

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing: 2022-06-25 09:27:39
Date of Next Testing: 2026-06-24 09:27:39
Product Name: **Piperazine Dihydrochloride Monohydrate**
CAS Number: 142-64-3
Specifications & Purity: >98.0%(T)
Lot #: F2220488
SKU #: **P160724**
Analysis: **093416**

| Parameter | Limit Values | Result |
|--|-----------------------|-----------------------|
| Purity(Argentmetric Titration)(calcd.on anh.substance) | 97.5-102.5 (%) | 97.56 % |
| Proton NMR spectrum | Conforms to Structure | Conforms to Structure |



John Su
QA & QC Manager