

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2023-01-11 16:38:50

Date of Next Testing: 2027-01-10 16:38:50

Product Name: **1,4-Diaminobutane dihydrochloride**

CAS Number: 333-93-7

Specifications & Purity:  $\geq 99\%$

Lot #: A2305275

SKU #: **D106194**

Version: **0**

Analysis #: **160899**

Storage Temperature: Room temperature, Argon charged

| Parameter                                                                      | Limit Values             | Result                   |
|--------------------------------------------------------------------------------|--------------------------|--------------------------|
| Purity (Argentmetric Titration)                                                | 98.5-101.5 (%)           | 101.44000 %              |
| Appearance (D106194)                                                           | White Powder or Crystals | White Powder or Crystals |
| Infrared spectrum                                                              | Conforms to Structure    | Conforms to Structure    |
| Proton NMR spectrum                                                            | Conforms to Structure    | Conforms to Structure    |
| Solubility in H <sub>2</sub> O , Colorless, Clear, 100 mg/mL, H <sub>2</sub> O | pass                     | Pass                     |



John Su  
QA & QC Manager