

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing:	2023-12-13 13:38:39
Date of Next Testing:	2025-12-12 13:38:39
Product Name:	<b>D-(+)-Gluconic acid <math>\delta</math>-lactone</b>
CAS Number:	90-80-2
Specifications & Purity:	99%
Lot #:	B2224396
SKU #	<b>G106879</b>
Version	<b>1</b>
Analysis #:	<b>303905</b>
Storage Temperature:	Argon charged

Parameter	Limit Values	Result
Heavy metal (as Pb)	0-20 (ppm)	11.00 ppm
Melting point	151-158 (°C)	152.60000 °C
Reducing Substances	0-0.5 (%)	0.30 %
Pb measure	0-10 (ppm)	2.33 ppm
Purity(HPLC)	99-100 (%)	99.32200 %
Specific Rotation $[\alpha]_{20/D}(c=10 \text{ in H}_2\text{O})$	60-67 (°)	63.45 °
Ash	0-0.1 (%)	0.09 %
Purity(Titration by HCl)	98.5-101.5 (%)	100.20 %
Appearance (G106879)	White to Off-White Powder or Crystals	White to Off-White Powder or Crystals
Solubility in H <sub>2</sub> O , Colorless to Very Faint Yellow ,Clear,100 mg/mL	pass	Pass
Proton NMR spectrum	Conforms to structure	Conforms to Structure



John Su  
QA & QC Manager