

## Certificate of Analysis

Date of Testing: 2022-03-04 10:33:39

Date of Next Testing: 2024-03-03 10:33:39

Product Name: **D-(+)-Mannose**

CAS Number: 3458-28-4

Specifications & Purity: 99%

Lot #: B2226314

SKU #: **M103969**

**Analysis:** **059606**

Storage Temperature: Argon charged

Parameter	Limit Values	Result
Loss on drying	0-0.45 (%)	0.00 %
Specific Rotation [α] <sub>20</sub> /D(c=4 in H <sub>2</sub> O)	14-15.5 (°)	14.58°
Purity(HPLC)	99-100 (%)	99.70300 %
Heavy metal (as Pb)	0-10 (ppm)	0.00 ppm
Appearance (M103969)	White to Off-White Solid, Powder, or Crystals	White to Off-White Solid, Powder, or Crystals
Solubility in H <sub>2</sub> O , Colorless to Faint Yellow , Clear , 50 mg/ml H <sub>2</sub> O	pass	Pass
<sup>13</sup> C NMR Spectrum	Conforms to Structure	Conforms to Structure



John Su  
QA & QC Manager