

SPECIFICATION

Product Name: Sucrose Large
Chemical Formula: C ₁₂ H ₂₂ O ₁₁
CAS Number: 57-50-1
Molecular Weight: 342.30 g/mol
Appearance: White crystalline crystals
Odor: Odorless

Chemical Composition

Parameter	Unit	Typical Value	Specification (Min./Max.)
Identification	-	Complies	Positive for Sucrose
Assay	%	99.9%	99.5 – 100.5%
pH (10% Solution)	-	6.5	5.0 – 7.5
Loss on Drying	%	0.03%	NMT 0.10%
Sulphated Ash	%	0.02%	NMT 0.05%
Reducing Sugars	%	0.03%	NMT 0.10%
Insoluble Matter	%	0.01%	NMT 0.05%
Conductivity Ash	%	0.01%	NMT 0.03%
Heavy Metals (as Pb)	PPM	Complies	NMT 5 PPM
Lead	PPM	Complies	NMT 0.5 PPM
Arsenic	PPM	Complies	NMT 1 PPM
Cadmium	PPM	Complies	NMY 0.5 PPM

Mercury	PPM	Complies	NMT 0.1 PPM
Bulk density	g/ml	0.85 g/ml	0.75 – 0.95 g/ml
Particle size	-	Complies	Large crystal

Physical Properties

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

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 contamination, as sucrose readily absorbs moisture, which may cause caking and crystal agglomeration. Keep the container tightly closed in the original, properly labeled packaging. Store away from strong odors, strong oxidizing agents, and incompatible materials to maintain the product's purity, sweetness, crystal integrity, free-flowing properties, and stability.

Applications

- Use: Widely used as a sweetening agent, bulking agent, binder, and carrier in pharmaceutical, nutraceutical, food, and confectionery formulations. It is commonly incorporated into tablets, capsules, granules, syrups, oral solutions, lozenges, medicated confectionery, hard candies, bakery products, beverages, and dietary supplements. Due to its large crystal size, it is particularly suitable for direct blending, granulation, controlled dissolution applications, and confectionery manufacturing where improved crystal integrity and reduced dust generation are desirable. It also enhances palatability, taste masking, granule strength, and product stability, making it a versatile ingredient in both solid and liquid formulations.
- Dosage: Depends on the dosage form, formulation, and the desired sweetness, bulking, or binding properties.

Packaging

- Standard Packing: 50 Kgs woven pp bag with inner liner and 100 Grams 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.