

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing: 2023-02-16 13:34:30
 Date of Next Testing: 2025-02-05 13:34:30
 Product Name: **Magnesium chloride hexahydrate**
 CAS Number: 7791-18-6
 Specifications & Purity: for Molecular Biology, ≥99.0%(T)
 Lot #: B2309021
 SKU #: **M116336**
Analysis: **028300**
 Storage Temperature: Desiccated

| Parameter | Limit Values | Result |
|----------------------------|----------------|------------|
| Zinc(Zn) | 0-5 (ppm) | 1.94 ppm |
| Iron(Fe) | 0-5 (ppm) | 3.66 ppm |
| Nickel(Ni) | 0-5 (ppm) | 0.03 ppm |
| Bismuth(Bi) | 0-5 (ppm) | 2.56 ppm |
| PH | 5-7.5 | 6.05 |
| Molybdenum(Mo) | 0-5 (ppm) | 4.00 ppm |
| Strontium(Sr) | 0-5 (ppm) | 2.81 ppm |
| Sulfate(SO42-) | 0-50 (ppm) | 15.96 ppm |
| Copper(Cu) | 0-5 (ppm) | 0.63 ppm |
| (As)Arsenic | 0-0.1 (ppm) | 0.01 ppm |
| Phosphate(PO4) | 0-5 (ppm) | 0.00 ppm |
| Lithium(Li) | 0-5 (ppm) | 2.94 ppm |
| Barium(Ba) | 0-5 (ppm) | 2.36 ppm |
| Aluminum(Al) | 0-5 (ppm) | 1.56 ppm |
| (Pb)Lead | 0-5 (ppm) | 3.69 ppm |
| Manganese(Mn) | 0-5 (ppm) | 1.32 ppm |
| Cobalt(Co) | 0-5 (ppm) | 2.55 ppm |
| UV Absorbance 260nm | 0-0.03 | 0.01 |
| Potassium(K) | 0-2000 (ppm) | 100.36 ppm |
| UV Absorbance 280nm | 0-0.025 | 0.00 |
| Sodium(Na) | 0-3000 (ppm) | 500.65 ppm |
| Cadmium(Cd) | 0-5 (ppm) | 1.00 ppm |
| Total Nitrogen | 0-0.0002 (%) | 0.00 % |
| Chromium(Cr) | 0-5 (ppm) | 2.36 ppm |
| Calcium(Ca) | 0-50 (ppm) | 14.35 ppm |
| Purity(Titration by AgNO3) | 98.5-101.5 (%) | 101.47 % |

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| Parameter | Limit Values | Result |
|--|-----------------------|-----------------------|
| Water by Karl Fischer | 51.5-53.5 (%) | 51.53% |
| DNases | none detected | none detected |
| Insoluble matter | pass | Pass |
| phosphatases | none detected | none detected |
| proteases | none detected | none detected |
| RNases | none detected | none detected |
| Solubility in H ₂ O , soluble , 1M , 20°C, clear, colorless | pass | Pass |
| X-Ray Diffraction | Conforms to Structure | Conforms to Structure |
| λ,1 M in H ₂ O | Pass | Pass |



John Su
QA & QC Manager