

Certificate of Analysis

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|--------------------------|--------------------------------------|
| Date of Testing: | 2022-01-18 13:10:18 |
| Date of Next Testing: | 2024-01-18 13:10:18 |
| Product Name: | Aluminum chloride hexahydrate |
| CAS Number: | 7784-13-6 |
| Specifications & Purity: | Analytical Reagent,97.0% |
| Lot #: | A2212505 |
| SKU # | A112509 |
| Analysis: | 067666 |

| Parameter | Limit Values | Result |
|------------------------------|-----------------------------|-----------------------------|
| Copper(Cu) | 0-50 (ppm) | 48.33 ppm |
| Assay | 99-100 (%) | 99.99 % |
| Zinc(Zn) | 0-50 (ppm) | 48.20 ppm |
| Iron(Fe) | 0-50 (ppm) | 49.99 ppm |
| Potassium(K) | 0-100 (ppm) | 99.91 ppm |
| Sodium(Na) | 0-500 (ppm) | 488.96 ppm |
| Nickel(Ni) | 0-50 (ppm) | 48.25 ppm |
| Calcium(Ca) | 0-100 (%) | 99.03 % |
| Cadmium(Cd) | 0-50 (ppm) | 46.23 ppm |
| Cl(Titration by AgNO3) | 43.4-44.7 (%) | 44.62 % |
| Sulfate(SO42-) | 0-50 (ppm) | 40.27 ppm |
| (Pb)Lead | 0-50 (ppm) | 45.23 ppm |
| Cobalt(Co) | 0-50 (ppm) | 47.96 ppm |
| PH(25 °C, 50 mg/mL in Water) | 2.5-3.5 (%) | 3.42 % |
| Appearance (A112509) | White to Off-White Crystals | White to Off-White Crystals |
| ICP Major Analysis | Confirmed to structure | Confirmed to structure |
| X-Ray Diffraction | Conforms to Structure | Conforms to Structure |



ALADDIN SCIENTIFIC CORPORATION

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A handwritten signature in black ink that reads "John Su".

John Su
QA & QC Manager