



**ICL Performance
Products LP**

Material Safety Data Sheet

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: NUTRIFOS® 355 Food Phosphate
MSDS Number: AST10084
Date: November 1, 2005
Chemical Family: Phosphate salts
Chemical Name: Blend of tetrasodium pyrophosphate and sodium tripolyphosphate
Synonyms: Blend of: (TSPP; sodium pyrophosphate; diphosphoric acid, tetrasodium salt) & (STP; Tripoly; triphosphoric acid, pentasodium salt)

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

<u>Component</u>	<u>CAS No.</u>
Sodium Tripolyphosphate	7758-29-4
Tetrasodium Pyrophosphate	7722-88-5

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Appearance and Odor: Odorless white powder

WARNING STATEMENTS

CAUTION!
MAY CAUSE RESPIRATORY TRACT IRRITATION

POTENTIAL HEALTH EFFECTS

Likely Routes of Exposure: Inhalation and skin contact

EYE CONTACT: No more than slightly irritating based on toxicity studies. The dry powder may cause foreign body irritation in some individuals.

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.

INHALATION: This product may cause coughing, chest tightness, runny nose, chest pain, and burning throat based on toxicity of component.

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.

Refer to Section 11 for toxicological information.

4. FIRST AID MEASURES

IF IN EYES OR ON SKIN, immediate first aid is not likely to be required. However, this material can be removed with water. Wash heavily contaminated clothing before reuse.

IF INHALED, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Remove material from eyes, skin and clothing.

IF SWALLOWED, immediate first aid is not likely to be required. A physician or Poison Control Center can be contacted for advice. Wash heavily contaminated clothing before reuse.

5. FIRE FIGHTING MEASURES

FLASH POINT: Not combustible

HAZARDOUS PRODUCTS OF COMBUSTION: Not applicable

EXTINGUISHING MEDIA: Not applicable

UNUSUAL FIRE AND EXPLOSION HAZARDS: None known

6. ACCIDENTAL RELEASE MEASURES

In case of spill, sweep, scoop or vacuum and remove and place in containers. If possible, complete cleanup on a dry basis. After all practical dry cleanup has been done, 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 with adequate ventilation.

Empty container retains product residue. Observe all labeled safeguards until container is cleaned, reconditioned, or destroyed. The reuse of this material's container for non-industrial purposes is prohibited and any reuse must be in consideration of the data provided in this MSDS.

STORAGE: Product is stable under normal conditions of storage and handling.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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

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.

RESPIRATORY PROTECTION: Avoid breathing dust. Use NIOSH/MSHA approved respiratory protection equipment when airborne exposure is excessive. 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.

VENTILATION: Provide natural or mechanical ventilation to control exposure levels below airborne exposure limits (see below). The use of local mechanical exhaust ventilation is preferred at sources of air contamination such as open process equipment.

AIRBORNE EXPOSURE LIMITS:

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.

<u>OSHA PEL</u>	<u>ACGIH TLV</u>
15 mg/m ³ (total dust) 8-hr TWA	10 mg/m ³ (inhalable) 8-hr TWA
5 mg/m ³ (respirable) 8-hr TWA	3 mg/m ³ (respirable) 8-hr TWA

Tetrasodium pyrophosphate has the following airborne exposure guidelines:

<u>OSHA PEL</u>	<u>ACGIH TLV</u>
Not established	5 mg/m ³ 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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Chemical Formula:	Na ₄ P ₂ O ₇ ; Na ₅ P ₃ O ₁₀
Appearance:	white powder or granules
Odor:	odorless
pH:	9.48 (1% solution @ 25 degrees C)
Bulk Density:	(lbs/cu ft) powder 70 lbs
Solubility:	g/100 g H ₂ O: 9.5

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

STABILITY: Product is stable under normal conditions of storage and handling.

MATERIALS TO AVOID: none known

HAZARDOUS DECOMPOSITION PRODUCTS: none known

HAZARDOUS POLYMERIZATION: will not occur

11. TOXICOLOGICAL INFORMATION

ICL Performance Products LP has not conducted toxicity studies with this material and no data was found in a reasonably extensive search of the literature. However, data on major components are given below:

Sodium Tripolyphosphate

Single exposure (acute) animal studies indicate that this material is practically nontoxic orally (rat) and after skin application. It is slightly irritating to rabbit eyes and nonirritating to rabbit skin. Rats fed sodium tripolyphosphate 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 orally during pregnancy. No effects were seen on the ability of male and female rats to reproduce when fed sodium tripolyphosphate for 3 successive generations. Sodium tripolyphosphate 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.

COMPONENTS

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

Tetrasodium Pyrophosphate

Single exposure (acute) studies indicate that this material is slightly toxic orally (rat) and practically nontoxic after skin application (rabbit). It is slightly irritating to rabbit eyes and nonirritating to rabbit skin. 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

The following data have been classified using the criteria adopted by the European Economic Community (EEC) for aquatic organism toxicity. A legend summarizing the classification scheme appears below.

Sodium Tripolyphosphate

96-hr LC50 Bluegill sunfish: 10,000 mg/l, Practically Nontoxic
96-hr LC50 Rainbow trout: 5,600 mg/l, Practically Nontoxic

Legend for Aquatic Organism Toxicity (Journal of the European Communities, Annex VII A, Section 5.2.1)

Values	Classifications
LC50 or EC50 < or = 1.0 mg/L	Very Toxic
LC50 or EC50 > 1.0 mg/L and < or = 10 mg/L	Toxic
LC50 or EC50 > 10 mg/L and < or = 100 mg/L	Harmful
LC50 or EC50 > 100 mg/L	Practically Nontoxic

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

13. 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.

US DOT

Not regulated for transport

Canadian TDG

Not regulated for transport

15. REGULATORY INFORMATION

TSCA Inventory: Listed

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: 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	A A = Safety glasses

Reason for revision: New Company
Product Use: Food Ingredient

Supersedes MSDS dated: October 1, 2003

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