


SAFETY DATA SHEET	
Sodium Acid Pyrophosphate	1 of 9

Complying with 1907/2006/EEC Regulation of 18 December 2006

Section 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

REACH Product name: Sodium Acid Pyrophosphate

Trade names: Sodium Acid Pyrophosphate; SAPP-Gr; SAPP-Pw; Hi-R-221; Hi-R-222; Hi-B-281; Hi-B-283; Hi-B-391; Hi-B-393; Hi-B-401; Hi-B-403.

Synonyms: Disodium Diphosphate; Pyrophosphoric acid, disodium salt; Disodium Dihydrogen Pyrophosphate; SAPP.

Chemical formula: Na₂H₂P₂O₇

Fertilizer formula: Not applicable

Product type: Solid (powder or granular)

Cas number: 7758-16-9

Use of the substance/preparation: Food processing- leavening agent, sequestrant, emulsifier, buffer.
Cosmetics- toothpastes, cleaners.
Industries- metal treatment, textile, water treatment, drilling mud.

Company/undertaking identification

Supplier/Manufacturer: Haifa Chemicals Ltd.

P.O.B 10809, Haifa Bay 26120, Israel

Tel: +972-4-8469961

Fax: +972-4-8469955

E-mail address of person responsible for this SDS: industrial@haifachem.com


Emergency telephone number: +972-4-8469603/4
(with hours of operation)

Section 2. HAZARDS IDENTIFICATION

Classification: The substance is not classified as dangerous according to Directive 67/548/EEC and its amendments.

Most important hazards: CAUTION! Dust in high concentration may cause eye, skin and respiratory tract irritation.

See section 11 for more detailed information on health effects and symptoms.

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Section 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/preparation:

Ingredient name	CAS number	%	EC number	Classification
Sodium Acid Pyrophosphate	7758-16-9	100%	231-835-0	-
See section 16 for the full text of the R-phrases declared above				

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in section 8.

Section 4. FIRST AID MEASURES

Symptoms: May cause irritation to the respiratory tract. Symptoms may include coughing and sneezing. Causes irritation to the gastrointestinal tract. Symptoms may include nausea, vomiting and diarrhea. Causes irritation to skin and eyes. Symptoms include dryness or cracking.


Eyes contact: Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention if irritation develops or persists or if visual changes occur.

Skin contact: In case of contact, immediately wash with plenty of soap and water for at least 5 minutes. Cold water may be used. Get medical attention if irritation develops or persists. Remove contaminated clothing and shoes. Clean contaminated clothing and shoes before re-use.

Inhalation: If respiratory irritation or distress occurs, remove victim to fresh air. Get medical attention if respiratory irritation or distress continues.

Ingestion: If victim conscious and alert, give 2-3 glasses of water to drink DO NOT INDUCE VOMITING. Do not give anything by mouth to an unconscious person. Seek immediate medical attention. Do not leave victim unattended. Vomiting may occur spontaneously. To prevent aspiration of swallowed product, lay victim on side with head lower than waist. If vomiting occurs and the victim is conscious, give water to further dilute the chemical.

Protection of first-aiders: No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

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Notes to physician: No specific antidote, medical staff contacts Poisons Information Center. All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

See section 11 for more detailed information on health effects and symptoms.

Section 5: Fire-Fighting Measures

Extinguishing media

Suitable: Use extinguishing media suitable for surrounding materials.

Not suitable: N/A

Special exposure hazards: Non-combustible.

Hazardous thermal decomposition products: Oxides of sodium and oxides of phosphorous.

Special protective equipment for fire fighters: Fire Fighting should wear positive self-contained breathing apparatus (SCBA) and full turnout gear.

Remark: Move containers from fire area if possible to do so without risk.

Section 6: Accidental Release Measures

Personal precautions: Wear protective clothing. Ventilate area of spill.

Environmental precautions: Do not let this chemical enter the environment.

Methods for cleaning up

Small spill: Pick up and place in a suitable container for reclamation or disposal, using a method that does not generate dust.


Large spill: As for small spill

Personal Protection in Case of Large Spill: Safety glasses. Full suit. Dust respirator. Boots. Gloves. A self-contained breathing apparatus should be used to avoid inhalation of the product.

Section 7: Handling and Storage

Handling: Minimize dust generation and accumulation. Do not breath dust. Avoid contact with skin and eyes. Wash thoroughly after handling. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing, gloves and eye/face protection. Do not permit eating/drinking/smoking near the material.

Storage: Keep containers tightly closed, in a dry, cool and well ventilated place.

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Protect from humidity.
 Do not store together with strong bases and strong oxidizing agents.
 Keep away from heat, sparks and open flame.
 In case of insufficient ventilation, wear suitable respiratory equipment

Specific use(s):

Section 8: Exposure Control / Personal Protection

Exposure limit values: ACGIH-TLV 10 mg/m³ (TWA) *
 ACGIH-TLV 3 mg/m³ (TWA) **
 OSHA-PEL 15 mg/m³ (TWA) ***
 OSHA-PEL 5 mg/m³ TWA) **
 * nuisance dust - inhalable particulate
 ** nuisance dust - respirable particulate
 *** total dust

Exposure controls

Occupational exposure controls: Use process enclosures, local exhaust ventilation, or others engineering controls to keep airborne levels below recommend exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Respiratory protection: Dust respirator. Be sure to use an approved/certified or equivalent. Wear appropriate respirator when ventilation is inadequate.

Hand protection: Wear protective gloves to prevent skin exposure.

Eye protection: Wear protective safety glasses.


Skin protection: Wear appropriate long-sleeved clothing to minimize skin contact.

Hygiene measures: Keep away from foodstuffs and beverages. Do not eat, drink or smoke during work time. Remove soiled or soaked clothing immediately. Clean skin thoroughly after work; apply skin cream. During use, provide suitable ventilation.

Environmental exposure controls: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Exposure Guidelines: Exposure limits represent regulated or recommended worker breathing zone concentrations measured by validated sampling and analytical methods, meeting the regulatory requirements.

Section 9: Physical and Chemical Properties

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General information:

Physical state: Solid (powder or granular)

Colour: White

Odour: Odourless

Odour threshold: Odourless

Molecular weight: 221.94 g/mol

pH: 3.5-5.0 (Conc.(%w/w): 1) [Acidic]

Boiling point/boiling range: Not applicable

Flash point: Not applicable

Flammability: Not flammable

Explosive properties: Not explosive

Oxidizing properties: Not oxidizer

Vapor pressure: <0.001 kPa (<0.01 mm Hg) at 20°C (68°F)- Not Volatile

Relative Density: 2.3 g/cm³

Water solubility: soluble in water

Octanol/Water partition coefficient: <1, the product is more soluble in water

Viscosity: Not viscous

Vapor density: Not volatile

Evaporation rate (butyl acetate=1): Not volatile

VOC: Not an organic compounds

Apparent (Bulk) Density: 0.7-1.0 g/cm³

Decomposition range: >180°C (356°F)- release of water of constitution, becomes polyphosphates.

Melting point/melting range: >630°C (1166°F)

Section 10: Stability and Reactivity

Stability: The product is stable under normal handling and storage conditions described in Section 7.

Conditions to avoid: Extreme humidity, excess heat.

Materials to avoid: Strong oxidizing agents, strong bases and moisture.

Hazardous Decomposition products: Under fire- oxides of phosphorous, oxides of sodium.


Hazard polymerization: Will not occur.

Section 11: Toxicological Information

Potential acute health effects

Inhalation: Dusts may cause upper respiratory tract irritation.

Ingestion: Ingestion of large quantities may cause gastrointestinal irritation, vomiting and diarrhea.

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Skin contact: Dusts may cause mild skin irritation. Prolonged contact with the dry powder may cause drying or chapping of the skin.

Eyes contact: Dusts have a dehydrating effect and may cause irritation at high concentration.

Acute toxicity:

Product/ingredient name	Test/Type	Species	Dose	Exposure
Sodium acid pyrophosphate	LD50, oral	Mouse	2650 mg/kg	-

Potential Chronic Health Effects

Reproductive toxicity: Significant effects or critical hazards are not known.

Carcinogenicity: This product does not contain any substances that are considered by IARC, NTP, OSHA, EU or ACGIH to be “probable” or “suspected” human carcinogens.

Mutagenicity: Significant effects or critical hazards are not known.

Teratogenicity: Significant effects or critical hazards are not known.

Developmental effects:

Fertility effects: Not applicable.

Over exposure signs/symptoms

Inhalation: Inhalation of product may aggravate existing chronic respiratory disease.

Ingestion: No specific data

Skin: No specific data

Eyes: No specific data

Target organs: No specific data

Special Remarks on Toxicity to animals: Very low toxicity for humans or animals.


Section 12: Ecological Information

Ecotoxicity

Aquatic ecotoxicity: N/A

Mobility: Soluble in water.

Persistence: Not applicable, since inorganic substance.

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Degradability: Not applicable.

Degradability in sewage works: Slow hydrolysis to orthophosphate form.

Bioaccumulative potential: N/A

Result of PBT assessment: N/A

Other adverse effects:

Substances which have an unfavorable influence on the oxygen balance and can be measured using parameters such as BOD, COD, etc.: Absent.

Substances, which contribute to eutrophication: Phosphates, 64% as P₂O₅

Remarks: N/A

Section 13: Disposal Considerations

Methods of disposal: Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Hazardous waste: N/A

Section 14: Transport Information

International transport regulations


Regulatory Information	UN number	Proper shipping name	classes	Packing group	Label	Additional information	Marine pollutant
ADR/RID Class	NOT regulated	-	-	-	-	-	-
ADNR Class	NOT regulated	-	-	-	-	-	-
IMDG class	NOT regulated	-	-	-	-	-	-
IATA class	NOT regulated	-	-	-	-	-	-

Section 15: Regulatory Information

EC regulations

Classification and labeling have been determined according to EU Directives 67/548/EEC and 1999/45/EC (including amendments) and take into account the intended product use.

Labelling in accordance with EC directivec: No symbol required.

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Risk phrases: This product is not classified according to EU legislation

Safety phrases: This product is not classified according to EU legislation

Contains: Sodium acid pyrophosphate 100%

Product use: Food processing- leavening agent, sequestrant, emulsifier, buffer.
Cosmetics- toothpastes, cleaners.
Industries- metal treatment, textile, water treatment, drilling mud.

Section 16: Other Information

Full text of R-phrases referred to in sections 2 and 3: N/A

Full text of classifications referred to in sections 2 and 3: N/A

Training advice: N/A

Recommended restriction: N/A

Further information:

Sources of key data used to compile the Safety Data Sheet:

National Fire Protection Association Hazard Ratings- NFPA (R):

- 1** Health Hazard Rating - Slight
- 0** Flammability Rating - Minimal
- 0** Instability Rating - Minimal

National Paint & Coating Hazardous Materials Identification System – HMIS (R):

- 1** Health Hazard Rating - Slight
- 0** Flammability Rating - Minimal
- 0** Instability Rating - Minimal

Key Legend Information:

ACGIH- American Conference of Governmental Industrial Hygienists

OSHA- Occupational Safety and Health Administration

NTP- National Toxicology program


IARC- International Agency for Research on Cancer

ND- Not Determined

N/A- Not available

R-phrases- Risk phrases

S-phrases- Safety phrases

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Version no. 1

According to Regulation (EC) No. 1907/2006 (REACH), Annex II and Commission Directive 2001/59/EC.

To the best of our knowledge the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.