

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2023-08-01 14:27:04  
Date of Next Testing: 2027-07-31 14:27:04  
Product Name: **1,10-Phenanthroline Monohydrate**  
CAS Number: 5144-89-8  
Specifications & Purity: Analytical Reagent,98%  
Lot #: G23181000  
SKU #: **P104932**  
**Analysis:** **245853**  
Storage Temperature: Argon charged

Parameter	Limit Values	Result
Carbon by Elemental Analysis	71.2-74.2 (%)	72.65 %
Water by Karl Fischer	0-11.1 (%)	9.14 %
Nitrogen by Elemental Analysis	13.8-14.4 (%)	14.08 %
Purity(HPLC)	98-100 (%)	99.49900 %
Appearance (P104932)	White to Off-White Powder or Solid	White to Off-White Powder or Solid
Proton NMR spectrum	Conforms to Structure	Conforms to Structure
Solubility in EtOH , Colorless to Light Yellow Clear to Hazy(100mg/ml)	pass	Pass



John Su  
QA & QC Manager