

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2022-09-21 12:30:32  
 Date of Next Testing: 2024-09-20 12:30:32  
 Product Name: **D-(+)-Gluconic acid  $\delta$ -lactone**  
 CAS Number: 90-80-2  
 Specifications & Purity: 99%  
 Lot #: I2220114  
 SKU #: **G106879**  
**Analysis:** **061982**  
 Storage Temperature: Argon charged

Parameter	Limit Values	Result
Heavy metal (as Pb)	0-20 (ppm)	10.00 ppm
Reducing Substances	0-0.5 (%)	0.20 %
Pb measure	0-10 (ppm)	6.00 ppm
Purity(HPLC)	98-100 (%)	99.67300 %
Ash	0-0.1 (%)	0.06 %
Purity(Titration by HCl)	98.5-101.5 (%)	100.50 %
Melting point	151-158 (°C)	157.79000 °C
Specific Rotation [a] <sub>20</sub> /D(c=10 in H <sub>2</sub> O)	60-67 (°)	63.47°
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