

## Certificate of Analysis

Date of Testing: 2023-07-31 14:22:00  
 Date of Next Testing: 2027-07-30 14:22:00  
 Product Name: **Lanthanum nitrate hexahydrate**  
 CAS Number: 10277-43-7  
 Specifications & Purity: reagent grade, 99%  
 Lot #: G2322667  
 SKU #: **L106046**  
 Analysis: **257708**

| Parameter               | Limit Values                    | Result                          |
|-------------------------|---------------------------------|---------------------------------|
| Chromium(Cr)            | 0-5 (ppm)                       | 0.35 ppm                        |
| Calcium(Ca)             | 0-50 (ppm)                      | 20.00 ppm                       |
| Copper(Cu)              | 0-5 (ppm)                       | 1.20 ppm                        |
| Sulfate(SO42-)          | 0-50 (ppm)                      | 31.79 ppm                       |
| Iron(Fe)                | 0-10 (ppm)                      | 4.50 ppm                        |
| (Pb)Lead                | 0-10 (ppm)                      | 2.37 ppm                        |
| Magnesium(Mg)           | 0-5 (ppm)                       | 2.20 ppm                        |
| Sodium(Na)              | 0-10 (ppm)                      | 6.80 ppm                        |
| Cobalt(Co)              | 0-5 (ppm)                       | 2.30 ppm                        |
| Potassium(K)            | 0-10 (ppm)                      | 6.58 ppm                        |
| Nickel(Ni)              | 0-5 (ppm)                       | 2.10 ppm                        |
| Purity(T)               | 99-100 (%)                      | 100.00 %                        |
| Zinc(Zn)                | 0-5 (ppm)                       | 3.20 ppm                        |
| Cadmium(Cd)             | 0-5 (ppm)                       | 2.10 ppm                        |
| Chloride (Cl-)          | 0-50 (ppm)                      | 29.80 ppm                       |
| La(Complexometric EDTA) | 30.8-31.8 (%)                   | 31.71 %                         |
| Manganese(Mn)           | 0-5 (ppm)                       | 2.60 ppm                        |
| Appearance (L106046)    | white crystal or crystal powder | white crystal or crystal powder |
| Infrared spectrum       | Conforms to Structure           | Conforms 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". The signature is written in a cursive, flowing style.

John Su  
QA & QC Manager