

SPECIFICATION

Product Name: Sucrose IP/BP Grade (20-80#)- Uttam Make
Chemical Formula: $C_{12}H_{22}O_{11}$
CAS Number: 57-50-1
Molecular Weight: 342.30 g/mol
Appearance: An almost white or crystalline powder
Odor: Odorless sweet in test

Chemical Composition

Parameter	Unit	Typical Value	Specification (Min/Max)
Identification	-	Passes the test	An orange precipitate is formed immediately.
Specific optical rotation	-	66.19	+65.9 to +67.0
Acidity or alkalinity	ml	Complies	The solution is colorless and NMT 0.6 ml of 0.01 M NaOH is require to change the color of the solution to pink
Heavy metals	PPM	Complies	NMT 10 PPM
Calcium	-	Complies	Test solution remains clear for at least 1 minute.
Barium	-	Complies	Any opalescence is not more intense than that of a mixture of 1 ml of distilled water and 10 ml of solution A.
Sulphite	-	Complies	Blue color develops
Glucose & invert sugar (Reducing sugar)	mg	Complies	Blue color does not disappear completely.
Sulphated Ash	%	0.020%	NMT 0.10%
Coloring matter A	-	Complies	No unpleasant odor is detectable

Coloring matter B	-	Complies	Any fluorescence is not more intense than that of a solution containing 0.4µg/ml of quinine sulphate in 0.005 M sulphuric acid
Dextrin	-	Complies	The solution remains yellow or becomes faint bluish green
Bacterial endotoxine, unit per mg of sucrose	-	Complies	NMT 0.25
In-House specification:			
Color	IU	21	Max. 35 IU
Moisture	%	0.062%	NMT 0.1%
Sucrose	%	99.89%	Min. 99.80
Extraneous matter	%	0.01%	Max. 0.1%
Sulphur dioxide	PPM	ND (DL-0.1)	Max. 10 PPM
Conductivity Ash	%	0.009	NMT 0.04%
Sieve Analysis: Retention on 850µ Retention on 180µ	% %	4.88 96.06	Max. 5% Min. 96%
Microbial Analysis:			
Total Plate Count	cfu/g	130	<500 cfu/g
Yeast & Mould	cfu/g	<10	<10 cfu/g
Enterobacteriaceae	Absent/g	Absent	Absent/10g

Physical Properties

- Solubility: Very soluble in water, freely soluble in Ethanol (70%), Practically insoluble in Ethanol.

Shelf Life & Storage

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

- Storage Conditions: Store in a cool, dry, and well-ventilated place. Keep in tightly closed containers to prevent moisture absorption. Protect from humidity and water exposure (hygroscopic in nature). Avoid direct sunlight and heat. Keep away from strong odors and volatile substances (can absorb odors). Use food/pharma-grade packaging (HDPE bags, lined containers).

Applications

- Use: Used as a sweetening agent in syrups, suspensions, and oral liquids. Acts as a binder and filler in tablet manufacturing. Used in sugar coating of tablets to improve taste and appearance. High concentration helps in preserving syrups by reducing microbial growth. Masks bitter taste of active ingredients. Provides quick energy source.

- Dosage: Depends on formulation design, stability, and taste requirements.

Packaging

- Standard Packing: 50 kg woven PP bags with inner liner, 1 kgs 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.