

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2022-12-10 14:28:23  
Date of Next Testing: 2026-12-09 14:28:23  
Product Name: **1,10-Phenanthroline monohydrochloride monohydrate**  
CAS Number: 3829-86-5  
Specifications & Purity: 98%  
Lot #: L2202566  
SKU #: **P109273**  
**Analysis:** **156441**  
Storage Temperature: Argon charged

Parameter	Limit Values	Result
Water by Karl Fischer	0-8.5 (%)	7.85 %
Melting point	224-227 (°C)	226.18000 °C
Purity(HPLC)	98-100 (%)	99.75500 %
Appearance (P109273)	White or light yellow or light-pink crystalline powder	White or light yellow or light-pink crystalline powder
Proton NMR spectrum	Conforms to Structure	Conforms to Structure
Solubility in H <sub>2</sub> O	Almost transparency	almost transparency
Suitability for iron-analysis	pass test	pass test



John Su  
QA & QC Manager