Nutrinova® Potassium Sorbate – Food Grade – Chemical and physical properties

Definition	
Chemical name	Potassium salt of 2,4-hexadienoic acid
CAS number	24634-61-5
EINECS number	246-376-1
E number	E 202
Chemical formula	$C_6H_7KO_2$
Relative molecular mass	150.22
Description	White to yellowish-white crystalline powder or spherical granules Freely soluble in water (approx. 1400 g/L at 20 °C), less soluble in ethyl alcohol (approx. 1 g/L at 20 °C)
Identification	
Ultra-violet absorption	UV-Maximum 264 ± 2 nm (solution of 0.002 g/L in water at pH1 <3)
Test for potassium	Positive
Purity	
Assay	99,0 % to 101,0 % of $C_6H_7KO_2$, on dry weight basis
Loss on drying	Not more than 0.5 % (Karl Fischer method)
pH-value	8.5 – 10.5 (10 % water solution)
Heat resistance	No discoloration after 90 minutes at 105 °C
Melting range	132 - 135 °C (FCC) - based on the range of sorbic acid
Alkalinity (calc. as K2CO3)	Not more than 0.1 %
Aldehydes	Not more than 0.1 % (as formaldehyde)
Heavy metals	Not more than 10 ppm (expressed as lead)
Lead	Not more than 0.1 ppm
Arsenic	Not more than 0.1 ppm
Mercury	Not more than 0.01 ppm
Cadmium	Not more than 0.02 ppm
Zinc	Not more than 0.1 ppm
Chloride	Not more than 100 ppm
Sulphate	Not more than 150 ppm
Shelf life	3 years from date of manufacture provided that the product is stored in the originally closed packaging, protected from sunlight and at ambient temperature (max. 30 °C) and under dry conditions (max. 65 % relative humidity)

Nutrinova® Potassium Sorbate conforms also to the specifications published by FAO/WHO/CODEX/JECFA, those of the US Food Chemicals Codex, of the JSFA and/or the EC as well as to national specifications published in food regulations for Potassium Sorbate. Any existing legal restrictions for the use in foods, drugs and cosmetics must be observed by users of Nutrinova® Potassium Sorbate.

Technical Note
The product may contain traces of sorbic acid. The user is responsible for the microbiological stability of its products. The water used in the production of aqueous sorbate solutions should not contain any reactive substances, such as free chlorine. We recommend following the hygiene requirements according to "Good Manufacturing Practice" (GMP).

® = registered trademark PPoSo0200 October 2019