

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2023-06-15 13:27:32  
Date of Next Testing: 2025-06-14 13:27:32  
Product Name: **D- $\alpha$ -Hydroxyglutaric acid disodium salt**  
CAS Number: 103404-90-6  
Specifications & Purity:  $\geq 95\%$   
Lot #: I2109493  
SKU #: **S137414**  
**Analysis: 241568**  
Storage Temperature: Store at -20°C, Argon charged

Parameter	Limit Values	Result
Specific Rotation $[\alpha]_{20/D}(c=1 \text{ in H}_2\text{O})(\text{anhydrous})$	8-9 ( $^{\circ}$ )	8.50 $^{\circ}$
Purity(Titration by HClO <sub>4</sub> )(anhydrous)	94.5-105.5 (%)	96.55 %
Water by Karl Fischer	0-4 (%)	2.15 %
Purity(HPLC)	95-100 (%)	96.81400 %
Appearance (S137414)	White to Off-White to yellow Powder	white to off-white to yellow powder
Proton NMR spectrum	Conforms to Structure	Conforms to Structure
Solubility in H <sub>2</sub> O , Colorless to Faint Yellow Clear ,50 mg/mL, H <sub>2</sub> O	pass	Pass



John Su  
QA & QC Manager