Richest Group
No. 999, Jiangyue Rd, Minhang, Shanghai 201114, China
Tel: 0086 21 5017 5386
E-mail: inquiry@richest-group.com
Web: www.richest-group.com

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Product	Sodium Acid Pyrophosphate Food Grade (SAPP)	**Revision date**	2026-11-16
Version	1.0	**Brand**	Richest

SECTION 1: Identification of the substance/mixture and of the company/undertaking

Product name	Sodium Acid Pyrophosphate Food Grade (SAPP)
Synonyms	7758-16-9; Sodium acid pyrophosphate; Disodium dihydrogen pyrophosphate; DISODIUM PYROPHOSPHATE; Dinatriumpyrophosphat; Disodium dihydrogen diphosphate
CAS No.	7758-16-9
EC No.	231-835-0
Molecular formula	Na2H2P2O7
Molecular weight	221.94 g/mol
Relevant identified uses	Baking powder constituent; Blanching solutions to prevent after-cooking darkening of potatoes; Phosphate mixes in meat processing; Cheese emulsifying salts; Food buffer/acidifier and seafood preservative
Uses advised against	No specific uses advised against were identified in the reviewed sources.
Company	Richest Group
Address	No. 999, Jiangyue Rd, Minhang, Shanghai 201114, China
Telephone	0086 21 5017 5386
E-mail	inquiry@richest-group.com
Website	www.richest-group.com
Emergency telephone number	0086 21 5017 5386

SECTION 2: Hazards identification

GHS Classification	No known hazards / not classified as hazardous for supply
Pictogram(s)	None
Signal word	None
Hazard statement(s)	H315 Causes skin irritation; H319 Causes serious eye irritation; H335 May cause respiratory irritation
Precautionary statement(s)	None
Other hazards	A skin, eye, and mucous membrane irritant; [SAX] Generally regarded as safe (GRAS) for use in foods; Ingestion of high doses may cause GI irritation; Absorption of sufficient phosphate can induce hyperphosphatemia, hypocalcemia, and/or hypomagnesemia and lead to cardiac arrest; Oral LD50 (mouse) = 2650 mg/kg; Intravenous LD50 (mouse) = 59 mg/kg; [HSDB] An eye and respiratory tract irritant; ...

SECTION 3: Composition/information on ingredients

Component	Sodium Acid Pyrophosphate Food Grade (SAPP)
CAS No.	7758-16-9

SECTION 3: Composition/information on ingredients

EC No.	231-835-0
Classification	No known hazards / not classified as hazardous for supply
Concentration	Na2H2P2O7 ≥94%

SECTION 4: First-aid measures

If inhaled	Move the person to fresh air and keep comfortable for breathing. Get medical advice if symptoms occur.
In case of skin contact	Wash with plenty of water. Remove contaminated clothing. Get medical advice if irritation occurs.
In case of eye contact	Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Get medical advice if irritation persists.
If swallowed	Rinse mouth. Do not induce vomiting unless directed by medical personnel. Get medical advice if symptoms occur.
Most important symptoms and effects	No data available
Indication of immediate medical attention	Treat symptomatically. Show this safety data sheet to medical personnel.

SECTION 5: Fire-fighting measures

Suitable extinguishing media	Water spray, carbon dioxide, foam or dry chemical
Unsuitable extinguishing media	No data available
Special hazards arising from the chemical	Non-flammable, but avoid dusting situations; Innophos reports no explosion sensitivity to mechanical impact or static discharge
Advice for firefighters	Wear self-contained breathing apparatus and protective clothing appropriate for the surrounding fire.

SECTION 6: Accidental release measures

Personal precautions and emergency procedures	Avoid contact with the material. Ensure adequate ventilation. Wear appropriate personal protective equipment.
Environmental precautions	Prevent uncontrolled release to drains, soil and watercourses.
Methods for containment and cleaning up	Collect mechanically or with a suitable absorbent and place in a suitable closed container for disposal.

SECTION 7: Handling and storage

Precautions for safe handling	Avoid contact with skin and eyes. Avoid formation or inhalation of dust, mist or vapour as applicable. Wash thoroughly after handling.
Conditions for safe storage, including incompatibilities	Keep in original unopened packaging in a clean, cool and dry place; prevent contamination and use single-layer pallets to avoid compaction; shelf life: 2 years.

SECTION 8: Exposure controls/personal protection

Occupational exposure limit values	Osha particulates not otherwise regulated total dust twa: 15 mg/m3; Osha particulates not otherwise regulated respirable fraction twa: 5 mg/m3; Nom 010 stps 2015 total dust twa: 10 mg/m3; Nom 010 stps 2015 respirable fraction twa: 3 mg/m3
Biological limit values	No biological limit values were identified in the reviewed sources.

SECTION 8: Exposure controls/personal protection	
Appropriate engineering controls	Provide adequate ventilation. Eyewash facilities should be available where contact is possible.
Eye/face protection	Use safety eyewear appropriate to the risk of exposure.
Skin and body protection	Wear suitable protective gloves and clothing appropriate to the risk of exposure.
Respiratory protection	Use suitable respiratory protection if exposure limits may be exceeded or dust, mist or vapour is generated.
Thermal hazards	No specific thermal hazards were identified in the reviewed sources; see Sections 5 and 10.

SECTION 9: Physical and chemical properties	
Physical state	White powder
Colour	White crystalline powder
Odour	Odorless
Melting point / freezing point	900 °C (Innophos SAPP Tech SDS and Brenntag product data)
Boiling point / boiling range	No data available
Flammability	Non-flammable
Explosion / flammability limits	No data available
Flash point	Non-flammable (Brenntag product data)
Auto-ignition temperature	No data available
Decomposition temperature	No data available
pH	4.3 at 20 °C (1% solution)
Viscosity	Not applicable to the neat solid; solution viscosity depends on concentration, temperature and test method.
Solubility	11.9 g per 100 g water at 20 °C
Partition coefficient n-octanol/water	No data available
Vapour pressure	0 Pa at 20 °C
Density and/or relative density	1.1-1.3 g/mL (50 taps)
Relative vapour density	No data available
Particle characteristics	White powder
Melting behavior	Melts above 600 °C
Thermal decomposition	Loses water above 250 °C

SECTION 10: Stability and reactivity	
Reactivity	No reactivity hazards identified in the Innophos SAPP Tech SDS
Chemical stability	Innophos SDS: stable under normal conditions of storage and use, and hazardous reactions will not occur; avoid dust formation and accumulation, and keep away from strong oxidants and bases. Hazardous decomposition products include sodium oxides and phosphorus oxides.
Possibility of hazardous reactions	Hazardous reactions will not occur under normal conditions

SECTION 10: Stability and reactivity	
Conditions to avoid	Avoid creation and accumulation of dust; keep in a dry, well-ventilated area away from incompatible materials
Incompatible materials	Strong oxidizing agents and bases
Hazardous decomposition products	WHEN HEATED TO DECOMPISITION IT EMITS TOXIC FUMES OF PHOSPHORUS OXIDES AND Na2O.

SECTION 11: Toxicological information	
Acute toxicity	LD50 Mouse oral 2650 mg/kg; LD50 Mouse sc 480 mg/kg; LD50 Mouse iv 59 mg/kg
Toxicological summary	Safe for use in cosmetics, with qualifications
Health effects	A skin, eye, and mucous membrane irritant; [SAX] Generally regarded as safe (GRAS) for use in foods; Ingestion of high doses may cause GI irritation; Absorption of sufficient phosphate can induce hyperphosphatemia, hypocalcemia, and/or hypomagnesemia and lead to cardiac arrest; Oral LD50 (mouse) = 2650 mg/kg; Intravenous LD50 (mouse) = 59 mg/kg; [HSDB] An eye and respiratory tract irritant; [MSDSonline]
Skin corrosion irritation	The Innophos SDS classifies this product as Skin Irritation Category 2; direct contact may cause skin irritation.
Serious eye damage irritation	The Innophos SDS classifies this product as Eye Irritation Category 2A; dust or direct contact may cause eye irritation.
Sensitization	Based on the available data, the Innophos SDS determines that the classification criteria for respiratory or skin sensitization are not met; this classification determination is not equivalent to provision of a standalone sensitization study report.
Carcinogenicity	Based on the available data, the Innophos SDS determines that the classification criteria for carcinogenicity are not met; the SDS also notes limited chronic-effects data, so this should not be expanded into a claim that long-term non-carcinogenicity has been demonstrated.

SECTION 12: Ecological information	
Ecotoxicity	The Innophos 2023 SDS does not provide experimental fish, daphnid, or algal endpoints specific to Sodium Acid Pyrophosphate, so values for other salts such as tetrasodium pyrophosphate are not applied. The following environmental description is based on hydrolysis to orthophosphate and phosphorus nutrient effects and is not a quantitative acute toxicity result for this product.
Persistence degradability	This product is an inorganic salt, and biodegradation test methods for organic substances are not applicable. Shannon and Lee's natural-water study measured rates of pyrophosphate hydrolysis to orthophosphate of 0.08–0.21 mg P/L/500 h at 4±1 °C and 0.23–0.47 mg P/L/500 h at 20±1 °C; samples were incubated in the dark. These rates are study results for pyrophosphate in natural-water matrices, not a product-specific OECD half-life for Sodium Acid Pyrophosphate.
Bioaccumulative potential	This product is a water-soluble inorganic ionic salt, and the conventional LogKow/BCF framework for organic substances is not applicable. The public SDS states that its components are not considered PBT or vPvB at levels ≥0.1%; low bioaccumulation potential is a judgement based on the inorganic ionic form and high water solubility, not a measured fish BCF.
Mobility in soil	The public SDS reports water solubility of 170 g/L at 20 °C, on the basis of which the dissolved phase is qualitatively expected to be relatively mobile; this judgement does not use a measured Koc. Following hydrolysis to orthophosphate, migration and fate will be affected by aquatic and soil chemistry and cannot simply be equated with permanent free migration.

SECTION 12: Ecological information

Other adverse effects	Shannon and Lee state that condensed phosphates can fertilise water bodies and promote aquatic plant growth. Sodium Acid Pyrophosphate hydrolyses to orthophosphate, so the principal environmental concern is eutrophication caused by phosphorus input; direct discharge to water bodies should be avoided.

SECTION 13: Disposal considerations

Product disposal methods	SRP: At the time of review, criteria for land treatment or burial (sanitary landfill) disposal practices are subject to significant revision. Prior to implementing land disposal of waste residue (including waste sludge), consult with environmental regulatory agencies for guidance on acceptable disposal practices.
Contaminated packaging	Empty containers should be taken to an approved waste handling site for recycling or disposal in accordance with local regulations.

SECTION 14: Transport information

UN Number (ADR/RID, IMDG, IATA)	Not regulated as dangerous goods
UN Proper Shipping Name	Not regulated as dangerous goods
Transport hazard class(es)	Not regulated as dangerous goods
Packing group	Not regulated as dangerous goods
Environmental hazards / Marine pollutant	No data available
Special precautions for user	Keep containers closed and secured during transport. Follow local transport requirements.

SECTION 15: Regulatory information

Safety, health and environmental regulations specific for the product	No data available

SECTION 16: Other information

Full text of H-Statements	H315 Causes skin irritation; H319 Causes serious eye irritation; H335 May cause respiratory irritation
Revision date	2026-11-16
Version	1.0
References	Supplier technical documents, public SDS/COA/TDS and regulatory sources reviewed. Public data citations are listed below. Public data sources: PubChem Disodium Pyrophosphate (CID 24451): https://pubchem.ncbi.nlm.nih.gov/compound/24451 | Sodium Acid Pyrophosphate — Safety Data Sheet: https://www.innophos.com/-/media/innophos-com/customer-center-files/phosphates/public/unique/001/sapp-tech-sds.pdf?rev=7f3f602ae98a4f8c939a1724a7c700d2 | Sodium Pyrophosphate / Sodium Acid Pyrophosphate — Safety Data Sheet: https://www.chemicalbook.com/msds/sodiumpyrophosphate.htm | Hydrolysis of Condensed Phosphates in Natural Waters: https://www.gfredlee.com/Nutrients/Shannon_Lee_Hydrolysis_Condensed_P.pdf | Sodium Acid Pyrophosphate - Safety Data Sheet: https://www.innophos.com/-/media/innophos-com/customer-center-files/phosphates/public/unique/001/sapp-tech-sds.pdf | Sodium Acid Pyrophosphate - Product characteristics: https://www.brenntag.com/en-sa/products/sodium-acid-pyrophosphate.html

SECTION 16: Other information

Abbreviations	CAS: Chemical Abstracts Service; ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road; IMDG: International Maritime Dangerous Goods; IATA: International Air Transport Association; SDS: Safety Data Sheet.
Disclaimer	The information in this SDS applies to the specified product and is provided in good faith based on information available to Richest Group at the date of issue. It describes health, safety and environmental requirements and does not constitute a guarantee of product properties. Users must assess suitability and comply with applicable regulations.