

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing: 2022-12-08 20:24:15
Date of Next Testing: 2026-12-07 20:24:15
Product Name: **Piperazine Dihydrochloride Monohydrate**
CAS Number: 142-64-3
Specifications & Purity: >98.0%(T)
Lot #: L2202422
SKU #: **P160724**
Analysis: **123502**

| Parameter | Limit Values | Result |
|--|-----------------------|-----------------------|
| Purity(Argentmetric Titration)(calcd.on anh.substance) | 97.5-102.5 (%) | 100.51 % |
| Proton NMR spectrum | Conforms to Structure | Conforms to Structure |



John Su
QA & QC Manager