

SPECIFICATION

Product Name: Sucralose Food Grade
Chemical Formula: C ₆ H ₁₄ O ₆
CAS Number: 56038-13-2
Molecular Weight: 100.115 g/mol
Appearance: White or almost white powder
Odor: Odorless

Chemical Composition

Parameter	Unit	Typical Value	Specification (Min./Max.)
Identification IR	-	Pass	The IR absorption spectrum conform the reference spectrum.
Identification HPLC	-	Pass	The retention time of the principal peak in the chromatogram of the Assay preparation corresponds to that in the chromatogram of the Standard preparation.
Identification TLC	-	Pass	The R _f value of the major spot in the thin-layer chromatogram of the Sample solution is the same as that of the Standard solution obtained in the test for Related Substances.
Assay	%	99.77%	98.0%–102.0%, calculated on the anhydrous basis.
Specific Rotation	°	+86.79°	+84.0~+87.5°
Clarity of solution	-	Clear	---
PH (10% aqueous solution)	-	5.72	5.0~7.0
Water	%	0.12%	≤2.0%
Methanol	%	Not detected	≤0.1%

Ignited Residue (Sulfated ash)	%	0.06%	≤0.7%
Arsenic (As)	PPM	<3 PPM	≤3 PPM
Heavy metals	PPM	<10 PPM	≤10 PPM
Lead	PPM	Not detected	≤1 PPM
Related substances (Other chlorinated disaccharides)	%	<0.5%	≤0.5%
Hydrolysis products (Chlorinated monosaccharides)	%	Complies	≤0.1%
Triphenylphosphine oxide	PPM	<150 PPM	≤150 PPM
Total aerobic count	cfu/g	<20 cfu/g	≤250 cfu/g
Yeast & Moulds	cfu/g	<10 cfu/g	≤50 cfu/g
Coliforms	cfu/g	Nf	Negative
E. coli	cfu/g	Nf	Negative
S. aureus	cfu/g	Nf	Negative
Salmonella	25g	Nf	Negative

Physical Properties

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

Shelf Life & Storage

- Shelf Life: 5 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 sugar substitute in food, beverage, nutraceutical, and pharmaceutical products. It provides approximately 600 times the sweetness of sucrose with virtually no calories, making it suitable for sugar-free and reduced-calorie formulations.

-Dosage: Depends on Desired sweetness level, Product formulation, Presence of other sweeteners, Flavor profile, Processing conditions, Regulatory requirements.

Packaging

- Standard Packing: 10 Kgs Box and 1 Kgs 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.

