

## Certificate of Analysis

Date of Testing: 2023-11-17 14:37:56

Date of Next Testing: 2025-11-16 14:37:56

Product Name: **D- $\alpha$ -Hydroxyglutaric acid disodium salt**

CAS Number: 103404-90-6

Specifications & Purity:  $\geq 95\%$

Lot #: F1812053

SKU #: **S137414**

**Analysis:** **296589**

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 ( $^{\circ}$ )	8.30 $^{\circ}$
Purity(Titration by HClO <sub>4</sub> )(anhydrous)	94.5-105.5 (%)	99.24 %
Water by Karl Fischer	0-4 (%)	2.02 %
Purity(HPLC)	95-100 (%)	96.20000 %
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