

## Certificate of Analysis

Date of Testing: 2022-07-23 00:22:15  
Date of Next Testing: 2024-07-12 00:22:15  
Product Name: **Cerium nitrate hexahydrate**  
CAS Number: 10294-41-4  
Specifications & Purity: 99.95% metals basis  
Lot #: G2221091  
SKU #: **C105378**  
**Analysis:** **084522**  
Storage Temperature: Argon charged

| Parameter  | Limit Values                                    | Result  |
|--|---|---|
| Purity(Based On Trace Rare Earth Analysis)                                       | 99.95-100 (%)                                   | 99.96 %   |
| Trace Rare Earth Analysis(by ICP Atomic emission)                                | 0-500 (ppm)                                     | 366.00 ppm                                      |
| CeO <sub>2</sub> (redox titration)   | 38.8-40.5 (%)                                   | 39.79000 %                                      |
| Cerium(Ce)   | 31.1-33.4 (%)                                   | 31.11 %   |
| Appearance (C105378)   | White to Off-White Moist Crystals and/or Chunks | White to Off-White Moist Crystals and/or Chunks |
| ICP: Confirms Cerium Component   | Confirmed                                       | Confirmed                                       |
| Solubility in H <sub>2</sub> O , Clear , Colorless(c =pass 5%, H <sub>2</sub> O) |   | Pass  |
| X-Ray Diffraction  | Conforms to Structure                           | Conforms to Structure                           |



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