



Standard Material Certificate of Analysis

Product Name		Fructose Standard			
Chemical name		D-(-)-Fructose; D-(-)-Levulose; D-Arabino-2-hexulose			
CAS Number	57-48-7	Lot Qty.	50.0g	M. Wt.	180.16 g/mol
Lot Number	MLS-FRC-STD/003		Mfg.	May-2026	
M.formula	C ₆ H ₁₂ O ₆		Retest	May-2028	
COA Date	10-05-2026	Shipment & Storage	Shipment: Room temperature.		
Catalogue Number	MLS-FRC-STD		Long term storage: Refrigerator 2-8°C		
EP Ref.B.No.	F0550000				
Chemical structure					
S. No.	Test Name	Specifications		Results	
1	Description	White color crystalline solid		Complies	
2	Sample Preparation	5mg of Sample dissolved in 5ml of Diluent. Diluent : 100% MilliQ Water		Complies	
3	Identification				
	1. ¹ H NMR	Spectral data should confirm the chemical structure.		Complies (Results: Annex-1)	
	2. MASS	Spectral data should confirm the chemical structure.		Complies (Results: Annex-2)	
	3. FT-IR	Spectral data should confirm the chemical structure.		Complies (Results: Annex-3)	
4	Purity by QNMR	Not less than 99.0%		99.96% (Results: Annex-4)	
5	Loss on drying	Not more than 0.5%		0.28% (Results: Annex-5)	
6	Potency	Not less than 95.0%		99.68%	

Note:

1. This standard material can be used for qualitative analysis only.
2. Potency Calculation: Potency % = [(100-(Loss on drying)) x (100-% Total Impurities by QNMR)]/100.
3. Caution: Do not dry the material. Use as such. Only for analytical purpose, not for human consumption
4. Traceability: Weigh measurements are done on the balance calibrated with OIML R 111-1 (E) compliant weights, Volumetric measurements and others determinations are traceable to SI units, Gravimetric determinations are traceable to NIST standards.
5. Expanded Uncertainty: 0.24%

Prepared by	Authorized by

