria are not met
Reproductive toxicity	Based on available data, the classification criteria are not met
STOT-single exposure	Specific Target Organ Toxicity – Single Exposure Category 3 (Respiratory Irritation)
STOT-repeated exposure	Based on available data, the classification criteria are not met
Aspiration hazard	Based on available data, the classification criteria are not met

**ROUTE OF EXPOSURE:** The most significant routes of overexposure for this product are by contact with the skin or eyes. The symptoms of overexposure are described in the following paragraphs.

#### **ACUTE:**

**INHALATION:** May cause respiratory irritation.

**CONTACT WITH SKIN:** Exposure to skin may cause irritation.

**EYE CONTACT:** Contact with the eyes may cause damage.

**INGESTION:** Ingestion of large quantities may cause abdominal cramps, nausea, vomiting, diarrhea.

**CHRONIC:** No data available.

**TARGET ORGANS:** **Acute:** Skin, Eyes **Chronic:** No data available.

**SUSPECTED CANCER AGENT:** Ingredients within this product are not found on the following lists: FEDERAL OSHA Z LIST, NTP, IARC, or CAL/OSHA and therefore are not considered to be, nor suspected to be, cancer-causing agents by these agencies.

**IRRITANCY OF PRODUCT:** This product may be irritating to skin and eyes.

**SENSITIZATION TO THE PRODUCT:** No information available for this product.

**REPRODUCTIVE TOXICITY INFORMATION:** No specific information is available concerning the effects of this product and its components on the human reproductive system.

**SPECIFIC TARGET ORGAN TOXICITY – SINGLE EXPOSURE:** Respiratory Irritation.

**SPECIFIC TARGET ORGAN TOXICITY – REPEATED EXPOSURE:** Data not sufficient for classification.

**ASPIRATION HAZARD:** None

## SECTION 12. ECOLOGICAL INFORMATION

### **12.1 TOXICITY:**

No specific data available on this product.

### **12.2 PERSISTENCE AND DEGRADABILITY:**

No specific data available on this product.

### **12.3 BIOACCUMULATIVE POTENTIAL:**

No specific data available on this product.

### **12.4 MOBILITY IN SOIL:**

No specific data available on this product.

### **12.5 RESULTS OF PBT AND vPvB ASSESSMENT:**

No specific data available on this product.

### **12.6 OTHER ADVERSE EFFECTS:**

No specific data available on this product.

### **12.7 WATER ENDANGERMENT CLASS:**

No data available. At present there are no ecotoxicological assessments for this product.

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## SECTION 13. DISPOSAL CONSIDERATIONS

### 13.1 WASTE TREATMENT METHODS:

Waste disposal must be in accordance with appropriate U.S. Federal, State, and local regulations, those of Canada, Australia, EU Member States and Japan.

### 13.2 EU WASTE CODE:

Not determined.

## SECTION 14. TRANSPORTATION INFORMATION

US DOT, IATA, IMO, ADR:

**14.1 U.S. DEPARTMENT OF TRANSPORTATION (DOT) SHIPPING REGULATIONS:** This product is classified (per 49 CFR 172.101) by the U.S. Department of Transportation, as follows.

**UN IDENTIFICATION NUMBER:** None  
**PROPER SHIPPING NAME:** Non-Regulated Material  
**HAZARD CLASS NUMBER and DESCRIPTION:** None  
**UN IDENTIFICATION NUMBER:** None  
**PACKING GROUP:** None  
**DOT LABEL(S) REQUIRED:** None  
**NORTH AMERICAN EMERGENCY RESPONSE GUIDEBOOK NUMBER:** None  
**RQ QUANTITY:** None

**MARINE POLLUTANT:** The components of this product are not designated by the Department of Transportation to be Marine Pollutants (49 CFR 172.101, Appendix B).

**INTERNATIONAL AIR TRANSPORT ASSOCIATION SHIPPING INFORMATION (IATA):** This product is not considered as dangerous goods.

**INTERNATIONAL MARITIME ORGANIZATION SHIPPING INFORMATION (IMO):** This product is not considered as dangerous goods.

**EUROPEAN AGREEMENT CONCERNING THE INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY ROAD (ADR):** This product is not considered by the United Nations Economic Commission for Europe to be dangerous goods.

## SECTION 15. REGULATORY INFORMATION

### 15.1 SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS SPECIFIC FOR THE SUBSTANCE OR MIXTURE:

#### UNITED STATES REGULATIONS:

**U.S. SARA REPORTING REQUIREMENTS:** The components of this product are subject to the reporting requirements of Sections 302, 304, and 313 of Title III of the Superfund Amendments and Reauthorization Act as follows: None

**U.S. SARA 311/312:** None

**U.S. SARA THRESHOLD PLANNING QUANTITY:** There are no specific Threshold Planning Quantities for the components of this product.

**U.S. CERCLA REPORTABLE QUANTITY (RQ):** 5000 lb final RQ (listed under Sodium phosphate, tribasic)

**U.S. TSCA INVENTORY STATUS:** The components of this product are listed on the TSCA Inventory or are exempted from listing.

**OTHER U.S. FEDERAL REGULATIONS:** None known

**CALIFORNIA SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT (PROPOSITION 65):** No ingredients in this product are on the Proposition 65 lists.

#### 15.2 CANADIAN REGULATIONS:

**CANADIAN DSL/NDSL INVENTORY STATUS:** Components are DSL Listed, NDSL Listed and/or are exempt from listing.

**OTHER CANADIAN REGULATIONS:** Not applicable.

#### **CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA) PRIORITIES SUBSTANCES LISTS:**

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all of the information required by those regulations.

**CANADIAN WHMIS CLASSIFICATION and SYMBOLS:** This product is classified per 2015 WHMIS Hazardous Product Regulations.

#### 15.3 EUROPEAN ECONOMIC COMMUNITY INFORMATION:

This product does meet the definition of a hazardous substance or preparation as defined by the European Union Council Directives 67/548/EEC, 1999/45/EC, 1272/2008/EC and subsequent Directives.

See Section 2 for Details

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## CHEMICAL SAFETY ASSESSMENT :

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

**15.4 AUSTRALIAN INFORMATION FOR PRODUCT:** Components of this product are listed on the International Chemical Inventory list.

## 15.5 JAPANESE INFORMATION FOR PRODUCT:

**JAPAN INDUSTRIAL SAFETY AND HEALTH LAW:** This product has been classified per the Japan Industrial Safety and Health Law. See Section 2 for the GHS Classification.

## 15.6 INTERNATIONAL CHEMICAL INVENTORIES:

Listing of the components on individual country Chemical Inventories is as follows:

Asia-Pac: Listed

Australian Inventory of Chemical Substances (AICS): Listed

Korean Existing Chemicals List (ECL): Not Listed

Japanese Existing National Inventory of Chemical Substances (ENCS): Listed

Philippines Inventory of Chemicals and Chemical Substances (PICCS): Listed

Swiss Giftliste List of Toxic Substances: Not Listed

U.S. TSCA: Not Listed

Mexican Inventory of chemical substances (NOM 010 STPS 2015): Not Listed

## SECTION 16. OTHER INFORMATION

HMIS Rating (Scale 0-4)	NFPA Rating (Scale 0-4)
Health hazard: 2	Health hazard: 2
Flammability: 0	Flammability: 0
Physical Hazard: 0	Physical Hazard: 0

## Abbreviations and acronyms

<b>ACGIH</b>	<i>American Conference of Governmental Industrial Hygienists</i>
<b>CFR</b>	<i>Code of Federal Regulations</i>
<b>DOT</b>	<i>Federal Department of Transportation</i>
<b>GHS</b>	<i>The Globally Harmonized System of Classification and Labelling of Chemicals</i>
<b>HMIS</b>	<i>Hazardous Material Identification System</i>
<b>HCS</b>	<i>Hazard Communication Standard</i>
<b>IARC</b>	<i>International Agency for Research on Cancer</i>
<b>IATA</b>	<i>The International Air Transport Association</i>
<b>ICAO</b>	<i>The International Civil Aviation Organization</i>
<b>IMDG</b>	<i>International Maritime Dangerous Goods</i>
<b>IMO</b>	<i>International Maritime Organization</i>
<b>LD50/LC50</b>	<i>Lethal Concentration/Dose, 50 percent</i>
<b>NFPA</b>	<i>National Fire Protection Association</i>
<b>NIOSH</b>	<i>National Institute for Occupational Safety and Health</i>
<b>NTP</b>	<i>National Toxicology Program</i>
<b>OSHA</b>	<i>Occupational Safety and Health</i>
<b>PEL</b>	<i>Permissible Exposure Limit</i>
<b>SARA</b>	<i>Superfund Amendments and Reauthorization Act</i>
<b>TLV</b>	<i>ACGIH Threshold Limit Value</i>
<b>TWA</b>	<i>Time-Weighted Average</i>

PREPARED BY: Chris Eigbrett

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The information contained herein is believed to be accurate but is not warranted to be so. Data and calculations are based on information furnished by the manufacturer of the product and manufacturers of the components of the product. Users are advised to confirm in advance of the need that information is current, applicable and suited to the circumstances of use. assumes no responsibility for injury to vendee or third party person proximately caused by the material if reasonable safety procedures are no adhered to as stipulated in the data sheet. Furthermore, assumes no responsibility for injury caused by abnormal use of this material even if reasonable safety procedures are followed.

**END OF SDS SHEET**