

SPECIFICATION

Product Name: Sucrose IP/BP Grade (40-80#)
Chemical Formula: C ₁₂ H ₂₂ O ₁₁
CAS Number: 57-50-1
Molecular Weight: 342.30 g/mol
Appearance: White crystalline powder
Odor: Odorless

Chemical Composition

Parameter	Unit	Typical Value	Specification (Min./Max.)
Identification	-	Complies	An orange precipitate is produced immediately
Heavy Metals as Pb	-	Complies	The solution complies with the limit test for heavy metals
Appearance of Solution	-	Complies	Clear solution after addition of ammonium Oxalate for at least 1 minute
Sulphated ash	%	0.0014 %	NMT 0.1%
Dextrin	-	Complies	Solution remains yellow or becomes faint bluish green
Sulphites	-	Complies	Blue colour develops
Glucose & Invert Sugar	-	Passes the test	The blue colour does not disappear completely
Coloring matter	-	Passes the test A & B	Passes the test A & B
Specific Optical rotation	-	Complies (66.3*)	+65.9 to 67.0
Acidity / Alkalinity	-	Complies (0.36 ml required)	Not more than 0.6 ml of 0.01 M sodium hydroxide is required to change the colour of the solution to Pink

Barium	-	Complies	Any opalescence is not more than a mixture of 1 ml of distilled water add 10 ml solution A
Bacterial Endotoxin	-	Not detected	Not more than 0.25 Endotoxin unit per mg of sucrose
Colour	IU	35 IU	Max. 45 IU
Moisture	%	0.06%	0.10%

Physical Properties

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

Shelf Life & Storage

- Shelf Life: 5 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 contamination, as sucrose readily absorbs moisture, which may lead to caking. Keep the container tightly closed in the original, properly labeled packaging. Store away from strong odors, oxidizing agents, and incompatible materials to maintain product quality, free-flowing properties, and stability in accordance with IP/BP standards.

Applications

- Use: Widely used in pharmaceutical, nutraceutical, and food formulations as a sweetening agent, diluent, bulking agent, binder, and syrup base. It is commonly incorporated into tablets, capsules, powders, granules, syrups, oral solutions, suspensions, lozenges, medicated confectionery, and chewable dosage forms. Sucrose improves palatability, taste masking, tablet binding, granule formation, and product stability, while also serving as a carrier and filler in solid dosage forms. It complies with Indian Pharmacopoeia (IP) and British Pharmacopoeia (BP) standards for pharmaceutical use.
- Dosage: Depends on the dosage form, formulation, and the desired sweetness, binding, or bulking properties.

Packaging

- Standard Packing: 50 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.