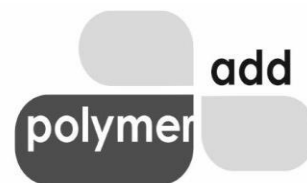


Polymer Add (Thailand) Co.,Ltd.

Office - 106, Chalarempriakiat, Lor 9, Soi 22, Yak 5, Nongbon, Prawet, Bangkok, Thailand 10250

Factory - 188/3, Moo 8, Tambon Bangpu Mai, Amphoe Muang Samut Prakan, Samutprakan, Thailand 10280

Mobile - Thai : 0804531391, English: 0839415475, E-mail - contact@polymeradd.co.th



PS-623 TECHNICAL DATA SHEET

Chemical Name	POTASSIUM SORBATE
Grade Name	PS-623
CAS No	24634-61-5
HS Code	2916.19.00
EINECS No	246-376-1
Molecular Formula	C ₆ H ₇ KO ₂
Molecular Weight	150.22 g/mol
Synonyms	Potassium (E,E)-hexa-2,4-dienoate; Sorbic acid potassium salt

Physical & Chemical Properties

Property	Typical Value / Description	Test Method
Appearance	White to off-white crystalline powder	Visual
Odor	Faint characteristic odor	Sensory
pH (1% aqueous)	7.5 – 10.5	pH meter
Moisture Content	≤ 1.0%	Oven drying (105°C) till constant weight
Bulk Density	0.60 – 0.80 g/cm ³	Tapped Density Method
Melting Point	Decomposes > 270°C	Literature / Estimation
Solubility in Water	Very soluble	1g in 1.5 mL H ₂ O at 20°C
Solubility in Ethanol	Slightly soluble	Observation
Assay (Dry Basis)	≥ 99.0%	Titration / HPLC
Loss on Drying	≤ 1.0%	Gravimetric
Particle Size (D50)	Typically < 300 μm (standard grade)	Laser Diffraction

Heavy Metals (Food & Additive Grade - EC / Codex Guidelines)

Element	Typical Limit	Test Method
Lead (Pb)	≤ 2 ppm	ICP, AAS
Arsenic (As)	≤ 3 ppm	ICP, AAS
Mercury (Hg)	≤ 1 ppm	ICP, CV-AAS
Cadmium (Cd)	≤ 1 ppm	ICP, AAS

Colour Impacting Impurities (for clarity-critical applications)

Element	Typical Max Limit (ppm)	Test Method
Iron (Fe)	≤ 10 ppm	ICP, AAS
Copper (Cu)	≤ 5 ppm	ICP, AAS
Manganese (Mn)	≤ 2 ppm	ICP, AAS

Product Performance Impacting Impurities

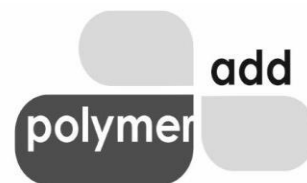
Ion / Element	Typical Max Limit (ppm)	Test Method
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Sodium (Na)	≤ 200 ppm	ICP, AAS
Calcium (Ca)	≤ 100 ppm	ICP, AAS
Chloride (Cl ⁻)	≤ 100 ppm	Ion Chromatography
Sulphate (SO ₄ ²⁻)	≤ 100 ppm	Ion Chromatography

USES / APPLICATION

Industry	Commercial Application / Uses
Food & Beverages	Preservative (E202) to inhibit molds, yeasts, and fungi in bakery, dairy, etc.
Pharmaceuticals	Preservative in syrups, suspensions, and topical formulations
Cosmetics & Personal Care	Preservative in creams, lotions, shampoos, and other aqueous products
Animal Nutrition	Mold inhibitor in pet food, feed additives
Packaging	Antimicrobial agent in coated films and barrier layers

US FDA 21 CFR LISTING

CFR Section	Title / Description
182.3640	Potassium Sorbate – Generally Recognized As Safe (GRAS)
172.375	Authorized food additive in specified concentrations in various foods
175.105	Adhesives - components for food packaging contact
178.3130	Preservatives in polymers

Disclaimer

This product is manufactured to meet food-grade quality and conforms to international additive standards. Buyers must confirm suitability for their specific formulation and regulatory needs. Analytical results may vary slightly based on batch and testing method.

Month of Creation: June 2025

Month of Review: June 2027