

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing: 2024-09-06 09:51:37
 Date of Next Testing: 2025-09-06 09:51:37
 Product Name: **Ammonium formate**
 CAS Number: 540-69-2
 Specifications & Purity: for LC-MS, ≥99.0%
 Lot #: I2402338
 SKU #: **A100186**
 Version: **3**
 Analysis #: **403229**
 Storage Temperature: Desiccated

| Parameter | Limit Values | Result |
|---|----------------|--------------|
| Bismuth(Bi) | 0-1 (ppm) | 0.00 ppm |
| Sulfate(SO42-) | 0-50 (ppm) | 0.00 ppm |
| Chromium(Cr) | 0-1 (ppm) | 0.00 ppm |
| Lithium(Li) | 0-1 (ppm) | 0.00 ppm |
| (As)Arsenic | 0-0.1 (ppm) | 0.00 ppm |
| Ignition Residue (as sulfate) | 0-0.1 (%) | 0.00 % |
| Cadmium(Cd) | 0-1 (ppm) | 0.00 ppm |
| Strontium(Sr) | 0-1 (ppm) | 0.00 ppm |
| Copper(Cu) | 0-1 (ppm) | 0.00 ppm |
| Manganese(Mn) | 0-1 (ppm) | 0.00 ppm |
| Iron(Fe) | 0-1 (ppm) | 0.00 ppm |
| Aluminum(Al) | 0-1 (ppm) | 0.00 ppm |
| Cobalt(Co) | 0-1 (ppm) | 0.00 ppm |
| Purity(Based on Trace Metals Impurities of ICP) | 99.999-100 (%) | 100.00 % |
| Magnesium(Mg) | 0-1 (ppm) | 0.00 ppm |
| Molybdenum(Mo) | 0-1 (ppm) | 0.00 ppm |
| Nickel(Ni) | 0-1 (ppm) | 0.00 ppm |
| Sodium(Na) | 0-5 (ppm) | 0.00 ppm |
| Zinc(Zn) | 0-1 (ppm) | 0.00 ppm |
| Lead(Pb) | 0-1 (ppm) | 0.00 ppm |
| Total Metallic Impuritie | 0-20 (ppm) | 0.00 ppm |
| Chloride (Cl-) | 0-50 (ppm) | 0.00 ppm |
| Barium(Ba) | 0-1 (ppm) | 0.00 ppm |
| Melting point | 119-121 (°C) | 119.49000 °C |
| Potassium(K) | 0-5 (ppm) | 0.00 ppm |

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| Parameter | Limit Values | Result |
|--|-----------------------|-----------------------|
| PH | 5.5-7.5 | 6.49 |
| Water by Karl Fischer | 0-2 (%) | 1.47 % |
| Assay(TITRATION (NT) HClO ₄ 0.1M)(calc. based on dry substance) | 99-101 (%) | 99.74000 % |
| Calcium(Ca) | 0-5 (ppm) | 0.00 ppm |
| UV Absorbance 260nm(at 1M in H ₂ O) | 0-0.01 | 0.01 |
| UV Absorbance 280nm(at 1M in H ₂ O) | 0-0.01 | 0.01 |
| Appearance (A100186) | White crystals | White crystals |
| Infrared spectrum | Conforms to Structure | Conforms to Structure |
| Insoluble matter | pass | Pass |



John Su
QA & QC Manager