

Certificate of Analysis (CoA)

Aug. 29, 2025

Product Name: Zinc Oxide Sputtering Target

Chemical Formula: ZnO

Purity: 99.9% (3N)

Dimensions: Ø76.2 mm × 3.0 mm (±0.1 mm)

Backing Plate: Elastomer bonded to OFHC Copper plate, 2 mm thick

Quantity: 2 pcs

Lot Number: CSXK-25SC-0830TB

Manufactured by: Thin-Film Materials

Physical Description

- Form: Ceramic sputtering target
- Appearance: White to light gray solid, dense surface
- Crystal Structure: Hexagonal wurtzite (ZnO)
- Theoretical Density: ~5.61 g/cm³
- Fabrication: Hot-pressed, machined, elastomer bonded to copper plate

Theoretical Stoichiometric Composition (Mass %)

- Zn = 65.38 g/mol
- O = 16.00 g/mol
- ZnO = 81.38 g/mol

Element Symbol Mass %

Zinc Zn ~80.4%

Oxygen O ~19.6%

Chemical Composition (by ICP-OES / GDMS)

Element	Symbol	Max. Content (ppm)
Zinc	Zn	Balance (>99.9%)
Oxygen	O	Balance (stoichiometric)

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Element	Symbol	Max. Content (ppm)
Iron	Fe	<20
Silicon	Si	<20
Calcium	Ca	<10
Other trace metals (each) –		<20
Total Impurities	–	<100 ppm

Handling & Storage

- Store in vacuum-sealed or inert atmosphere packaging.
- Avoid exposure to moisture to prevent surface hydration.
- Handle with gloves to maintain clean surface.
- Protect from mechanical impact to avoid cracking.

Declaration

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

Authorized Signature:Inspection Certificate by: Nancy Liu

Approver by:

Chen Qiang