

SPECIFICATION

Product Name: Potassium Sorbate Food Grade
Chemical Formula: C ₆ H ₇ KO ₂
CAS Number: 24634-61-5
Molecular Weight: 150.22 g/mol
Appearance: White to off white granular
Odor: Odorless

Chemical Composition

Parameter	Unit	Typical Value	Specification (Min./Max.)
Heat Stability	-	Complied	No change in color after heating for 90 minutes at 105°C
Identification Test	- - -	Complied Complied Complied	(1) Potassium test: passes test (2) Test of Double Bonds: passes test (3) UV: conforms with standard spectrum
Assay (dry weight basis)	%	100.4	99 - 101.0
pH-Value	-	9.5	8.5 - 10.5
Transmittance	%	91.31	≥87.0
Clarify	-	Complied	Passes test
Alkalinity	-	Complied	Passes test
Chloride	%	<0.018	≤0.018
Sulfate	%	<0.038	≤0.038
Loss on Drying	%	0.1	≤1.0

Aldehyde	%	<0.1	≤0.1
Arsenic	mg/kg	<3	≤3
Lead	mg/kg	<2	≤2
Zinc	mg/kg	<0.1	≤0.1
Cadmium	mg/kg	<0.02	≤0.02
Mercury	mg/kg	<1	≤1
Melting Point (As sorbic acid)	°C	133.0-135.0°C	133.0-135.0°C
Residual Organic Solvents	-	Negative	Negative
Acidity (As Sorbic acid)	%	-	≤1
Heavy Metals	mg/kg	<10	≤10
Total Count Colony	cfu/g	<100	≤100
Mould & Yeast	cfu/g	<100	≤100
Coliform	cfu/g	<30	≤30

Physical Properties

- Solubility: Soluble in water. Soluble in ethanol. Soluble in acetone. Insoluble in ether. Soluble in propylene glycol. Soluble in glycerin.

Shelf Life & Storage

- Shelf Life: 3 years from date of manufacture under recommended storage.
 - Storage Conditions: Store in a cool, dry, and well-ventilated place at 15–30°C. Protect from moisture, excessive humidity, direct sunlight, and heat. Keep the container tightly closed in the original, properly labeled packaging to prevent moisture absorption and product degradation. Store away from strong oxidizing agents, strong acids, and incompatible materials. Proper storage helps maintain the product's purity, preservative effectiveness, free-flowing properties, and stability.

Applications

- Use: Widely used as an antimicrobial preservative in food, beverage, pharmaceutical, nutraceutical, and cosmetic formulations. It effectively inhibits the growth of molds, yeasts, and certain bacteria, thereby extending product shelf life while maintaining product quality and safety. It is commonly incorporated into fruit juices, soft drinks, dairy products, cheese, yogurt, jams, jellies, sauces, pickles, bakery products, confectionery, dried fruits, syrups, oral liquids, dietary supplements, cosmetics, and personal care products. Potassium Sorbate is valued for its excellent preservative efficacy, good water solubility, and minimal impact on the taste, color, and aroma of finished products when used at recommended levels.

- Dosage: Depends on the type of food or product, pH, and applicable regulatory limits.

Packaging

- Standard Packing: 25 Kgs Box 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.