

Certificate of Analysis (CoA)

Aug. 7, 2025

Product Name: Cerium Sputtering Target**Chemical Formula:** Ce**Purity:** 99.9% (3N)**Dimensions:** Ø92 mm × 4 mm**Backing Plate:** Bonded to OFHC Copper plate (Ø100 mm × 4 mm)**Batch Number:** CSFM-2508006071TB**Manufactured by:** Thin-Film Materials

Physical Description

- Form: Metallic sputtering target
- Appearance: Silvery-gray metallic surface
- Fabrication: High-purity Ce bonded to copper backing plate
- Crystal Structure: Face-centered cubic (fcc)
- Theoretical Density: ~6.77 g/cm³

Theoretical Composition

- **Element:** Cerium (Ce)
- **Atomic Weight:** 140.12 g/mol
- **Mass Fraction:** 100% Ce (elemental metal)

Chemical Composition (by ICP-OES)

Element	Symbol	Max. Content (ppm)
Cerium	Ce	Balance (>99.9%)
La	La	<50
Pr	Pr	<50
Nd	Nd	<50
Fe	Fe	<20
Si	Si	<20
Other metals (each) –		<20

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Element	Symbol	Max. Content (ppm)
Total Impurities	—	<1000 ppm

Handling & Storage

- Store in vacuum-sealed or inert gas packaging.
 - Handle with clean gloves to prevent contamination.
 - Avoid mechanical shock to bonded interface.
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Declaration

We hereby certify that the above product has been manufactured and tested in accordance with our quality control procedures and meets the specifications stated herein.

Authorized Signature:Inspection Certificate by: Nancy LiuApprover by: Chen Qiang