

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2024-11-07 11:55:34  
Date of Next Testing: 2028-11-06 11:55:34  
Product Name: **L-Cysteine hydrochloride monohydrate**  
CAS Number: 7048-04-6  
Specifications & Purity:  $\geq 99\%$   
Lot #: K2401065  
SKU #: **C110436**  
Version: **2**  
Analysis #: **226730**  
Storage Temperature: Protected from light, Room temperature, Argon charged, Desiccated

Parameter	Limit Values	Result
Specific Rotation $[\alpha]_{20/D}(c=8 \text{ in } 1\text{mol/L HCl})$	5-7 ( $^{\circ}$ )	6.03800 $^{\circ}$
Purity(Iodometric Titration)	99-100 (%)	99.10000 %
Loss on drying (P2O5 , 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 H2O)	pass	Pass



John Su  
QA & QC Manager