

Certificate of Analysis

Date of Testing:	2024-12-19 13:46:26
Date of Next Testing:	2028-12-18 13:46:26
Product Name:	Mannitol
CAS Number:	69-65-8
Specifications & Purity:	Ultra pure, ≥99%(HPLC)
Lot #:	L2416554
SKU #	M108829
Version	0
Analysis #:	445646
Storage Temperature:	Argon charged

Parameter	Limit Values	Result
Sulfate(SO42-)	0-200 (ppm)	0.00 ppm
Reducing sugars	0-0.2 (%)	0.00 %
Calcium(Ca)	0-100 (ppm)	0.00 ppm
Phosphorus (P)	0-0.01 (%)	0.00 %
Silicon(Si)	0-0.02 (%)	0.00 %
Melting point	166-170 (°C)	169.33000 °C
Chloride (Cl-)	0-50 (ppm)	0.00 ppm
Copper(Cu)	0-50 (ppm)	0.00 ppm
Sodium(Na)	0-200 (ppm)	0.00 ppm
Purity(HPLC)	99-100 (%)	99.64600 %
Zinc(Zn)	0-10 (ppm)	0.00 ppm
Specific Rotation[a] ₂₅ /D(c=1 in 1%acidified Molybdate&H2SO4	137-145 (°)	139.37 °
Potassium(K)	0-50 (ppm)	0.00 ppm
loss on drying, 105 °C	0-0.5 (%)	0.02 %
Iron(Fe)	0-50 (ppm)	0.00 ppm
Magnesium(Mg)	0-50 (ppm)	0.00 ppm
Lead(Pb)	0-50 (ppm)	0.00 ppm
Appearance (M108829)	White Powder or Crystals	White Powder or Crystals
Solubility in H2O	Almost transparency	almost transparency
Infrared spectrum	Conforms to Structure	Conforms to Structure



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A handwritten signature in black ink that reads "John Su". The signature is written in a cursive, flowing style.

John Su
QA & QC Manager