

Certificate of Analysis (CoA)

July 14, 2025

Product Name: Selenium Sputtering Target**Chemical Formula:** Se**Purity:** ≥99.99% (4N)**Dimensions:** Ø50.8 mm × 6.35 mm (2" × 1/4")**Backing Plate:** Indium bonded to 3 mm thick Titanium plate with keeper**Lot Number:** JMCS-25-SC-3960

Physical Description

- Form: Semiconductor sputtering target
- Appearance: Dark gray to black, glassy or crystalline
- Crystal Structure: Trigonal (hexagonal chain structure)
- Density: ~4.81 g/cm³
- Bonding: Indium bonded to Ti backing plate, mechanical keeper included

Theoretical Composition

- **Element:** Selenium (Se)
- **Atomic Weight:** 78.96 g/mol
- **Mass Fraction:** 100% Se (elemental form)

Chemical Composition (by ICP-OES)

Element	Symbol	Max. Content (ppm)
Selenium	Se	Balance (>99.99%)
Tellurium	Te	<10
Sulfur	S	<10
Iron	Fe	<10
Lead	Pb	<10
Other trace elements (each) –		<10
Total Impurities	–	<100 ppm

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Handling & Storage

- Selenium is brittle and sensitive to oxidation at elevated temperatures.
- Store in vacuum-sealed packaging or inert atmosphere.
- Avoid excessive mechanical stress to prevent cracking.
- Handle by edges using gloves or clean tools.

Declaration

We hereby certify that the above product has been manufactured and tested according to our quality standards and conforms to the specifications stated.

Inspection Certificate by: Nancy Liu

Approver by: Chen Qiang

