

Certificate of Analysis (CoA)

Nov. 11, 2025

Product Name: Zirconium Dioxide Pieces**Chemical Formula:** ZrO_2 **Purity:** 99.9% (3N)**Dimensions:** 3 - 6 mm Pieces**Color:** Black**Quantity:** 5 KG**Lot Number:** CSFM-251111TB**Manufactured by:** Thin-Film Materials

Physical Description

- Form: Solid ceramic pieces
- Appearance: Black, dense, sintered zirconia fragments
- Crystal Structure: Monoclinic / partially stabilized tetragonal
- Theoretical Density: $\sim 5.68 \text{ g/cm}^3$
- Fabrication: High-purity zirconium oxide powder sintered under controlled temperature and atmosphere

Chemical Composition (by XRF / ICP-OES)

Element	Symbol	Max. Content (ppm)
Zirconium	Zr	Balance (>99.9%)
Iron	Fe	<30
Silicon	Si	<30
Aluminum	Al	<20
Calcium	Ca	<20
Magnesium	Mg	<20
Sodium	Na	<10
Copper	Cu	<10
Other trace elements (each)	—	<10
Total Impurities	—	<100 ppm

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Handling & Storage

- Store in a clean, dry environment.
 - Avoid mechanical impact and contamination.
 - Handle with clean gloves; prevent exposure to strong acids or alkalis.
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Declaration

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

Authorized Signature:

Inspection Certificate by: Nancy Liu

Approver by:

Chen Qiang

