

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2023-05-17 16:09:24  
Date of Next Testing: 2027-05-16 16:09:24  
Product Name: **N-(m-Tolyl)piperazine Dihydrochloride**  
CAS Number: 13078-13-2  
Specifications & Purity: 95%  
Lot #: E2315254  
SKU #: **N159751**  
**Analysis: 194419**  
Storage Temperature: Argon charged

| Parameter                      | Limit Values  | Result  |
|--------------------------------|---|---|
| Assay(Argentometric Titration) | 95-103 (%)  | 96.15000 %  |
| Appearance(N159751)            | White to Almost white to Light orange powder to crystal | White to Almost white to Light orange powder to crystal |
| NMR Spectrum 1H                | Conforms to Structure                                   | Conforms to Structure                                   |



John Su  
QA & QC Manager