

Certificate of Analysis

Date of Testing: 2024-12-10 17:47:59

Date of Next Testing: 2026-12-10 17:47:59

Product Name: **L-(+)-Pantolactone**

CAS Number: 5405-40-3

Specifications & Purity: $\geq 98\%$

Lot #: B2318185

SKU #: **S138963**

Version: **2**

Analysis #: **446928**

Storage Temperature: Store at 2-8°C, Argon charged

Parameter	Limit Values	Result
Specific Rotation $[\alpha]_{22/D}$ (c=0.5 in H ₂ O)	45-55 (°)	51.10°
Purity(HPLC)	98-100 (%)	98.60000 %
Appearance (S138963)	white to pale yellow Powder, Crystals and/or Chunk	white to pale yellow Powder, Crystals and/or Chunk
Proton NMR spectrum	Conforms to structure	Conforms to Structure
Carbon NMR Spectrum	Conforms to Structure	Conforms to Structure



John Su
QA & QC Manager