

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing: 2023-09-08 13:28:51
Date of Next Testing: 2027-09-07 13:28:51
Product Name: **Piperazine Dihydrochloride Monohydrate**
CAS Number: 142-64-3
Specifications & Purity: >98.0%(T)
Lot #: K1926024
SKU #: **P160724**
Analysis: **273417**

| Parameter | Limit Values | Result |
|--|-----------------------|-----------------------|
| Purity(Argentmetric Titration)(calcd.on anh.substance) | 97.5-102.5 (%) | 100.22 % |
| Proton NMR spectrum | Conforms to Structure | Conforms to Structure |



John Su
QA & QC Manager