

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing: 2024-05-27 12:53:06
 Date of Next Testing: 2028-05-26 12:53:06
 Product Name: **DL-Thioctic acid**
 CAS Number: 1077-28-7
 Specifications & Purity: 99%
 Lot #: E2423380
 SKU #: **T106640**
 Version: **1**
 Analysis #: **355523**
 Storage Temperature: Store at 2-8°C, Argon charged

Parameter	Limit Values	Result
Specific Rotation [α] ₂₀ /D(c=5 in EtOH)	-1-1 (°)	0.15°
Heavy metals	0-10 (ppm)	2.30 ppm
Purity(Neutralization titration)	98.5-101.5 (%)	100.19 %
Loss on drying	0-1 (%)	0.20 %
Chloride (Cl ⁻)	0-0.071 (%)	0.04 %
Sulfate Ash	0-0.1 (%)	0.02 %
Melting point	60-63 (°C)	62.95000 °C
Appearance (T106640)	yellow powder, crystals and/or chunks	yellow powder, crystals and/or chunks
Solubility(2% in 10% NaOH)	Pale yellow transparent liquid	Pale yellow transparent liquid
Proton NMR spectrum	Conforms to Structure	Conforms to Structure



John Su
QA & QC Manager