

## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

### Identification

Product Name: TRISODIUM PHOSPHATE (CRYSTALLINE)  
Reference Number: AST10065  
Date: May 8, 2015  
Chemical Family: Phosphate Salts  
Chemical Name: Trisodium Orthophosphate  
Synonyms: Phosphoric Acid, Trisodium Salt Dodecahydrate, TSP Crystals, TSPC, TSP-X

### Use of the ingredient or preparation

Food ingredient, cleaning compound

### Company information

**ICL PERFORMANCE PRODUCTS LP**  
622 Emerson Road - Suite 500  
St. Louis, Missouri 63141



Emergency telephone: In USA call CHEMTREC: 1 800 424 9300  
In Canada call CANUTEC: 1 613 996 6666

Outside the USA, including ships at sea, call CHEMTREC's international and maritime telephone number (collect calls accepted): +1 (703) 527-3887

General Information: +1 800 244 6169 (Worldwide)

## 2. HAZARDS IDENTIFICATION

### GHS



GHS07

### Warning

Skin Irrit. 2 H315 Causes skin irritation.  
Eye Irrit. 2 H319 Causes serious eye irritation.  
STOT SE 3 H335 May cause respiratory irritation.

### Precautionary statements

P261 Avoid breathing dust.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.

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

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

P337+P313 If eye irritation persists: Get medical advice/attention.

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

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Composition

| <u>Substance</u>                  | <u>CAS No.</u> | <u>%w/w</u> | <u>EINECS No.</u> | <u>Risk Phrase</u> |
|-----------------------------------|----------------|-------------|-------------------|--------------------|
| Trisodium Phosphate Dodecahydrate | 10101-89-0     | 98          | *231-509-8        | None               |
| Sodium Hydroxide                  | 1310-73-2      | 1.8 – 2.0   | 215-185-5         | R35                |

\*Registration, classification, inventory and information found in Sections 2 through 16 for this product are based upon the anhydrous form of Trisodium Phosphate, Anhydrous.

### 4. FIRST AID MEASURES

#### General

Likely Routes of Exposure: Skin contact and inhalation

#### Eye Contact

Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove any contact lenses. Get medical attention. Remove material from eyes, skin and clothing.

#### Skin contact

Immediately flush the area with plenty of water. Remove contaminated clothing. Get medical attention if irritation persists. Wash clothing and thoroughly clean shoes before reuse.

#### Inhalation

Immediate first aid is not likely to be required. However, if symptoms occur, remove to fresh air.

#### Ingestion

Rinse mouth with water. Dilute by giving 1 or 2 glasses of water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention. A Poison Control Center can be contacted for advice.

### 5. FIRE FIGHTING MEASURES

#### Extinguishing media

Non-combustible. No special requirement. To extinguish fire use water, dry chemical, chemical foam, or alcohol-resistance foam.

#### Unsuitable extinguishable media

Non-combustible. No special requirement.

#### Exposure hazards

No special considerations.

#### Protective equipment

As a general precaution, firefighters and others exposed, wear self-contained breathing apparatus.

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions

Avoid unnecessary exposure and remove all material from eyes, skin and clothing.

### Environmental precautions

Small quantities: Avoid discharge into the environment

Large quantities: Avoid discharge into the environmental – See section 15

### Method for cleaning up

In case of spill, sweep, scoop or vacuum and remove. Flush residual spill area with water.

## 7. HANDLING AND STORAGE

### Handling:

Do not get in eyes, on skin, or on clothing. Avoid breathing dust. Keep container closed.

Use only with adequate ventilation. Wash thoroughly after handling.

### Engineering measures

Provide natural or mechanical ventilation to minimize exposure. The use of local mechanical exhaust ventilation is preferred at sources of air contamination such as open process equipment. Consult National Fire Protection Association (NFPA) Standard 91 for design of exhaust systems.

### Storage

Emptied container retains product residue. Observe all labeled safeguards until container is cleaned, reconditioned, or destroyed. Store in a cool, dry place to maintain product performance. Sealed containers should be kept free of water because of its corrosivity when wet.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Occupational Exposure limit

ACGIH TLV 10 mg/m<sup>3</sup> (inhalable) 8-hr TWA, 3 mg/m<sup>3</sup> (respirable) 8-hr TWA

OSHA PEL 15 mg/m<sup>3</sup> (total dust) 8-hr TWA, 5 mg/m<sup>3</sup> (respirable) 8-hr TWA

OSHA and ACGIH have not established specific exposure limits for this material. However, OSHA and ACGIH have established limits for particulates not otherwise regulated (PNOR) and particulates not otherwise classified (PNOC) which are the least stringent exposure limits applicable to dusts.

Components referred to herein may be regulated by specific Canadian provincial legislation. Please refer to exposure limits legislated for the province in which the substance will be used.

### Respiratory protection

Avoid breathing dust. In case of insufficient ventilation, use approved respiratory protective equipment as described in OSHA 29 CFR 1910.133 or European Standard EN 149.

### Hand/Skin protection

Wear appropriate protective clothing and chemical resistant gloves to prevent skin contact. Consult the glove/clothing manufacturer to determine the appropriate type glove/clothing for a given application. Wash immediately if skin is contaminated. Launder contaminated clothing and clean protective equipment before reuse. Provide a safety shower at any location where skin contact can occur. Wash thoroughly after handling.

### **Eye protection**

Wear appropriate protective eyeglasses or chemical safety goggles as described in OSHA 29 CFR 1910.133 or European Standard EN166.

## **9. PHYSICAL AND CHEMICAL PROPERTIES**

- a) Appearance: White Crystalline, free-flowing granules or powder
- b) Odor: None
- c) Odor threshold: Undetermined.
- d) pH: 12.0 (as a 1% solution @ 25 °C)
- e) Melting point/freezing point: Undetermined.
- f) Initial boiling point and boiling range: Undetermined.
- g) Flash point: Undetermined
- h) Evaporation rate: Undetermined.
- i) Flammability (solid, gas) : Undetermined.
- j) Upper/lower flammability or explosive limits: Undetermined.
- k) Vapor pressure: Undetermined.
- l) Vapor density: Undetermined.
- m) Relative density: Undetermined.
- n) Solubility(ies) : 21g / 100g saturated solution @ 25 °C
- o) Partition coefficient: n-octanol/water: Undetermined.
- p) Auto-ignition temperature: Undetermined.
- q) Decomposition temperature: Undetermined.
- r) Viscosity: Undetermined.

NOTE: These physical data are typical values based on material tested but may vary from sample to sample. Typical values should not be construed as a guaranteed analysis of any specific lot or as specifications for the product.

## **10. STABILITY AND REACTIVITY**

Product is stable under normal conditions of storage and handling.

### **Conditions to avoid**

None known.

### **Materials to avoid**

This material could be corrosive to aluminum surfaces because of high pH.

### **Hazardous decomposition**

None known.

## **11. TOXICOLOGICAL INFORMATION**

### **Laboratory data**

Data from ICL Performance Products LP single-dose (acute) animal studies with this material are given below:

Oral - rat LD<sub>50</sub>: 6,500 mg/kg; practically nontoxic  
Dermal - rabbit LD<sub>50</sub>: > 7,940 mg/kg; practically nontoxic  
Eye Irritation - rabbit (4-hr exp.): corrosive  
Skin Irritation - rabbit: 3.3/8.0; moderately irritating

The anhydrous form of this material produced no mutagenic effects in standard assays using fruit flies.

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This material has been defined as a hazardous chemical under the criteria of the OSHA Hazard Communication Standard (29 CFR 1910.1200).

## 12. ECOLOGICAL INFORMATION

### Environmental toxicity

The following data have been classified using the criteria adopted by the European Economic Community (EEC) for aquatic organism toxicity.

|                 |   |
|-----------------|---|
| Invertebrate:   | 48-hr EC <sub>50</sub> Daphnia magna: >1000 mg/L; Practically Nontoxic  |
| Warmwater Fish: | 96-hr LC <sub>50</sub> Bluegill sunfish: 440 mg/L; Practically Nontoxic |
| Coldwater Fish: | 96-hr LC <sub>50</sub> Rainbow trout: 260 mg/L; Practically Nontoxic    |

No definitive algal toxicity data was available for this material.

### Environmental fate

No definitive biodegradation data was available for this material.

## 13. DISPOSAL CONSIDERATIONS

### European waste catalog number

The data provided in this section is for information only. Please apply the appropriate classification for your waste.

06 03 07 Waste from inorganic chemical processes, waste salts and their solutions, phosphates and related solid salts

### Disposal Considerations

This material when discarded is not a hazardous waste as that term is defined by the Resource, Conservation and Recovery Act (RCRA), 40 CFR 261. Dry material may be landfilled or recycled in accordance with local, state and federal regulations. Consult your attorney or appropriate regulatory officials for information on such disposal.

## 14. TRANSPORT INFORMATION

The data provided in this section is for information only. Please apply the appropriate regulations to properly classify your shipment for transportation.

### Road/Rail, Sea and Air

IMDG/UN:

UN3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (sodium phosphate, tribasic), 9, III\*\*

ICAO/IATA:

UN3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (sodium phosphate, tribasic), 9, III\*\*

RID/ADR:

UN3077, Environmentally hazardous substance, solid, n.o.s. (sodium phosphate, tribasic), 9, III\*\*

Canadian TDG:

\* UN3077, Environmentally hazardous substance, solid, n.o.s. (sodium phosphate, tribasic), 9, III\*\*

\*Applies only when intended for disposal.

US DOT:

UN3077, Environmentally hazardous substance, solid, n.o.s. (sodium phosphate, tribasic\*\*), 9, III\*\*

\*\*Applies only to packages of 5000 lb or more containing a reportable quantity of sodium phosphate, tribasic.

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### 15. REGULATORY INFORMATION

#### Chemical Inventory

TSCA Inventory: Listed – Anhydrous TSP per 40 CFR 720.30(b)

DSL Inventory: Listed

WHMIS Classification; D2 (B) - Materials Causing Other Toxic Effects

SARA Hazard Notification

|   |                |
|---|----------------|
| Hazard Categories Under Title III Rules (40 CFR 370): | Immediate      |
| Section 302 Extremely Hazardous Substances:           | Not Applicable |
| Section 313 Toxic Chemical(s):                        | Not Applicable |

CERCLA Reportable Quantity: 5,000 lb RQ of Trisodium Phosphate Crystalline

Release of more than 5,000 pounds of this product to the environment in a 24-hour period requires notification to the National Response Center (800-424-8802 or 202-426-2675).

Refer to Section 11 for OSHA Hazardous Chemical(s) and Section 13 for RCRA classification

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulation and the MSDS contain all the information required by the Canadian Controlled Products Regulation.

### 16. OTHER INFORMATION

|                       | <u>Health</u> | <u>Fire</u> | <u>Reactivity</u> |   |
|-----------------------|---------------|-------------|-------------------|---|
| Suggested NFPA Rating | 3             | 0           | 0                 |   |
| Suggested HMIS Rating | 3             | 0           | 0                 | J |

J = splash goggles, gloves, synthetic apron, dust & vapor respirator

Reason for revision: Revised section 2, 3, 9. Supersedes MSDS dated: September 25, 2013  
Drafted in accordance with ECC Dir 2001/58/EC

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