



# Safety Data Sheet

## Section 01 - Identification

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<b>Product Identifier</b>	Sodium Tripolyphosphate LD (low density) Sodium Tripolyphosphate HD (high density)
<b>Other Means of Identification</b>	STPP, tripoly, pentasodium triphosphate
<b>Product Use and Restrictions on Use</b>	Water treatment, detergent additive, pulp and paper, soap, cleaning, cement, petroleum industry
<b>Initial Supplier Identifier</b>	ClearTech Industries Inc. 1500 Quebec Avenue Saskatoon, SK. Canada S7K 1V7
<b>Prepared By</b>	ClearTech Industries Inc. Technical Writer Phone: 1 (800) 387-7503
<b>24-Hour Emergency Phone</b>	Phone: 1 (306) 664 – 2522

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## Section 02 - Hazard Identification

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### GHS-Classification

<b>Serious Eye Damage/Irritation</b>	Category 2
<b>Skin Corrosion/Irritation</b>	Category 2
<b>STOT-Single Exposure</b>	Category 3

### Physical Hazards

No known physical hazards.

### **Warning**

### **Hazards Statements**

H319 – Causes serious eye irritation  
H315 – Causes skin irritation.  
H335 – May cause respiratory irritation.

### **Pictograms**



### **Precautionary Statements**

P403 + P233 – Store in a well-ventilated place. Keep container tightly closed.  
P405 – Store locked up.  
P261 – Avoid breathing dust.

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

P304 + P340 – IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P280 – Wear protective gloves, protective clothing, eye protection, and face protection.

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

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.

P310 – Immediately call a POISON CENTER or doctor/physician.

P501 – Dispose of contents/container in accordance with all federal, provincial, and/or local regulations including the Canadian Environmental Protection Act.

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## Section 03 - Composition / Information on Ingredients

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Chemical Name	CAS Number	Weight %	Unique Identifiers
Sodium Tripolyphosphate	7758-29-4	96-100%	
Tetrasodium Pyrophosphate	7722-88-5	1-4%	

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## Section 04 - First Aid Measures

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<b>Inhalation</b>	If symptoms are experienced, remove victim to fresh air. Give artificial respiration only if breathing has stopped. If breathing is difficult, give oxygen. Seek medical attention.
<b>Skin Contact / Absorption</b>	Rinse skin with lukewarm, gently flowing water and non-abrasive soap. If irritation persists, seek medical attention. Completely decontaminate clothing, shoes and leather goods before re-use.
<b>Eye Contact</b>	Contact lenses should never be worn when working with this product. Flush immediately with water for at least 30 minutes. Forcibly hold eyelids apart to ensure complete irrigation of eye tissue. If irritation persists, seek immediate medical attention.
<b>Ingestion</b>	If irritation or discomfort occur, obtain medical advice immediately.
<b>Additional Information</b>	Not Available

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## Section 05 - Fire Fighting Measures

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<b>Suitable Extinguishing Media</b>	This material does not burn. Use extinguishing media appropriate to the surrounding fire conditions.
<b>Unsuitable Extinguishing Media</b>	Not Available.
<b>Specific Hazards Arising From the Chemical</b>	Sodium tripolyphosphate and its solutions do not burn or support combustion. During a fire, irritating/toxic phosphorus oxides may be generated. Closed containers may explode in the heat of a fire.
<b>Special Protective Equipment and Precautions for Fire-Fighters</b>	Wear NIOSH-approved self-contained breathing apparatus and protective clothing.
<b>Further Information</b>	Not Available

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## Section 06 - Accidental Release Measures

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<b>Personal Precautions / Protective Equipment / Emergency Procedures</b>	Wear appropriate personal protective equipment. Ventilate area. Only enter area with PPE. Stop or reduce leak if safe to do so. Flush with water to remove any residue.
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**Environmental Precautions** Prevent material from entering sewers or waterways. Notify government occupational health and safety and environmental authorities.

**Methods and Materials for Containment and Cleaning Up** Do not touch spilled material. Contain spills of sodium tripolyphosphate solutions with earth, sand, or absorbent material which does not react with spilled material.  
SMALL SPILLS (SOLUTIONS): Soak up spill with absorbent material which does not react with spilled chemical. Put material in suitable, covered, labelled containers. Flush area with water.  
SMALL SPILLS (SOLIDS): Shovel or sweep up dry material; avoid generating dust. Place in clean, dry, labelled containers and cover. Flush area with water.

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## **Section 07 - Handling and Storage**

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**Precautions for Safe Handling** This material is an EYE IRRITANT. Avoid generating dusts. Prevent the release of dust into the workplace air. Use in a well-ventilated area, separate from the storage area. The use of compressed air to clean equipment, clothing, etc., is not recommended.  
Dry sweeping is not recommended. Pre-wet the material or use a vacuum equipped with high efficiency filter(s).

**Conditions for Safe Storage** Store in suitable, labelled containers, preferably the supplier container. Protect from damage. It is good practice to keep storage containers closed when not in use.

**Incompatibilities** Strong oxidizing agents and strong acids

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## **Section 08 - Exposure Controls and Personal Protection**

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### **Exposure Limit(s)**

<b>Component</b>	<b>Regulation</b>	<b>Type of Listing</b>	<b>Value</b>
Sodium Tripolyphosphate	Not Established		
Tetrasodium Pyrophosphate	OSHA	PEL-TWA	5mg/m <sup>3</sup>

### **Engineering Control(s)**

**Ventilation Requirements** Mechanical ventilation (dilution or local exhaust), process or personnel enclosure and control of process conditions must be provided in accordance with all fire codes and regulatory requirements. Supply sufficient replacement air to make up for air removed by exhaust systems.

**Other** Emergency shower and eyewash must be available and tested in accordance with regulations and be in close proximity.

### **Protective Equipment**

**Eyes/Face** Chemical safety goggles. A face shield may also be necessary.

**Hand Protection** Impervious gloves of chemically resistant material (rubber or PVC) should be worn at all times. Wash contaminated clothing and dry thoroughly before reuse.

**Skin and Body Protection** Body suite, aprons, and/or coveralls of chemical resistant material should be worn at all times. Wash contaminated clothing and dry thoroughly before reuse.

No special footwear is required other than what is mandated at place of work.

**Respiratory Protection** An approved respirator suitable for protection from dusts and mists may be adequate.

**Thermal Hazards** Not Available

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## Section 09 - Physical and Chemical Properties

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### Appearance

Physical State	Solid
Colour	White powder
Odour	Odourless
Odour Threshold	Not Applicable

### Property

pH	9.7-9.9 (1% solution)
Melting Point/Freezing Point	Decomposes @ 622°C
Initial Boiling Point and Boiling Range	Not Applicable
Flash Point	Not Applicable
Evaporation Rate	Not Applicable
Flammability	Non-flammable
Upper Flammable Limit	Not Applicable
Lower Flammable Limit	Not Applicable
Vapour Pressure (mm Hg, 20°C)	Does not form a vapour.
Vapour Density (Air=1)	Not Applicable
Relative Density	Not Available
Solubility(ies)	Soluble in water.
Partition Coefficient: n-octanol/water	Not Available
Auto-ignition Temperature	Not Applicable
Decomposition Temperature	622°C
Viscosity	Not Available
Explosive Properties	Not Available
Specific Gravity (Water=1)	2.57-2.62
% Volatiles by Volume	Not Applicable
Formula	Na <sub>5</sub> O <sub>10</sub> P <sub>3</sub>
Molecular Weight	367.91

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## Section 10 - Stability and Reactivity

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<b>Reactivity</b>	Sodium tripolyphosphate is probably stable in alkaline aqueous solution, but breaks down (hydrolyzes) to orthophosphate under acidic conditions.
<b>Stability</b>	Anhydrous and hexahydrate forms of sodium tripolyphosphate are stable at room temperature. The hexahydrate decomposes near 100°C. Anhydrous STPP is hygroscopic and rapidly absorbs water to form hexahydrate.
<b>Possibility of Hazardous Reactions</b>	Polymerization will not occur.
<b>Conditions to Avoid</b>	High temperatures, moisture, generation of dust.
<b>Incompatible Materials</b>	Strong oxidizing agents and strong acids.
<b>Hazardous Decomposition Products</b>	None known.

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## Section 11 - Toxicological Information

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### Acute Toxicity Estimate

<b>Component</b>	<b>Oral LD<sub>50</sub></b>	<b>Dermal LD<sub>50</sub></b>	<b>Inhalation LC<sub>50</sub></b>
Sodium Tripolyphosphate	3,200 mg/kg	Not Available	Not Available

This product has been classified in accordance with the Hazardous Products Regulations using ATE formula documented in the GHS standard.

### Chronic Toxicity – Carcinogenicity

<b>Component</b>	<b>IARC</b>
Sodium Tripolyphosphate	Not Considered carcinogenic by IARC or ACGIH

<b>Skin Corrosion/Irritation</b>	Concentrated solutions may be slightly irritating.
<b>Ingestion</b>	Low in oral toxicity. Ingestion of very large amounts may cause nausea, vomiting, cramps, abdominal pain, diarrhea and severe inflammation of the stomach and intestinal tract.
<b>Inhalation</b>	May cause irritation of the nose and throat. Long-term exposures to high concentrations of dust may cause increased mucous flow in the nose and respiratory system airways.
<b>Serious Eye Damage/Irritation</b>	Tetrasodium pyrophosphate is a severe eye irritant.
<b>Respiratory or Skin Sensitization</b>	Not reported as human respiratory or skin sensitizer.
<b>Germ Cell Mutagenicity</b>	Not mutagenic
<b>Reproductive Toxicity</b>	Not adverse effects observed.
<b>STOT-Single Exposure</b>	May cause respiratory irritation.
<b>STOT-Repeated Exposure</b>	Kidney damage has been observed in rats following long-term ingestion of very high doses.
<b>Aspiration Hazard</b>	Not Available
<b>Synergistic Materials</b>	Not Available

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## Section 12 – Ecological Information

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### Ecotoxicity

Component	Toxicity to Algae	Toxicity to Fish	Toxicity to Daphnia and Other Aquatic Invertebrates
Sodium Tripolyphosphate	EC <sub>50</sub> (Blue-green algae): 60mg/L	LC <sub>50</sub> (Oryzias latipes, 48hr): 590mg/L	EC <sub>50</sub> (Ceriodaphnia dubia, 48hrs): 276.61mg/L
Tetrasodium pyrophosphate	EC <sub>50</sub> (Blue-green algae): 100mg/L	LC <sub>50</sub> (Oryzias latipes, 48hr): 700mg/L	LC <sub>50</sub> (Daphnia magna, 48hr): 391mg/L
<b>Biodegradability</b>	Not Available		
<b>Bioaccumulation</b>	Not Available		
<b>Mobility</b>	Not Available		
<b>Other Adverse Effects</b>	While the alkalinity of this material is readily reduced in natural waters, the resulting phosphate may persist indefinitely or incorporate into biological systems.		

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## Section 13 – Disposal Considerations

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<b>Waste From Residues/Unused Products</b>	Dispose in accordance with all federal, provincial, and/or local regulations including the Canadian Environmental Protection Act.
<b>Contaminated Packaging</b>	Dispose in accordance with all federal, provincial, and/or local regulations including the Canadian Environmental Protection Act.

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## Section 14 – Transport Information

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<b>UN Number</b>	Not Regulated
<b>UN Proper Shipping Name</b>	Not Regulated
<b>Transport Hazard Class(es)</b>	Not Regulated
<b>Packaging Group</b>	Not Regulated
<b>Environmental Hazards</b>	Not listed as a marine pollutant under Canadian TDG Regulations, schedule III.
<b>Special Precautions</b>	Not Available
<b>Transport in Bulk</b>	Not Available

### TDG

<b>Other</b>	Secure containers (full and/or empty) with suitable hold down devices during shipment and ensure all caps, valves, or closures are secured in the closed position.
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**TDG PRODUCT CLASSIFICATION:** This product has been classified on the preparation date specified at section 14 of this MSDS / SDS, for transportation in accordance with the requirements of part 2 of the Transportation of Dangerous Goods Regulations. If applicable, testing and/or published test data regarding the classification of this product are listed in the references at section 16 of this MSDS / SDS.

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## Section 15 – Regulatory Information

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**NOTE: THE PRODUCT LISTED ON THIS SDS HAS BEEN CLASSIFIED IN ACCORDANCE WITH THE HAZARD CRITERIA OF THE CANADIAN CONTROLLED PRODUCTS REGULATIONS. THIS SDS CONTAINS ALL INFORMATION REQUIRED BY THOSE REGULATIONS.**

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## Section 16 – Other Information

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**Preparation Date** September 2, 2015

**Note:** The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of

our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations.

**Attention: Receiver of the chemical goods / SDS coordinator**

As part of our commitment to the Canadian Association of Chemical Distributors (CACD) Responsible Distribution<sup>®</sup> initiative, ClearTech Industries Inc. and its associated companies require, as a condition of sale, that you forward the attached Safety Data Sheet(s) to all affected employees, customers, and end-users. ClearTech will send any available supplementary handling, health, and safety information to you at your request.

If you have any questions or concerns please call our customer service center.

**References:**

- 1) CHEMINFO
- 2) eChemPortal
- 3) TOXNET
- 4) Transportation of Dangerous Goods Canada
- 5) HSDB
- 6) ECHA
- 7) PAN

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