Section 1: Identification of the Substance/Mixture and of the Company/Undertaking

1.1 Product identifier

Product Name: Sodium Tripolyphosphate
Synonyms: Pentasodium Triphosphate; STPP; Tripoly
SDS Number/Grade: 6
REACH Registration Number: 05-2118797182-33-0000

1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified use(s): Food applications for meat and seafood. A wide variety of processed food products including dairy and meat processing. Water Treatment. Sequestrant for alkaline metals, scale control, corrosion control, softening, lead control, red and black water control.

1.3 Details of the supplier of the safety data sheet

Manufacturer: Innophos
259 Prospect Plains Rd. Bldg A
Cranbury, NJ 08512-3706
United States

Telephone (Technical): 609-495-2495

1.4 Emergency telephone number

Manufacturer: 800-424-9300 - Chemtrec - within USA and Canada
Manufacturer: 615-386-7816 - Innophos Emergency Communication Team (ECT)
Manufacturer: +1 703-527-3887 - Chemtrec - outside USA and Canada (collect calls accepted)

Section 2: Hazards Identification

2.1 Classification of the substance or mixture

CLP: Skin Irritation 2 - H315
Eye Irritation 2 - H319

DSD/DPD: Irritant (Xi) R36/38

2.2 Label Elements

CLP: WARNING
**Hazard statements**
- H315 - Causes skin irritation
- H319 - Causes serious eye irritation

**Precautionary statements**

**Prevention**
- P264 - Wash thoroughly after handling.
- P280 - Wear protective gloves/protective clothing/eye protection/face protection.

**Response**
- P302+P352 - IF ON SKIN: Wash with plenty of soap and water.
- P321 - Specific treatment, see supplemental first aid information.
- P332+P313 - If skin irritation occurs: Get medical advice/attention.
- P362 - Take off contaminated clothing and wash 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.
- P337+P313 - If eye irritation persists: Get medical advice/attention.

**Risk phrases**
- R36/38 - Irritating to eyes and skin.

**Safety phrases**
- S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

**2.3 Other hazards**

**CLP**
- According to Regulation (EC) No. 1272/2008 (CLP) this material is considered hazardous.

**DSD/DPD**
- According to European Directive 1999/45/EC this material is considered dangerous.

**United States (US)**
According to OSHA 29 CFR 1910.1200 HCS

**2.1 Classification of the substance or mixture**

**OSHA HCS 2012**
- Skin Irritation 2 - H315
- Eye Irritation 2 - H319

**2.2 Label elements**

**OSHA HCS 2012**

**WARNING**

**Hazard statements**
- Causes skin irritation - H315
- Causes serious eye irritation - H319

**Precautionary statements**

**Prevention**
- Wash thoroughly after handling. - P264
- Wear protective gloves/protective clothing/eye protection/face protection. - P280

**Response**
- IF ON SKIN: Wash with plenty of soap and water. - P302+P352
- Specific treatment, see supplemental first aid information. - P321
- If skin irritation occurs: Get medical advice/attention. - P332+P313
- Take off contaminated clothing and wash before reuse. - P362
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. - P305+P351+P338
- If eye irritation persists: Get medical advice/attention. - P337+P313

**2.3 Other hazards**

**Preparation Date:** 15/November/2004
**Revision Date:** 29/January/2014

**Format:** EU CLP/REACH Language: English (US)
**WHMIS, EU CLP, EU DSD/DPD, OSHA HCS 2012**

**Page 2 of 14**
Canada
According to WHMIS

2.1 Classification of the substance or mixture

WHMIS
- Other Toxic Effects - D2B

2.2 Label elements

WHMIS
- Other Toxic Effects - D2B

2.3 Other hazards

WHMIS
- In Canada, the product mentioned above is considered hazardous under the Workplace Hazardous Materials Information System (WHMIS).

Section 3 - Composition/Information on Ingredients

3.1 Substances

- Material does not meet the criteria of a substance in accordance with Regulation (EC) No 1272/2008.

3.2 Mixtures

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Identifiers</th>
<th>%</th>
<th>LD50/LC50</th>
<th>Classifications According to Regulation/Directive</th>
<th>Comments</th>
</tr>
</thead>
</table>
| Triphosphoric acid, sodium salt (1:5) | CAS:7758-29-4 EC Number:231-838-7 | > 94% | Ingestion/Oral-Rat LD50 • 3120 mg/kg  
Skin-Rabbit LD50 • >4640 mg/kg | EU DSD/DPD: Self Classified: Xi; R38  
EU CLP: Self Classified: Skin Irrit. 2, H315  
OSHA HCS 2012: Skin Irrit. 2 | NDA |
| Diphosphoric acid, sodium salt (1:4) | CAS:7722-88-5 EC Number:231-767-1 | < 6% | Ingestion/Oral-Rat LD50 • 4 g/kg | EU DSD/DPD: Self Classified: Xi; R36/37/38  
EU CLP: Self Classified: Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3: Resp. Irrit., H335  
OSHA HCS 2012: Skin Irrit. 2; Eye Irrit. 2A; STOT SE 3: Resp. Irrit. | NDA |

See Section 16 for full text of H-statements and R-phrases.

Section 4 - First Aid Measures

4.1 Description of first aid measures

Inhalation
- Move victim to fresh air. Administer oxygen if breathing is difficult. Give artificial respiration if victim is not breathing. If signs/symptoms continue, get medical attention.
Skin

- IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.

Eye

- Flush eyes with water for at least 15 minutes while holding eyelids open. Remove contact lenses if worn. If eye irritation persists: Get medical advice/attention.

Ingestion

- Do NOT induce vomiting. Do not give anything by mouth to an unconscious person. Rinse mouth. Vomiting may occur spontaneously. To prevent aspiration of swallowed product, lay victim on side with head lower than waist. If vomiting occurs and the victim is conscious, give water to further dilute the chemical.

4.2 Most important symptoms and effects, both acute and delayed

- Refer to Section 11 - Toxicological Information.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to Physician

- All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

4.4 Other information

- Call 911 or emergency medical service. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.

Section 5 - Firefighting Measures

5.1 Extinguishing media

Suitable Extinguishing Media

- Not combustible. Use extinguishing media suitable for surrounding fire.

Unsuitable Extinguishing Media

- None known.

5.2 Special hazards arising from the substance or mixture

Unusual Fire and Explosion Hazards

- Non-combustible.

Hazardous Combustion Products

- Oxides of sodium, oxides of phosphorus.

5.3 Advice for firefighters

- Wear positive pressure self-contained breathing apparatus (SCBA). Structural firefighters' protective clothing will only provide limited protection.

LARGE FIRES: Move containers from fire area if you can do it without risk.

LARGE FIRES: Do not scatter spilled material with high pressure water streams.

LARGE FIRES: Dike fire-control water for later disposal.

Section 6 - Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal Precautions

- Do not touch or walk through spilled material.

Emergency Procedures

- Keep unauthorized personnel away.

6.2 Environmental precautions

- LARGE SPILLS: Prevent entry into waterways, sewers, basements or confined areas.

6.3 Methods and material for containment and cleaning up

Containment/Clean-up Measures

- Avoid generating dust.

SMALL DRY SPILLS: With clean shovel place material into clean, dry container and cover loosely: move containers from spill area.

LARGE SPILLS: Cover powder spill with plastic sheet or tarp to minimize spreading. Clean up residual material by washing area with water. Collect washings for disposal. Decontaminate tools and equipments after cleanup.
6.4 Reference to other sections

- Refer to Section 8 - Exposure Controls/Personal Protection and Section 13 - Disposal Considerations.

Section 7 - Handling and Storage

7.1 Precautions for safe handling

**Handling**
- Keep containers closed when not in use. Avoid breathing dust. Avoid direct or prolonged contact with skin and eyes. Do not ingest. Do not use in areas without adequate ventilation.

7.2 Conditions for safe storage, including any incompatibilities

**Storage**
- Store in a tightly closed container. Product is hygroscopic and tends to cake on storage. Store in an area that is cool, dry and isolated from all toxic and harmful substances.

7.3 Specific end use(s)

- Refer to Section 1.2 - Relevant identified uses.

Section 8 - Exposure Controls/Personal Protection

8.1 Control parameters

<table>
<thead>
<tr>
<th>Exposure Limits/Guidelines</th>
<th>ACGIH</th>
<th>Argentina</th>
<th>Australia</th>
<th>Austria</th>
<th>Belgium</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Tripolyphosphate as Particulates not otherwise classified (PNOC)</td>
<td><strong>TWAs</strong></td>
<td>10 mg/m³ TWA (inhalable particles, recommended); 3 mg/m³ TWA (respirable particles, recommended)</td>
<td>10 mg/m³ TWA [CMP] (inhalable fraction, particulate matter containing no asbestos and less than 1% crystalline silica); 3 mg/m³ TWA [CMP] (respirable fraction, particulate matter containing no asbestos and less than 1% crystalline silica)</td>
<td>Not established</td>
<td>Not established</td>
</tr>
<tr>
<td>Diphosphoric acid, sodium salt (1:4) (7722-88-5)</td>
<td><strong>TWAs</strong></td>
<td>Not established</td>
<td>5 mg/m³ TWA [CMP]</td>
<td>Not established</td>
<td>5 mg/m³ TWA</td>
</tr>
<tr>
<td><strong>MAKs</strong></td>
<td>Not established</td>
<td>Not established</td>
<td>Not established</td>
<td>5 mg/m³ TWA [TMW] (inhalable fraction)</td>
<td>Not established</td>
</tr>
<tr>
<td><strong>STEls</strong></td>
<td>Not established</td>
<td>Not established</td>
<td>Not established</td>
<td>10 mg/m³ STEL [KZW] (inhalable fraction, 4 X 15 min)</td>
<td>Not established</td>
</tr>
</tbody>
</table>

**Exposure Limits/Guidelines (Con't.)**

<table>
<thead>
<tr>
<th>Result</th>
<th>China</th>
<th>Denmark</th>
<th>France</th>
<th>Indonesia</th>
<th>Ireland</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>STELs</strong></td>
<td>16 mg/m³ STEL (free SiO₂ &lt;10%, except asbestos and toxic substances. Use PC- STEL of silica When free SiO₂ &gt;10%,)</td>
<td>Not established</td>
<td>Not established</td>
<td>Not established</td>
<td>Not established</td>
</tr>
<tr>
<td>Sodium Tripolyphosphate as Particulates not otherwise classified (PNOC)</td>
<td>TWAs</td>
<td>as Particulates not otherwise classified (PNOC)</td>
<td>Total</td>
<td>Not established</td>
<td>Not established</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Sodium Tripolyphosphate as Particulates not otherwise classified (PNOC)</td>
<td>TWAs</td>
<td>8 mg/m3 TWA (free SiO2 &lt;10%, except asbestos and toxic substances. Use PC-TWA of silica When free SiO2 &gt;10%, total) as Particulates not otherwise classified (PNOC)</td>
<td>Not established</td>
<td>Not established</td>
<td>10 mg/m3 TWA (recommended, inhalable particles); 3 mg/m3 TWA (recommended, respirable particles) as Particulates not otherwise classified (PNOC)</td>
</tr>
<tr>
<td>Sodium Tripolyphosphate as Particulates not otherwise classified (PNOC)</td>
<td>TWAs</td>
<td>5 mg/m3 TWA</td>
<td>5 mg/m3 TWA</td>
<td>5 mg/m3 TWA</td>
<td></td>
</tr>
<tr>
<td>Diphosphoric acid, sodium salt (1:4) (7722-88-5)</td>
<td>TWAs</td>
<td>Not established</td>
<td>5 mg/m3 TWA</td>
<td>5 mg/m3 TWA [VME]</td>
<td>5 mg/m3 TWA</td>
</tr>
<tr>
<td>Exposure Limits/Guidelines (Con’t.)</td>
<td>Result</td>
<td>Israel</td>
<td>Korea</td>
<td>Malaysia</td>
<td>New Zealand</td>
</tr>
<tr>
<td>---</td>
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<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Sodium Tripolyphosphate as Particulates not otherwise classified (PNOC)</td>
<td>TWAs</td>
<td>10 mg/m3 TWA (recommended, inhalable particles); 3 mg/m3 TWA (recommended, respirable particles) as Particulates not otherwise classified (PNOC)</td>
<td>10 mg/m3 TWA (particulate matter containing no Asbestos and &lt;1% crystalline Silica, inhalable fraction); 3 mg/m3 TWA (particulate matter containing no Asbestos and &lt;1% crystalline Silica, respirable fraction) as Particulates not otherwise classified (PNOC)</td>
<td>3 mg/m3 TWA (respirable dust); 10 mg/m3 TWA (inhalable dust) as Particulates not otherwise classified (PNOC)</td>
<td></td>
</tr>
<tr>
<td>Diphosphoric acid, sodium salt (1:4) (7722-88-5)</td>
<td>TWAs</td>
<td>Not established</td>
<td>5 mg/m3 TWA (Serial No. 549)</td>
<td>5 mg/m3 TWA</td>
<td>5 mg/m3 TWA</td>
</tr>
<tr>
<td>Exposure Limits/Guidelines (Con’t.)</td>
<td>Result</td>
<td>Norway</td>
<td>OSHA</td>
<td>Portugal</td>
<td>Singapore</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
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<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Sodium Tripolyphosphate as Particulates not otherwise classified (PNOC)</td>
<td>TWAs</td>
<td>10 mg/m³ TWA (total dust); 5 mg/m³ TWA (respirable dust) as Particulates not otherwise classified (PNOC)</td>
<td>15 mg/m³ TWA (total dust); 5 mg/m³ TWA (respirable fraction) as Particulates not otherwise classified (PNOC)</td>
<td>Asbestos and &lt; 1% Crystalline silica; 3 mg/m³ TWA [VLE-MP] (respirable fraction, particulate matter containing no Asbestos and &lt; 1% Crystalline silica) as Particulates not otherwise classified (PNOC)</td>
<td>10 mg/m³ PEL as Particulates not otherwise classified (PNOC)</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Diphosphoric acid, sodium salt (1:4) (7722-88-5)</td>
<td>TWAs</td>
<td>5 mg/m³ TWA</td>
<td>Not established</td>
<td>Not established</td>
<td>5 mg/m³ PEL</td>
</tr>
</tbody>
</table>

### Exposure Limits/Guidelines (Con't.)

<table>
<thead>
<tr>
<th>Result</th>
<th>Spain</th>
<th>Switzerland</th>
<th>Taiwan</th>
<th>United Kingdom</th>
<th>Venezuela</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Tripolyphosphate as Particulates not otherwise classified (PNOC)</td>
<td>TWAs</td>
<td>10 mg/m³ TWA [VLA-ED] (recommended limit, this value is for the particulate matter that is free from Asbestos and contains less than 1% of Crystalline silica; no toxicological data to support TWA. Do not exceed generic limit value provided, inhalable fraction); 3 mg/m³ TWA [VLA-ED] (recommended limit, this value is for the particulate matter that is free from Asbestos and contains less than 1% of Crystalline silica; no toxicological data to support TWA. Do not exceed generic limit value provided, respirable fraction) as Particulates not otherwise classified (PNOC)</td>
<td>Not established</td>
<td>Not established</td>
<td>Not established</td>
</tr>
<tr>
<td>Diphosphoric acid, sodium salt (1:4) (7722-88-5)</td>
<td>MAKs</td>
<td>Not established</td>
<td>5 mg/m³ TWA [MAK] (inhalable)</td>
<td>Not established</td>
<td>Not established</td>
</tr>
<tr>
<td>TWAs</td>
<td>5 mg/m³ TWA [VLE-ED]</td>
<td>Not established</td>
<td>5 mg/m³ TWA</td>
<td>5 mg/m³ TWA</td>
<td>5 ppm TWA [CAP]</td>
</tr>
<tr>
<td>STELs</td>
<td>Not established</td>
<td>Not established</td>
<td>Not established</td>
<td>15 mg/m³ STEL (calculated)</td>
<td>Not established</td>
</tr>
</tbody>
</table>

### Exposure Control Notations

**South Africa**

*Diphosphoric acid, sodium salt (1:4) (7722-88-5): Skin* (Skin Notation)
8.2 Exposure controls

**Engineering Measures/Controls**
- Adequate ventilation systems as needed to control concentrations of airborne contaminants below applicable threshold limit values.

**Personal Protective Equipment**

**Respiratory**
- For limited exposure use an N95 dust mask. For prolonged exposure use an air-purifying respirator with high efficiency particulate air (HEPA) filters. Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or symptoms are experienced.

**Eye/Face**
- Wear safety glasses.

**Skin/Body**
- Wear appropriate gloves.

**General Industrial Hygiene Considerations**
- Do not use, and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored. Wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics, or using the toilet.

**Environmental Exposure Controls**
- Follow best practice for site management and disposal of waste.

---

**Key to abbreviations**
- MAK = Maximale Arbeitsplatz Konzentration is the maximum permissible concentration
- PEL = Permissible Exposure Level determined by the Occupational Safety and Health Administration (OSHA)
- STEL = Short Term Exposure Limits are based on 15-minute exposures
- TWA = Time-Weighted Averages are based on 8h/day, 40h/week exposures

---

**Section 9 - Physical and Chemical Properties**

### 9.1 Information on Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Material Description</th>
<th>Physical Form</th>
<th>Appearance/Description</th>
<th>Odor Threshold</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Physical Form</strong></td>
<td>Solid</td>
<td>White granules with no odor.</td>
<td>Data lacking</td>
</tr>
<tr>
<td><strong>Color</strong></td>
<td>White</td>
<td>Odorless</td>
<td>Data lacking</td>
</tr>
<tr>
<td><strong>Odor Threshold</strong></td>
<td>Data lacking</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| General Properties   | Boiling Point | Melting Point | pH | Water Solubility |
|----------------------|---------------|--------------|----|-----------------
| Boiling Point        | Data lacking  | 622 C(1151.6 F) |    | Soluble         |
| Decomposition Temperature | Data lacking | pH | 9.5 to 10.2 | Not an Oxidizer. |
| Specific Gravity/Relative Density | Data lacking | Water Solubility | Soluble |
| Viscosity            | Data lacking  | Vapor Density  | Data lacking |
| Oxidizing Properties | Not an Oxidizer. |               |               |

<table>
<thead>
<tr>
<th>Volatility</th>
<th>Vapor Pressure</th>
<th>Vapor Density</th>
<th>Evaporation Rate</th>
<th>Data lacking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flash Point</td>
<td>Data lacking</td>
<td>UEL</td>
<td>Data lacking</td>
<td></td>
</tr>
<tr>
<td>LEL</td>
<td>Data lacking</td>
<td>Autoignition</td>
<td>Data lacking</td>
<td></td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not Flammable.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Environmental</th>
<th>Octanol/Water Partition coefficient</th>
<th>Data lacking</th>
</tr>
</thead>
</table>

### 9.2 Other Information
- No additional physical and chemical parameters noted.
Section 10: Stability and Reactivity

10.1 Reactivity
- No data available

10.2 Chemical stability
- Stable under normal temperatures and pressures.

10.3 Possibility of hazardous reactions
- Hazardous polymerization will not occur.

10.4 Conditions to avoid
- Dusting conditions, extreme heat, extreme humidity.

10.5 Incompatible materials
- Strong acids, strong oxidizing agents.

10.6 Hazardous decomposition products
- None known.

Section 11 - Toxicological Information

11.1 Information on toxicological effects

<table>
<thead>
<tr>
<th>Test Type</th>
<th>Dosage</th>
<th>Route</th>
<th>Species</th>
<th>Duration</th>
<th>Results</th>
<th>Test Class</th>
<th>Target Organs</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Irritation</td>
<td></td>
<td>Skin</td>
<td>Rabbit</td>
<td>NDA</td>
<td>NDA</td>
<td>Moderate irritation</td>
<td>NDA</td>
<td>NDA</td>
</tr>
<tr>
<td>Irritation</td>
<td></td>
<td>Eye</td>
<td>Rabbit</td>
<td>NDA</td>
<td>NDA</td>
<td>Irritating (non-specific severity)</td>
<td>NDA</td>
<td>Unwashed.</td>
</tr>
<tr>
<td>Irritation</td>
<td></td>
<td>Eye</td>
<td>Rabbit</td>
<td>NDA</td>
<td>NDA</td>
<td>Essentially non-irritating</td>
<td>NDA</td>
<td>Washed.</td>
</tr>
<tr>
<td>Irritation</td>
<td>3900 mg/kg</td>
<td>Unreported Route</td>
<td>Rat</td>
<td>NDA</td>
<td>NDA</td>
<td></td>
<td>NDA</td>
<td>NDA</td>
</tr>
<tr>
<td>Irritation</td>
<td>4640 mg/kg</td>
<td>Unreported Route</td>
<td>Rabbit</td>
<td>NDA</td>
<td>NDA</td>
<td></td>
<td>NDA</td>
<td>NDA</td>
</tr>
</tbody>
</table>

Component Name | CAS | Data
---|---|---
Triphosphoric acid, sodium salt (1:5) (> 94%) | 7758-29-4 | Irritation: skn-rbt 500 mg/24H MOD; Multi-dose Toxicity: orl-rat TDLo:2730 mg/kg/13W-l
Diphosphoric acid, sodium salt (1:4) (< 6%) | 7722-88-5 | Acute Toxicity: orl-rat LD50:4 gm/kg; skn-rbt LD >300 mg/kg

GHS Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity</td>
<td>EU/CLP • Acute Toxicity - Dermal - Classification criteria not met; Acute Toxicity - Inhalation - Data lacking; Acute Toxicity - Oral - Classification criteria not met</td>
</tr>
<tr>
<td>Aspiration Hazard</td>
<td>EU/CLP • Not relevant</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>EU/CLP • Data lacking</td>
</tr>
<tr>
<td>Germ Cell Mutagenicity</td>
<td>EU/CLP • Data lacking</td>
</tr>
<tr>
<td>Route(s) of entry/exposure</td>
<td>Inhalation, Skin, Eye, Ingestion</td>
</tr>
<tr>
<td>---------------------------</td>
<td>---------------------------------</td>
</tr>
<tr>
<td>Medical Conditions</td>
<td>Disorders of the lungs.</td>
</tr>
<tr>
<td>Aggravated by Exposure</td>
<td></td>
</tr>
<tr>
<td>Potential Health Effects</td>
<td></td>
</tr>
<tr>
<td>Inhalation</td>
<td></td>
</tr>
<tr>
<td>Acute (Immediate)</td>
<td>May cause irritation. Processes such as cutting, grinding, crushing, or impact may result in generation of excessive amounts of airborne dusts in the workplace. Nuisance dust may affect the lungs but reactions are typically reversible.</td>
</tr>
<tr>
<td>Chronic (Delayed)</td>
<td>No data available.</td>
</tr>
<tr>
<td>Skin</td>
<td></td>
</tr>
<tr>
<td>Acute (Immediate)</td>
<td>Causes skin irritation.</td>
</tr>
<tr>
<td>Chronic (Delayed)</td>
<td>No data available.</td>
</tr>
<tr>
<td>Eye</td>
<td></td>
</tr>
<tr>
<td>Acute (Immediate)</td>
<td>Causes serious eye irritation.</td>
</tr>
<tr>
<td>Chronic (Delayed)</td>
<td>No data available.</td>
</tr>
<tr>
<td>Ingestion</td>
<td></td>
</tr>
<tr>
<td>Acute (Immediate)</td>
<td>Low acute oral toxicity. Ingestion of large quantities may cause abdominal pain, abdominal cramps, nausea, vomiting, diarrhea.</td>
</tr>
<tr>
<td>Chronic (Delayed)</td>
<td>No data available.</td>
</tr>
</tbody>
</table>

Key to abbreviations
- LD = Lethal Dose
- MOD = Moderate
- TD = Toxic Dose

**Section 12 - Ecological Information**

**12.1 Toxicity**
- No data found for product.

**12.2 Persistence and degradability**
- No specific biodegradation test data located. While the alkalinity of this material is readily reduced in natural waters, the resulting phosphate may persist indefinitely or
incorporate into biological systems.

12.3 Bioaccumulative potential
- No data found for product.

12.4 Mobility in Soil
- No data found for product.

12.5 Results of PBT and vPvB assessment
- PBT and vPvB assessment has not been carried out.

12.6 Other adverse effects
- No studies have been found.

Section 13 - Disposal Considerations

13.1 Waste treatment methods

Product waste
- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Packaging waste
- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Section 14 - Transport Information

14.1 UN number
14.2 UN proper shipping name
14.3 Transport hazard class(es)
14.4 Packing group
14.5 Environmental hazards

<table>
<thead>
<tr>
<th>DOT</th>
<th>TDG</th>
<th>IMO/IMDG</th>
<th>IATA/ICAO</th>
</tr>
</thead>
<tbody>
<tr>
<td>NDA</td>
<td>NDA</td>
<td>NDA</td>
<td>NDA</td>
</tr>
</tbody>
</table>

14.6 Special precautions for user
- None known.

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

SARA Hazard Classifications
- Acute

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS</th>
<th>Canada DSL</th>
<th>Canada NDSL</th>
<th>China</th>
<th>EU EINECS</th>
<th>EU ELNICS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diphosphoric acid, sodium salt (1:4)</td>
<td>7722-88-5</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Triphosphoric acid, sodium salt (1:5)</td>
<td>7758-29-4</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>
### Inventory (Con’t.)

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS</th>
<th>New Zealand</th>
<th>Philippines PICCS</th>
<th>TSCA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diphosphoric acid, sodium salt (1:4)</td>
<td>7722-88-5</td>
<td>Yes</td>
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<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

### Canada

#### Labor
- **Canada - WHMIS - Classifications of Substances**
  - Triphosphoric acid, sodium salt (1:5) 7758-29-4 Not Listed
  - Diphosphoric acid, sodium salt (1:4) 7722-88-5 D2B

- **Canada - WHMIS - Ingredient Disclosure List**
  - Triphosphoric acid, sodium salt (1:5) 7758-29-4 Not Listed
  - Diphosphoric acid, sodium salt (1:4) 7722-88-5 1 %

#### Environment
- **Canada - CEPA - Priority Substances List**
  - Triphosphoric acid, sodium salt (1:5) 7758-29-4 Not Listed
  - Diphosphoric acid, sodium salt (1:4) 7722-88-5 Not Listed

### Germany

#### Environment
- **Germany - TA Luft - Types and Classes**
  - Triphosphoric acid, sodium salt (1:5) 7758-29-4 Not Listed
  - Diphosphoric acid, sodium salt (1:4) 7722-88-5 Not Listed

- **Germany - Water Classification (VwVwS) - Annex 1**
  - Triphosphoric acid, sodium salt (1:5) 7758-29-4 Not Listed
  - Diphosphoric acid, sodium salt (1:4) 7722-88-5 Not Listed

- **Germany - Water Classification (VwVwS) - Annex 2 - Water Hazard Classes**
  - Triphosphoric acid, sodium salt (1:5) 7758-29-4 **ID Number 1209, hazard class 1 - low hazard to waters**
  - Diphosphoric acid, sodium salt (1:4) 7722-88-5 Not Listed

- **Germany - Water Classification (VwVwS) - Annex 3**
  - Triphosphoric acid, sodium salt (1:5) 7758-29-4 Not Listed
  - Diphosphoric acid, sodium salt (1:4) 7722-88-5 **ID Number 5096, hazard class 1 - low hazard to waters**

### Philippines

#### Other
- **Philippines - Priority Chemical List**
  - Triphosphoric acid, sodium salt (1:5) 7758-29-4 Not Listed
  - Diphosphoric acid, sodium salt (1:4) 7722-88-5 Not Listed

### Singapore

#### Other
- **Singapore - Corrosive and Explosive Substances - Corrosive Substances**
### United States

#### Labor

**U.S. - OSHA - Process Safety Management - Highly Hazardous Chemicals**

<table>
<thead>
<tr>
<th>Chemical</th>
<th>CAS Number</th>
<th>Regulation</th>
</tr>
</thead>
<tbody>
<tr>
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**U.S. - OSHA - Specifically Regulated Chemicals**

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### Environment

**U.S. - CAA (Clean Air Act) - 1990 Hazardous Air Pollutants**

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**U.S. - CAA (Clean Air Act) - Class II Ozone Depleters**

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</table>

**U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities**

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**U.S. - CERCLA/SARA - Radionuclides and Their Reportable Quantities**

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</table>

**U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA RQs**

<table>
<thead>
<tr>
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<th>CAS Number</th>
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**U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs**

<table>
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</tr>
</tbody>
</table>

**U.S. - CERCLA/SARA - Section 313 - Emission Reporting**

<table>
<thead>
<tr>
<th>Chemical</th>
<th>CAS Number</th>
<th>Regulation</th>
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</thead>
<tbody>
<tr>
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<td>7758-29-4</td>
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</tr>
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<td>Diphosphoric acid, sodium salt (1:4)</td>
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<td>Not Listed</td>
</tr>
</tbody>
</table>

**U.S. - CERCLA/SARA - Section 313 - PBT Chemical Listing**

<table>
<thead>
<tr>
<th>Chemical</th>
<th>CAS Number</th>
<th>Regulation</th>
</tr>
</thead>
<tbody>
<tr>
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</tr>
<tr>
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<td>Not Listed</td>
</tr>
</tbody>
</table>

### United States - California

#### Environment

**U.S. - California - Proposition 65 - Carcinogens List**

<table>
<thead>
<tr>
<th>Chemical</th>
<th>CAS Number</th>
<th>Regulation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Triphosphoric acid, sodium salt (1:5)</td>
<td>7758-29-4</td>
<td>Not Listed</td>
</tr>
<tr>
<td>Diphosphoric acid, sodium salt (1:4)</td>
<td>7722-88-5</td>
<td>Not Listed</td>
</tr>
</tbody>
</table>

**U.S. - California - Proposition 65 - Developmental Toxicity**

<table>
<thead>
<tr>
<th>Chemical</th>
<th>CAS Number</th>
<th>Regulation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Triphosphoric acid, sodium salt (1:5)</td>
<td>7758-29-4</td>
<td>Not Listed</td>
</tr>
</tbody>
</table>
• Diphosphoric acid, sodium salt (1:4) 7722-88-5 Not Listed

U.S. - California - Proposition 65 - Maximum Allowable Dose Levels (MADL)
• Triphosphoric acid, sodium salt (1:5) 7758-29-4 Not Listed
• Diphosphoric acid, sodium salt (1:4) 7722-88-5 Not Listed

U.S. - California - Proposition 65 - No Significant Risk Levels (NSRL)
• Triphosphoric acid, sodium salt (1:5) 7758-29-4 Not Listed
• Diphosphoric acid, sodium salt (1:4) 7722-88-5 Not Listed

U.S. - California - Proposition 65 - Reproductive Toxicity - Female
• Triphosphoric acid, sodium salt (1:5) 7758-29-4 Not Listed
• Diphosphoric acid, sodium salt (1:4) 7722-88-5 Not Listed

U.S. - California - Proposition 65 - Reproductive Toxicity - Male
• Triphosphoric acid, sodium salt (1:5) 7758-29-4 Not Listed
• Diphosphoric acid, sodium salt (1:4) 7722-88-5 Not Listed

15.2 Chemical Safety Assessment
  ● No Chemical Safety Assessment has been carried out.

Section 16 - Other Information

Relevant Phrases (code & full text)
  ● H335 - May cause respiratory irritation
  R36/37/38 - Irritating to eyes, respiratory system and skin.
  R38 - Irritating to skin.

Last Revision Date  29/January/2014
Preparation Date   15/November/2004
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Key to abbreviations
NDA = No Data Available