



**ICL Performance  
Products LP**

## *Material Safety Data Sheet*

### **1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

Product Name: Polyclear®  
Reference Number: AST10080  
Date: September 6, 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>	<u>%w/w</u>
Tetrasodium Pyrophosphate	7722-88-5	1% -5%

Remaining components are non hazardous under OSHA & WHMIS regulations and held Company Trade Secret - Business Confidential. ICL Performance Products LP is withholding their specific chemical identities under provision of the OSHA Hazard Communication Rule Trade Secrets (1910.1200(i)(1)). The specific chemical identities will be made available to health professionals in accordance with 29 CFR 1910.1200 (i)(1) (2) (3) (4).

### **3. HAZARDS IDENTIFICATION**

#### **EMERGENCY OVERVIEW**

Appearance and Odor: White powder or granules with no odor

#### **WARNING STATEMENTS**

**CAUTION!**  
**MAY CAUSE RESPIRATORY TRACT IRRITATION**

#### **POTENTIAL HEALTH EFFECTS**

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.

**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.

**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. Remove material from eyes, skin and clothing. Wash heavily contaminated clothing before reuse.

**IF INHALED,** remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

**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**

**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. 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.

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

#### **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 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.

**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 <sup>3</sup> (total dust) 8-hr TWA	10 mg/m <sup>3</sup> (inhalable) 8-hr TWA
5 mg/m <sup>3</sup> (respirable) 8-hr TWA	3 mg/m <sup>3</sup> (respirable) 8-hr TWA

This product 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 <sup>3</sup> 8-hr. TWA
Belgium	Occupation Exposure Limit	5 mg/m <sup>3</sup> 8-hr. TWA
Denmark	Occupation Exposure Limit	5 mg/m <sup>3</sup> 8-hr. TWA
Finland	Occupation Exposure Limit	5 mg/m <sup>3</sup> 8-hr. TWA, 3 mg/m <sup>3</sup>
France	Occupation Exposure Limit	VME 5 mg/m <sup>3</sup>
Norway	Occupation Exposure Limit	5 mg/m <sup>3</sup> 8-hr. TWA
Switzerland	Occupation Exposure Limit	MAK – week 5 mg/m <sup>3</sup>
United Kingdom	Occupation Exposure Limit	5 mg/m <sup>3</sup> 8-hr TWA
United States	Occupation Exposure Limit	5 mg/m <sup>3</sup> 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**

Appearance: White powder or granules  
 Odor: Odorless  
 pH: (as a 1% solution @ 25 C): 9.8-10.3  
 Melting Point: > 600 °C  
 Solubility in Water: ~ 31% @ 25° 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**

STABILITY: Stable under normal conditions of storage and use.

MATERIALS TO AVOID: None known

HAZARDOUS DECOMPOSITION PRODUCTS: None known

HAZARDOUS POLYMERIZATION: Does not occur

**11. TOXICOLOGICAL INFORMATION**

Data from ICL Performance Products LP single-dose (acute) animal studies with this material are given below:

Eye Irritation - rabbit - mildly irritating  
Skin Irritation - rabbit - slightly irritating

Data on the major component(s) are given below:

Component A

Oral - rat LD50 - 5,400 mg/kg; practically nontoxic  
Dermal - rabbit LD50 - >7,940 mg/kg; practically nontoxic  
Eye Irritation - rabbit - 3.3/110.0 (24-hr exp.); slightly irritating  
Skin Irritation - rabbit - 0.0/8.0 (24-hr exp.); nonirritating

Diets containing 0.05, 0.5 and 5.0% of this component were fed to rats over 24 months. At the 5.0% level, growth retardation, elevated kidney/body weight ratios, and chronic tubular nephropathy were observed. The no-effect level for chronic toxic effects was 0.5%.

This component was reported to be mutagenic when tested in a host-mediated assay conducted in mice with Saccharomyces D3. No mutagenic or genotoxic effects were reported in host-mediated assays conducted in mice with Salmonella TA1530 and G46, in microbial assays using six Salmonella strains, in an in vivo rat bone marrow cell clastogenesis assay in in vitro Chinese hamster fibroblast cell and human embryonic lung cell chromosomal aberration assays, and in an in vivo dominant lethal assay conducted in rats.

No adverse effects were observed in a three-generation rat reproduction study with rats fed diets containing 0.5% of the component.

No teratogenic, fetotoxic, or maternal toxic effects were observed in rabbits administered at 250 mg/kg on days 6 through 19 of gestation.

Component B

Oral - rat LD50: 2,980 mg/kg; slightly toxic  
Dermal - rabbit LD50: > 7,940 mg/kg; practically nontoxic  
Eye Irritation - rabbit: 11.1/110.0, moderately irritating  
Skin Irritation - rabbit: 0.5/8.0 (24-hr. exposure), practically nonirritating

Following repeated exposure (13-weeks) to the component in their food, kidney damage with changes in body weight, food consumption, clinical parameters and organ weights were reported at high-dose levels in rats.

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

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**

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

**13. DISPOSAL CONSIDERATIONS**

This material when discarded is not a hazardous waste as the Resource, Conservation and Recovery Act (RCRA), 40 CFR 261 define that term. Dry material may be land filled 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	F F = Safety glasses, gloves, synthetic apron, dust respirator

Reason for revision: Revised sections 1 + 2 Supersedes MSDS dated: May 2, 2006  
Product Use: Detergent builder, sequestrant, dispersant

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