

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2023-09-04 13:24:25  
Date of Next Testing: 2027-09-03 13:24:25  
Product Name: **L-Cysteine hydrochloride monohydrate**  
CAS Number: 7048-04-6  
Specifications & Purity: 99%  
Lot #: H2330222  
SKU #: **C110436**  
**Analysis:** **226730**  
Storage Temperature: Protected from light, Argon charged, Desiccated

Parameter	Limit Values	Result
Specific Rotation [ $\alpha$ ] <sub>D</sub> (c=8 in 1mol/L HCl)	5-7 (°)	6.04°
Purity(Iodometric Titration)	99-100 (%)	99.10%
Loss on drying (P <sub>2</sub> O <sub>5</sub> , vacuum drier)	8.5-12 (%)	8.51000%
Appearance (C110436)	White Crystals, Powder or Crystalline Solid	White Crystals, Powder or Crystalline Solid
Proton NMR spectrum	Conforms to Structure	Conforms to Structure
Solubility, Colorless and clear (5% in H <sub>2</sub> O)	pass	Pass



John Su  
QA & QC Manager