

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2026-05-27 15:28:37

Date of Next Testing: 2027-05-22 15:28:37

Product Name: **D-Lactose monohydrate**

CAS Number: 64044-51-5

Specifications & Purity: Ultra pure, ≥99.5%(HPLC)

Lot #: H2511372

SKU #: **L100103**

Version: **1**

Analysis #: **711037**

Storage Temperature: Room temperature, Argon charged

| Parameter                     | Limit Values | Result       |
|-------------------------------|--------------|--------------|
| Sulfate(SO42-)                | 0-50 (%)     | 20.99800 %   |
| Strontium(Sr)                 | 0-5 (ppm)    | 2.49800 ppm  |
| Chromium(Cr)                  | 0-5 (ppm)    | 1.49800 ppm  |
| Aluminum(Al)                  | 0-5 (ppm)    | 1.46800 ppm  |
| UV Absorbance 280nm           | 0-0.02       | 0.01780      |
| Cobalt(Co)                    | 0-5 (ppm)    | 2.19900 ppm  |
| pH                            | 3.5-6        | 3.78000      |
| Barium(Ba)                    | 0-5 (ppm)    | 2.09800 ppm  |
| Bismuth(Bi)                   | 0-5 (ppm)    | 2.07800 ppm  |
| Iron(Fe)                      | 0-5 (ppm)    | 2.56800 ppm  |
| Zinc(Zn)                      | 0-5 (ppm)    | 2.08900 ppm  |
| UV Absorbance 260nm           | 0-0.02       | 0.01880      |
| Molybdenum(Mo)                | 0-5 (ppm)    | 2.29800 ppm  |
| Chloride (Cl-)                | 0-50 (ppm)   | 24.99800 ppm |
| Copper(Cu)                    | 0-5 (ppm)    | 2.09800 ppm  |
| Purity(HPLC)                  | 99.5-100 (%) | 99.99800 %   |
| (Pb)Lead                      | 0-5 (ppm)    | 2.09800 ppm  |
| (As)Arsenic                   | 0-0.1 (ppm)  | 0.04800 ppm  |
| Magnesium(Mg)                 | 0-5 (ppm)    | 1.49800 ppm  |
| Lithium(Li)                   | 0-5 (ppm)    | 1.89000 ppm  |
| Calcium(Ca)                   | 0-10 (ppm)   | 4.99800 ppm  |
| Potassium(K)                  | 0-50 (ppm)   | 23.99800 ppm |
| Nickel(Ni)                    | 0-5 (ppm)    | 2.29800 ppm  |
| Cadmium(Cd)                   | 0-5 (ppm)    | 1.88700 ppm  |
| Ignition Residue (as sulfate) | 0-0.05 (%)   | 0.02480 %    |

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| Parameter                                                       | Limit Values                          | Result                                |
|-----------------------------------------------------------------|---------------------------------------|---------------------------------------|
| Manganese(Mn)                                                   | 0-5 (ppm)                             | 2.16800 ppm                           |
| Sodium(Na)                                                      | 0-50 (ppm)                            | 21.99800 ppm                          |
| Specific Rotation [a] <sub>20</sub> /D(c=10 in water,22h)       | 52-54 (°)                             | 52.67000 °                            |
| Appearance (L100103)                                            | Colorless or White Powder or Crystals | Colorless or White Powder or Crystals |
| Insoluble matter                                                | pass                                  | Pass                                  |
| Solubility in H <sub>2</sub> O , Colorless and clear(0.5M,20°C) | pass                                  | Pass                                  |
| λ,0.5 M in H <sub>2</sub> O                                     | Pass                                  | Pass                                  |



John Su  
QA & QC Manager