

SPECIFICATION

Product Name: Sorbitol Food Grade
Chemical Formula: C ₆ H ₁₄ O ₆
CAS Number: 50-70-4
Molecular Weight: 182.17 g/mol
Appearance: White crystalline powder
Odor: Odorless

Chemical Composition

Parameter	Unit	Typical Value	Specifications Min./Max.
Identification:			
(A) Test with catechol solution	-	Passes	A deep pink or wine-red color appears
(B) HPLC sheet chromatogram	-	Passes	The retention time of the major peak from sample solution corresponds to that of the standard solution, as obtained in the assay.
Sediment test	-	Passes	Clear, just like sample
Water	%	0.36%	NMT 1.0%
Melting point	°C	98.9°C	NLT 98°C and NMT 104°C
Reducing sugar	%	0.047%	NMT 0.2%
Residue in ignition	%	0.0140%	NMT 0.1%
pH (10%)	-	5.9	3.5 – 7.0
Lead	PPM	0.000	NMT 0.5 PPM
Heavy metals (as pb)	PPM	0.000	NMT 5.0 PPM

Arsenic	PPM	0.000	NMT 1.3 PPM
Nickel	PPM	0.024	NMT 1.0 PPM
Chloride	PPM	2.75	NMT 50 PPM
Sulphate	PPM	1.13	NMT 60 PPM
Conductivity 20% solution	µs/cm	1.06	NMT 20 µs/cm
D- sorbitol	%	97.5	NMT 97.0%
Mannitol	%	0.8	Information only
Total bacteria	cfu/gr	0	NMT 100 cfu/gr
Total mould and yeast	cfu/gr	0	NMT 50 cfu/gr
Eschericia coli	cfu/gr	Absent	Absent
Salmonella	cfu/gr	Absent	Absent
Coliform	cfu/gr	Absent	Absent
Bacterial endotoxin	IU/gr	Negative	NMT 2.5 IU/gr
Particle 35 mesh pass (>500 µm)	%	0.25	NMT 2%
Particle 50 mesh pass (<300 µm)	%	82.31	NLT 70%

Physical Properties

- Solubility: Soluble in water. Soluble in ethanol. Soluble in methanol. Insoluble in acetone. Insoluble in ether. Insoluble in chloroform.

Shelf Life & Storage

- Shelf Life: 2 years from date of manufacture under recommended storage.

- Storage Conditions: Store in a tightly closed, moisture-resistant container in a cool, dry, and well-ventilated place, protected from moisture, excessive heat, direct sunlight, and contamination.

Applications

- Use: Widely used as a sweetener, humectant, bulking agent, stabilizer, texturizer, and moisture-retaining agent in the food, beverage, nutraceutical, pharmaceutical, and personal care industries.

- Dosage: Depends on Desired sweetness, Moisture retention, Texture and mouthfeel, Product formulation, Processing conditions, Regulatory requirements.

Packaging

- Standard Packing: 25 Kgs 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.