

## Certificate of Analysis

Date of Testing: 2022-03-14 19:01:40  
Date of Next Testing: 2026-03-13 19:01:40  
Product Name: **Cerium oxide**  
CAS Number: 1306-38-3  
Specifications & Purity: 20nm-50nm,99.5% metals basis  
Lot #: C2208157  
SKU #: **C103981**  
Analysis: **062360**

Parameter	Limit Values	Result
Particle size	20-50 (nm)	23.58 nm
Purity(Based On Trace Rare Earth Analysis)	99.5-100 (%)	99.98 %
Trace Rare Earth Analysis(by ICP Atomic emission)	0-5000 (ppm)	163.00 ppm
Appearance (C103981)	White to Yellow Powder	White to Yellow Powder
ICP: Confirms Cerium Component	Confirmed	Confirmed
X-Ray Diffraction	Conforms to Structure	Conforms to Structure



John Su  
QA & QC Manager