

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2023-08-23 13:35:27  
Date of Next Testing: 2025-08-22 13:35:27  
Product Name: **L-Cystine , disodium salt**  
CAS Number: 64704-23-0  
Specifications & Purity: 98%  
Lot #: H2307456  
SKU #: **L134101**  
Analysis: **256970**

| Parameter   | Limit Values                 | Result                       |
|---|------------------------------|------------------------------|
| Specific Rotation [α] <sub>20</sub> /D(c=1 in 1mol/L HCl) | -179--164 (°)                | -167.16 °                    |
| Water by Karl Fischer                                     | 0-8 (%)                      | 5.42 %                       |
| PH  | 9.5-11                       | 10.62                        |
| Purity(HPLC area)   | 98-100 (%)                   | 98.02 %                      |
| Appearance (L134101)                                      | White or light yellow powder | White or light yellow powder |
| Proton NMR spectrum                                       | Conforms to Structure        | Conforms to Structure        |



John Su  
QA & QC Manager