

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing: 2023-04-03 18:53:42

Date of Next Testing: 2027-04-02 18:53:42

Product Name: **Tauroursodeoxycholic Acid Dihydrate**

CAS Number: 117609-50-4

Specifications & Purity: 98%

Lot #: C23241336

SKU #: **S101371**

Analysis: **194822**

Parameter	Limit Values	Result
Purity(HPLC)	98-100 (%)	99.11700 %
Purity(Neutralization titration) (after drying)	98-102 (%)	98.96 %
Water by Karl Fischer	6-7.4 (%)	6.93 %
Specific Rotation $[\alpha]_{20/D}(c=0.5 \text{ in H}_2\text{O})$	42-48 (°)	47.26 °
Appearance (S101371)	white powder	White powder
Solubility in hot H ₂ O	almost transparency	almost transparency
Infrared spectrum	Conforms to Structure	Conforms to Structure
Proton NMR spectrum	Conforms to Structure	Conforms to Structure

A handwritten signature in black ink that reads "John Su".

John Su
QA & QC Manager