



**ICL Performance
Products LP**

Material Safety Data Sheet

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Nutrifos ® 424 Food Phosphate
Reference Number: AST10085
Date: May 2, 2006
Chemical Family: Phosphate salts

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 Acid Pyrophosphate	7758-16-9
Sodium Hexametaphosphate	68915-31-1
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 dermal 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.

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

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.

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 vapor and 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

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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.

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
United States	Occupation Exposure Limit	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:

Na₂H₂P₂O₇ - SAPP

Na₂O·P₂O₅ – SHMP

Na₄P₂O₇ - TSPP

Appearance:

White powder

Odor:

Odorless

pH:

7.1 - 7.5 (1% solution)

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

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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 the components are given below:

Sodium Acid Pyrophosphate

Oral - rat LD50 -	3,600 mg/kg; slightly toxic
Dermal - rabbit LD50 -	>7,940 mg/kg; practically nontoxic
Eye Irritation - rabbit -	13.0/110.0; slightly irritating
Skin Irritation - rabbit -	0.0/8.0; practically nonirritating

No birth defects were reported in mice, hamsters, or rabbits given sodium acid pyrophosphate during pregnancy. No adverse genetic effects were reported in standard tests using animals or bacterial and yeast cells.

The following components have been identified as hazardous chemicals under the criteria of the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Tetrasodium Pyrophosphate

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 reported 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.

Sodium Hexametaphosphate

Oral - rat LD50 -	6,600 mg/kg; practically nontoxic
Dermal - rabbit LD50 -	>7,940 mg/kg; practically nontoxic
Eye Irritation - rabbit -	1.3/110.0; slightly irritating
Skin Irritation - rabbit -	0.0/8.0 (24-hr exp.); non irritating

Rats fed sodium hexametaphosphate in their diet for one month showed decreased growth, increased kidney, lung and spleen weight, and kidney damage. Rats fed this material for two years also showed decreased weight gain, increased kidney weight, and kidney changes. No increase in tumors was reported. No adverse effects in reproductive capacity were reported in a multigeneration study using rats fed this material.

12. ECOLOGICAL INFORMATION

ICL Performance Products LP has not conducted environmental toxicity studies with this product.

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

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

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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: Revised sections 8 + 11. Supersedes MSDS dated: November 1, 2005

Product Use: Food Ingredient

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