

SPECIFICATION

Product Name: Sodium Monofluorophosphate
Chemical Formula: $\text{Na}_2\text{PO}_3\text{F}$
CAS Number: 10163-15-2
Molecular Weight: 143.95 g/mol
Appearance: White powder
Odor: Odorless

Chemical Composition

Parameter	Unit	Typical Value
Assay	%	Min.95%
Total Fluorine	%	Min. 12.3%
Phosphate	%	Min. 47.0%
pH of 2% solution	-	6.5 to 8
Heavy metal (as lead)	%	Max. 0.005%
Arsenic	%	Max. 0.0003%
Loss on drying	%	0.005%

Physical Properties

- Solubility: Soluble in water. Insoluble in ethanol. Insoluble in acetone.

Shelf Life & Storage

- Shelf Life: 2 years from date of manufacture under recommended storage.
- Storage Conditions: Store in a cool, dry place at 15–30°C. Protect from moisture, excessive heat, and direct sunlight. Keep the container tightly closed in the original, properly labeled container and store in a well-ventilated area. Avoid contact with strong acids and incompatible materials to maintain product stability.

Applications

- Use: Widely used as an anticaries (anti-cavity) agent in toothpastes, tooth powders, mouth rinses, and other oral care products. It releases fluoride ions that help strengthen tooth enamel, promote remineralization, reduce demineralization, and prevent dental caries (cavities). It is also used in certain pharmaceutical and dental formulations where fluoride supplementation is appropriate.

- Dosage: Depends on the product type and applicable regulatory requirements.

Packaging

- Standard Packing: 25 Kgs woven pp bag with inner liner 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.