

CERTIFICATE OF ANALYSIS

PRODUCT NAME: Mannitol, Ultrapure, $\geq 99.0\%$ (HPLC)

ITEM NUMBER: M108829
BRAND: Aladdin
CAS NUMBER: 69-65-8
MDL NUMBER: MFCD00064287
FORMULA: C₆H₁₄O₆
MOLECULAR WEIGHT: 182.17

TEST	SPECIFICATION		TARGET VALUE
	MIN.	MAX.	
Appearance	White Powder or Crystals		
Ca	0 ppm	100 ppm	100 ppm
Chloride(Cl)	0 ppm	50 ppm	50 ppm
Copper (Cu)	0 ppm	50 ppm	50 ppm
Infrared spectrum	Conforms to Structure		
Iron(Fe)	0 ppm	50 ppm	50 ppm
Lead (Pb)	0 ppm	50 ppm	50 ppm
loss on drying, 105 ° C	0 %	0.5 %	0.5 %
Magnesium(Mg)	0 ppm	50 ppm	50 ppm
Melting point	166 ° C	170 ° C	170 ° C
Na	0 ppm	200 ppm	200 ppm
phosphorus	0 %	0.01 %	0.01 %
Potassium(K)	0 ppm	50 ppm	50 ppm
Purity(HPLC)	99 %	100 %	100 %
Reducing sugars	0 %	0.2 %	0.2 %
Si	0 %	0.02 %	0.02 %
Solubility in Water	almost transparency		
Specific rotation[α] _{25/D} (C=1 in 1%acidified Molybdate&H ₂ SO ₄)	+137 °	+45 °	+145 °

sulfate (SO42-)	0 ppm	200 ppm	200 ppm
Zinc(Zn)	0 ppm	10 ppm	10 ppm