

SPECIFICATION

Product Name: Sodium Acid Pyrophosphate Food Grade
Chemical Formula: $\text{Na}_2\text{H}_2\text{P}_2\text{O}_7$
CAS Number: 7758-81-4
Molecular Weight: 221.94 g/mol
Appearance: White crystalline powder
Odor: Odorless

Chemical Composition

Parameter	Unit	Typical Value	Specification (Min/Max)
Content ($\text{Na}_2\text{H}_2\text{P}_2\text{O}_7$)	%	95.5	Min. 95.0
Phosphorus pentoxide	-	64.0	63.0 - 64.0
PH value	-	4.1	3.5 - 4.5
Water-insoluble	%	0.3	Max. 1.0
Fluoride	PPM	6 PPM	Max. 10 PPM
Heavy metal	PPM	6 PPM	Max. 10 PPM
Lead	PPM	2 PPM	Max. 4 PPM
Cadmium	PPM	0.6 PPM	Max. 1 PPM
Mercury	PPM	0.01 PPM	Max. 1 PPM
Arsenic	PPM	2 PPM	Max. 3 PPM

Aluminum	PPM	2 PPM	Max. 3 PPM
Loss on burning (105°C)	%	0.36	Max. 0.5

Physical Properties

- Solubility: Freely soluble in water. Insoluble in alcohol.

Shelf Life & Storage

- Shelf Life: 2 years from date of manufacture under recommended storage.
- Storage Conditions: Store in a cool, dry, and well-ventilated place. Keep container tightly closed to prevent moisture absorption (hygroscopic nature). Protect from humidity and direct sunlight. Use moisture-proof packaging (e.g., HDPE bags with liners). Keep away from strong acids and strong bases.

Applications

- Use: Leavening agent in bakery products (cakes, muffins, biscuits) – reacts with baking soda to release CO₂. pH control agent in processed foods. Sequestrant / chelating agent – binds metal ions to improve stability. Emulsifier & stabilizer in processed foods. Color retention agent in potatoes and seafood (prevents discoloration). Texture modifier in meat and seafood processing. Used in instant baking mixes for controlled leavening reaction.
- Dosage: Depends on the application and formulation.

Packaging

- Standard Packing: 25 kg woven PP bags with inner liner, 1 kgs and 100 grams, or as per customer requirement.
- Labeling: Product name, batch number, net weight, manufacture date, expiry date, and manufacturer details.

* Specifications are based on the manufacturer's provided specifications.