

## Certificate of Analysis

Date of Testing: 2023-04-25 16:50:40  
Date of Next Testing: 2027-04-24 16:50:40  
Product Name: **D-Mannono-1,4-lactone**  
CAS Number: 26301-79-1  
Specifications & Purity: 97%  
Lot #: D2319109  
SKU #: **S161301**  
**Analysis:** **205146**  
Storage Temperature: Argon charged

Parameter	Limit Values	Result
Purity(HPLC area)	97-100 (%)	99.61%
Specific Rotation [α] <sub>20</sub> /D(c=2 in H <sub>2</sub> O)	49-54 (°)	51.27°
Melting point	151-156 (°C)	151.26000 °C
Appearance(S161301)	White to Almost white powder to crystal	White to Almost white powder to crystal
NMR Spectrum 1H	conforms to structure	Conforms to Structure



John Su  
QA & QC Manager