



**ICL Performance
Products LP**

Material Safety Data Sheet

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Identification

Product Name: SODIUM TRIPOLYPHOSPHATE ANHYDROUS
Reference Number: AST10056
Date: May 2, 2006
Chemical Family: Phosphate Salts
Chemical Name: Triphosphoric Acid, Pentasodium Salt
Synonyms: STP; STPP; Polysorb®

Use of substance or preparation

Food Ingredient, Cleaning Compound

Company/Undertaking Identification

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

General Information: 1-800-244-6169 (Worldwide)

2. COMPOSITION/INFORMATION ON INGREDIENTS

Composition

<u>Substance</u>	<u>CAS No.</u>	<u>EINECS No</u>	<u>% w/w</u>
Sodium Tripolyphosphate Anhydrous	7758-29-4	231-838-7	93
Tetrasodium Pyrophosphate (TSPP)	7722-88-5	231-767-1	1-5
Sodium Trimetaphosphate	7785-84-4	232-088-3	1-2

3. HAZARDS IDENTIFICATION

Classification of the substance/preparation

EC Classification None
Safety phrase None

Human Health Effects

May cause respiratory tract irritation.

Environmental Effects

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This material is not expected to produce any significant environmental effects when recommended use instructions are followed.

4. FIRST AID MEASURES

General

Likely Routes of Exposure: Skin contact and inhalation

Eye contact

No more than slightly irritating based on toxicity studies. The dry powder may cause foreign body irritation in some individuals. Immediate first aid is not likely to be required. However, this material can be removed with water. Remove material from eyes, skin and clothing. Wash heavily contaminated clothing before reuse.

Skin contact

No more than slightly toxic or slightly irritating based on toxicity studies. Prolonged contact with the dry powder may cause drying or chapping of the skin. Immediate first aid is not likely to be required. However, this material can be removed with water. Remove material from eyes, skin and clothing. Wash heavily contaminated clothing before reuse.

Inhalation:

This product may cause coughing, chest tightness, runny nose, chest pain, and burning throat. If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

Ingestion

No more than slightly toxic if swallowed based on toxicity tests. No significant adverse health effects are expected to develop if only small amounts (less than a mouthful) are swallowed. Swallowing large quantities may cause gastrointestinal tract irritation, nausea, vomiting, and diarrhea. If swallowed, immediate first aid is not likely to be required. A physician or Poison Control Center can be contacted for advice.

5. FIRE FIGHTING MEASURES

Extinguishing media

Non-combustible. No special requirement.

Unsuitable extinguishing 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

No special requirement.

Environmental precautions

Small quantities: Presents no environmental problems.

Large quantities: As general precaution, avoid discharge into the environment.

Methods for cleaning up

In case of spill, sweep, scoop or vacuum and remove. If possible, complete cleanup on a dry basis. Flush residual spill area with water.

Refer to Section 13 for disposal information and Sections 14 and 15 for reportable quantity information.

7. HANDLING AND STORAGE**Handling**

Avoid breathing dust.

Keep container closed.

Use only with adequate ventilation.

Emptied container retains product residue. Observe all labeled safeguards until container is cleaned, reconditioned or destroyed.

Engineering measures

Provide natural or mechanical ventilation to control exposure levels below occupational exposure limits. 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

Store in a cool, dry place to maintain product performance.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Occupational exposure limit**

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

OSHA PEL

15 mg/m³ (total dust) 8-hr TWA

5 mg/m³ (respirable) 8-hr TWA

ACGIH TLV

10 mg/m³ (inhalable) 8-hr TWA

3 mg/m³ (respirable) 8-hr TWA

Sodium tripolyphosphate anhydrous contains tetrasodium pyrophosphate which has the following airborne exposure guidelines:

<u>State</u>	<u>Standard</u>	<u>Limit</u>
Australia	Occupation Exposure Limit	5 mg/m ³ 8-hr. TWA
Belgium	Occupation Exposure Limit	5 mg/m ³ 8-hr. TWA
Denmark	Occupation Exposure Limit	5 mg/m ³ 8-hr. TWA
Finland	Occupation Exposure Limit	5 mg/m ³ 8-hr. TWA, 3 mg/m ³
France	Occupation Exposure Limit	VME 5 mg/m ³
Norway	Occupation Exposure Limit	5 mg/m ³ 8-hr. TWA
Switzerland	Occupation Exposure Limit	MAK – week 5 mg/m ³
United Kingdom	Occupation Exposure Limit	5 mg/m ³ 8-hr TWA

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United States

Occupation Exposure Limit

5 mg/m³ 8-hr. TWA

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. Use NIOSH/MSHA approved respiratory protection equipment when airborne exposure limits are exceeded (see below). Consult the respirator manufacturer to determine appropriate type equipment for a given application. Observe respirator use limitations specified by NIOSH/MSHA or the manufacturer. Respiratory protection programs must comply with 29 C.F.R. 1910.134.

Hand/skin protection

Although this product does not present a significant skin concern, minimize skin contamination by following good industrial practice. Wearing protective gloves is recommended. Wash hands and contaminated skin thoroughly after handling.

Eye protection

This product does not cause significant eye irritation or eye toxicity requiring special protection. Use good industrial practice to avoid eye contact.

9. PHYSICAL AND CHEMICAL PROPERTIES

General Information

Chemical Formula:	Na ₅ P ₃ O ₁₀
Appearance:	White powder or granules
Odor:	None

Important health, safety and environmental information

pH:	9.7-10.1 (as a 1% solution @ 25 C)
Melting Point @ 760 mm Hg:	Begins to melt incongruently @ 552 degrees C; completely melted @ 622 degrees C
Bulk Density (lb./cu. ft):	Powder - 50-65; Granular - 43-52 (medium dense)
Solubility in Water (g/100 g H ₂ O):	6.0 @ 0 degrees C, 14.8 @ 25 degrees C, 16.7 @ 60 degrees C, 22.2 @ 80 degrees C, 32.2 @ 100 degrees C

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

None known

Hazardous decomposition products

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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 LD50 -	5,400 mg/kg; practically non-toxic
Dermal - rabbit LD50 -	> 7,940 mg/kg; practically non-toxic
Eye Irritation - rabbit -	3.3/110.0; slightly irritating
Skin Irritation - rabbit -	0-0/8.0 (24-hr exp.); not irritating
Inhalation - LC50	> 0.39 mg/L (rat, 4 hr) (maximum attainable concentration)

Rats fed Sodium Tripolyphosphate Anhydrous in their diet for two years exhibited decreased growth, increased kidney/body weight ratios, and kidney changes. No birth defects were noted in rabbits given Sodium Tripolyphosphate Anhydrous orally during pregnancy. No effects were seen on the ability of male and female rats to reproduce when fed Sodium Tripolyphosphate Anhydrous for 3 successive generations. Sodium Tripolyphosphate Anhydrous has generally produced no genetic changes in a variety of standard tests using animals and animal or bacterial cells. Genetic changes were reported in a standard test using yeast cells.

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

Tetrasodium pyrophosphate (a component of sodium tripolyphosphate anhydrous)

Oral - rat LD50:	3,770 mg/kg; slightly toxic
Dermal - rabbit LD50:	> 7,940 mg/kg; practically nontoxic
Eye Irritation - rabbit:	43.0/110.0; extremely irritating
Skin Irritation - rabbit (24-hr exp.):	0.0/8.0; non-irritating

Rats fed tetrasodium pyrophosphate in their diet for four months showed a reduced weight gain, urinary changes, increased organ-to-body weight ratios, and slight kidney damage. No birth defects were reports in rabbits, hamsters, mice or rats given this material orally during pregnancy. Tetrasodium pyrophosphate produced no genetic changes in standard tests using bacterial and yeast cells.

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 LC50 Daphnia magna: > 1000 mg/L; Practically Nontoxic

96 hr. LC 50 > 100 mg/L, non-toxic (Rainbow trout, Inland silversides and mysid schrimp). [FMC 189-1081, 1082 & 1083]

48 hr. LC 50 > 100 mg/L, non-toxic (Daphnia magna) [FMC 189-1084]

Environmental Fate

ICL Performance Products LP has not conducted biodegradation studies with this product since when dissolved / hydrolyzed in water it yields completely mineralized materials.

13. DISPOSAL CONSIDERATIONS

European waste catalog number

Unknown

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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	Not regulated for transportation
ICAO/IATA	Not regulated for transportation
RID/ADR	Not regulated for transportation
Canadian TDG	Not regulated for transportation
U.S. DOT	Not regulated for transportation

15. REGULATORY INFORMATION**EC label**

None

Chemical Inventory

TSCA Inventory:	Listed	Australia:	Listed
DSL Inventory:	Listed	China:	Listed
EC:	Listed	Philippines:	Listed
Korea:	Listed		

Additional information

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: Not applicable

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

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

16. OTHER INFORMATION

	Health	Fire	Reactivity	Additional Information
Suggested NFPA Rating	1	0	0	
Suggested HMIS Rating	1	0	0	F

Reason for revision: Sections 8+ 11 revised.

Supersedes MSDS dated: March 21, 2006

Drafted in accordance with ECC Dir 2001/58/EC

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