

**ICL Performance  
Products LP**

## Material Safety Data Sheet

**RESPONSIBLE CARE**<sup>®</sup>  
OUR COMMITMENT TO SUSTAINABILITY

### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

#### Identification

Product Name: SODIUM ACID PYROPHOSPHATE  
Reference Number: AST10051  
Date: December 13, 2010  
Synonyms: SAPP; Pyrophosphate Acid, Disodium Salt; Disodium Dihydrogen Pyrophosphate

#### Use of substance or preparation

Food ingredient, buffer, sequesterant, deflocculant, peptizing agent in cheese and meat products, dairy cleaners, drilling mud, metal cleaning and phosphatizing.

#### 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. HAZARDS IDENTIFICATION

#### Classification of the substance/preparation

GHS

**Warning**

H319 Causes serious eye irritation.

#### **Prevention:**

P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P264 Wash thoroughly after handling.

#### **Response:**

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313 If eye irritation persists: Get medical advice/attention.



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*Product manufactured and packaged after December 1, 2010 has GHS hazard identification and classification labels reflecting results from recent eye irritation tests, however there may still be product on the market with the former classification on the packaging.*

**Former EU classification:**

Xi - Irritant

R36 Irritating to eyes

S25 Avoid contact with eyes

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice

S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

**Composition**

<u>Substance</u>	<u>CAS No.</u>	<u>EINECS No</u>	<u>%w/w</u>
Sodium Acid Pyrophosphate	7758-16-9	231-835-0	93+

**4. FIRST AID MEASURES**

**General**

Treatment is symptomatic and supportive.

**Eye contact**

Rinse immediately with plenty of water. If easy to do, remove any contact lenses. Get medical attention if irritation occurs and persists. Remove contaminated clothing. Remove material from eyes, skin and clothing. Wash clothing before reuse.

**Skin contact**

Remove this material with plenty of soap and water. Contact with the dry material may cause drying, or chapping, redness or burning of the skin.

**Inhalation**

Remove to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Inhalation of the dust may cause coughing and sneezing.

**Ingestion**

If swallowed, do NOT induce vomiting. Rinse mouth with plenty of water and get medical attention. Contact a Poison Control Center. Never give anything by mouth to an unconscious person.

**5. FIRE FIGHTING MEASURES**

**Extinguishing media**

Non-combustible. No special requirement.

**Unsuitable extinguishing media**



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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**

Sweep, scoop or vacuum and place into containers for disposal. Flush 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.

Avoid contact with eyes and skin.  
Wash thoroughly after handling.  
Do not taste or swallow.

**Engineering measures**

Provide natural or mechanical ventilation to minimize exposure. 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. Emptied 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.

**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 regulated (PNOR) and particulates not otherwise classified (PNOC) which are the least stringent exposure limits



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applicable to dusts.

ACGIH TLV 10 mg/m<sup>3</sup> (inhalable) 8-hr TWA, 3 mg/m<sup>3</sup> (respirable) 8-hr TWA  
OSHA PEL 15 mg/m<sup>3</sup> (total dust) 8-hr TWA, 5 mg/m<sup>3</sup> (respirable) 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. In case of insufficient ventilation, wear suitable respiratory equipment. Use NIOSH/MSHA approved respiratory protection equipment when airborne exposure limits are exceeded. Consult the respirator manufacturer to determine appropriate type equipment for a given application. Observe respirator use limitations specified by NIOSH/MSHA or the manufacturer. Use approved respiratory protective equipment as described in the U.S. OSHA 29 CFR 1910.134 or European Standard EN149.

**Hand/skin protection**

Wearing protective clothes is recommended; wash hand and contaminated skin thoroughly after handling.

**Eye protection**

Wear appropriate protective eyeglasses or chemical safety goggles as described in the U.S. OSHA 29 CFR 1910.133 or European Standard EN 166.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**General Information**

Chemical Formula:	Na <sub>2</sub> H <sub>2</sub> P <sub>2</sub> O <sub>7</sub>
Form	Powder, free flowing
Color	White
Odor	Odorless

**Important health, safety and environmental information**

pH (1% solution)	4.0 – 5.0
Melting point:	Decomposes between 250 – 275 °C (482-527 °F) to polyphosphates, which melt between 600 - 650 °C (1112-1202 °F)
Bulk density:	0.8 – 1.33 g/cc
Water solubility (g/100g H <sub>2</sub> O):	5 @ 0 °C 12.5 @ 25 °C 20 @ 50 °C 65 @ 75 °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**



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None known.

**Materials to avoid**

Strong mineral acids.

**Hazardous decomposition products**

None known.

**11. TOXICOLOGICAL INFORMATION**

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

The dry powder may cause foreign body irritation in some individuals. Prolonged contact with the dry powder may cause drying or chapping of the skin. Workers exposed to dust of this product reported moderate irritation of the nose and throat, with five of the eighteen workers reporting nasal stuffiness and nosebleeds. High dust concentrations were reported to cause mild eye and skin irritation.

**Laboratory data**

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

Oral - rat LD<sub>50</sub> - 3,600 mg/kg; slightly toxic  
Dermal - rabbit LD<sub>50</sub>: > 7,940 mg/kg; practically non-toxic  
Eye Irritation - rabbit: 66.5/110; severely irritating  
Skin Irritation - rabbit: 0.7/8.0; slightly irritating  
Inhalation - LC<sub>50</sub> >0.58 mg/l, 4 hr (rat) - maximum attainable concentration

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.

**12. ECOLOGICAL INFORMATION**

**Environmental Toxicity**

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

**Environmental Fate**

Inorganic compounds in contact with the soil, sub-surface or surface waters may be taken up by plants and utilized as essential nutrients. Phosphates may also form precipitates, usually with calcium or magnesium. The resultant compounds are insoluble in water and become a part of the soil or sediment. The term biodegradability, as such, is not applicable to inorganic compounds.

**13. DISPOSAL CONSIDERATIONS**

**European waste catalog number**

The data provided in this section is for information only. Please apply the appropriate classification for your waste.

16 03 03 inorganic wastes containing dangerous substances



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**Disposal Considerations**

This material when discarded is not a hazardous waste as that term is defined by the U.S. Resource, Conservation and Recovery Act (RCRA), 40 CFR 261. 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.

**Road/Rail, Sea and Air**

IMDG/UN	Not regulated for transport
ICAO/IATA	Not regulated for transport
RID/ADR	Not regulated for transport
Canadian TDG	Not regulated for transport
U.S. DOT	Not regulated for transport

**15. REGULATORY INFORMATION**

**EC label**

Hazard Symbol:	Xi – Irritant
R36	Irritating to Eyes
S25	Avoid contact with eyes
S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S36/37/39	Wear suitable protective clothing, gloves and eye/face protection.

**Chemical Inventory**

USA TSCA:	Listed
Canada DSL:	Listed
EC:	Listed

**Additional information**

Germany: WGK = 1

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:	None
Section 313 Toxic Chemical(s):	None

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.

**16. OTHER INFORMATION**

	<u>Health</u>	<u>Fire</u>	<u>Reactivit</u>	<u>Additional Information</u>
Suggested NFPA Rating	2	0	$\frac{Y}{0}$	



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Suggested HMIS Rating    2                    0                    0                    J

J = Splash goggles, gloves,  
synthetic apron, dust & vapor  
respirator

Reason for revision: Revised section 2.  
Supersedes MSDS dated: December 8, 2010

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