

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2025-04-02 15:57:15  
 Date of Next Testing: 2029-04-01 15:57:15  
 Product Name: **L-Histidine monohydrate monohydrochloride**  
 CAS Number: 5934-29-2  
 Specifications & Purity: Ultra pure, Moligand™, ≥99.5%(AT)  
 Lot #: C2528410  
 SKU #: **H106212**  
 Version: **1**  
 Analysis #: **453955**  
 Storage Temperature: Store at 2-8°C, Argon charged

| Parameter                                             | Limit Values  | Result      |
|-------------------------------------------------------|---------------|-------------|
| Iron(Fe)                                              | 0-10 (ppm)    | 0.00000 ppm |
| Nickel(Ni)                                            | 0-5 (ppm)     | 0.32500 ppm |
| Potassium(K)                                          | 0-50 (ppm)    | 0.83200 ppm |
| Zinc(Zn)                                              | 0-5 (ppm)     | 0.01500 ppm |
| UV Absorbance 280nm                                   | 0-0.05 (nm)   | 0.00010 nm  |
| Cadmium(Cd)                                           | 0-5 (ppm)     | 0.01520 ppm |
| Specific Rotation [α] <sub>20/D(c=5 in 5 M HCl)</sub> | 9-10 (°)      | 9.88000 °   |
| Sodium(Na)                                            | 0-50 (ppm)    | 0.55400 ppm |
| Ammonia (NH <sub>4</sub> )                            | 0-500 (ppm)   | 0.36400 ppm |
| Aluminum(Al)                                          | 0-5 (ppm)     | 0.01200 ppm |
| Manganese(Mn)                                         | 0-5           | 0.25200     |
| Ignition Residue (as sulfate)                         | 0-0.1 (%)     | 0.00100 %   |
| Loss on drying                                        | 0-0.2 (%)     | 0.01060 %   |
| (As)Arsenic                                           | <1(ppm)       | 0.00000 ppm |
| Magnesium(Mg)                                         | 0-5 (ppm)     | 0.03600 ppm |
| Lithium(Li)                                           | 0-5 (ppm)     | 0.21400 ppm |
| Barium(Ba)                                            | 0-5 (ppm)     | 0.01200 ppm |
| Chloride Content                                      | 16.7-17.1 (%) | 16.91000 %  |
| Chromium(Cr)                                          | 0-10 (ppm)    | 0.53200 ppm |
| Strontium(Sr)                                         | 0-5 (ppm)     | 0.03620 ppm |
| Molybdenum(Mo)                                        | 0-5 (ppm)     | 0.02100 ppm |
| Bismuth(Bi)                                           | 0-5 (ppm)     | 0.05100 ppm |
| pH                                                    | 3-4           | 3.63800     |
| (Pb)Lead                                              | <10(ppm)      | 0.31450 ppm |
| Cobalt(Co)                                            | 0-5 (ppm)     | 0.02400 ppm |

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| Parameter                                                 | Limit Values                         | Result                               |
|-----------------------------------------------------------|--------------------------------------|--------------------------------------|
| UV Absorbance 260nm                                       | 0-0.05 (nm)                          | 0.00120 nm                           |
| Copper(Cu)                                                | 0-5 (ppm)                            | 0.00100 ppm                          |
| Sulfate(SO42-)                                            | < 0.02 (%)                           | 0.00000 %                            |
| Purity (Argentmetric Titration)                           | 99.5-100 (%)                         | 99.93000 %                           |
| Appearance (H106212)                                      | White crystals or crystalline powder | White crystals or crystalline powder |
| Solubility in H2O , soluble , 1M , 20°C, clear, colorless | pass                                 | Pass                                 |
| $\lambda$ , 0.5 M in H2O                                  | Pass                                 | Pass                                 |
| Infrared spectrum                                         | Conforms to Structure                | Conforms to Structure                |



John Su  
QA & QC Manager