

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2023-12-14 14:13:20  
 Date of Next Testing: 2025-12-13 14:13:20  
 Product Name: **D-(+)-Gluconic acid  $\delta$ -lactone**  
 CAS Number: 90-80-2  
 Specifications & Purity: 99%  
 Lot #: L2307085  
 SKU #: **G106879**  
**Analysis:** **305237**  
 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 [a] <sub>20</sub> /D(c=10 in H <sub>2</sub> 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