

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing: 2024-12-17 19:00:42

Date of Next Testing: 2028-12-16 19:00:42

Product Name: **DL-Thioctic acid**

CAS Number: 1077-28-7

Specifications & Purity: $\geq 99\%$

Lot #: L2412735

SKU #: **T106640**

Version: **1**

Analysis #: **441074**

Storage Temperature: Store at 2-8°C, Protected from light, Argon charged

Parameter	Limit Values	Result
Specific Rotation $[\alpha]_{20/D(c=5 \text{ in EtOH})}$	-1-1 (°)	0.08000 °
Heavy metals	0-10 (ppm)	0.00000 ppm
Purity(Neutralization titration)	98.5-101.5 (%)	100.99000 %
Loss on drying	0-1 (%)	0.10000 %
Chloride (Cl-)	0-0.071 (%)	0.00860 %
Sulfate Ash	0-0.1 (%)	0.00000 %
Melting point	60-63 (°C)	62.91000 °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