

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing: 2026-05-28 11:07:51
Date of Next Testing: 2030-05-27 11:07:51
Product Name: **DL-Thioctic acid**
CAS Number: 1077-28-7
Specifications & Purity: $\geq 99\%$
Lot #: E2621114
SKU #: **T106640**
Version: **1**
Analysis #: **632434**
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 (°) | 0.11900° |
| Heavy metals | 0-10 (ppm) | 0.00000 ppm |
| Purity(Neutralization titration) | 98.5-101.5 (%) | 100.58000 % |
| Loss on drying | 0-1 (%) | 0.18000 % |
| Chloride (Cl-) | 0-0.071 (%) | 0.00130 % |
| Sulfate Ash | 0-0.1 (%) | 0.07000 % |
| 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