

### 32 N Gould St., Sheridan, WY 82801, USA

Tel.: +1 (786) 825 8645 Email: sales@thinfilmmaterials.com WhatsApp: Keyue Advanced Materials Website: www.thinfilmmaterials.com

# **Certificate of Analysis (CoA)**

Aug. 29, 2025

Product Name: Tin(II) Sulfide Sputtering Target

Chemical Formula: SnS

**Purity**: 99.9% (3N)

**Dimensions**:  $\emptyset$ 76.2 mm × 3.0 mm (±0.1 mm)

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

Quantity: 2 pcs

**Lot Number**: CSJM-25SC-0830TB **Manufactured by:** Thin-Film Materials

#### **Physical Description**

• Form: Ceramic/semiconducting sputtering target

· Appearance: Dark gray to black solid, dense surface

Crystal Structure: Orthorhombic (SnS)

• Fabrication: Hot pressing, elastomer bonded to Cu plate

Theoretical Density: ~5.22 g/cm³

#### **Theoretical Stoichiometric Composition (Mass %)**

#### **Element Symbol Mass %**

Tin Sn ~63.6% Sulfur S ~36.4%

(Based on Sn = 118.71, S = 32.06, SnS = 150.77 g/mol)

#### **Chemical Composition (by ICP-OES / GDMS)**

Element	Symbol	l Max. Content (ppm)
Tin	Sn	Balance (>99.9%)
Sulfur	S	Balance (>99.9%)
Iron	Fe	<20
Silicon	Si	<20



### 32 N Gould St., Sheridan, WY 82801, USA

Tel.: +1 (786) 825 8645 Email: sales@thinfilmmaterials.com WhatsApp: Keyue Advanced Materials Website: www.thinfilmmaterials.com

# **Certificate of Analysis (CoA)**

Aug. 29, 2025

Element	Symbol Max. Content	(ppm)
Element	Symbol Max. Content	(pp

Calcium Ca <20 Other trace metals (each) – <20

**Total Impurities** – <100 ppm

### **Handling & Storage**

- Store in vacuum-sealed packaging under inert atmosphere.
- Handle carefully to avoid chipping or cracking.
- Avoid prolonged exposure to air and humidity.

#### **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:**

Approver by:

Nancy Liu

Chen Qiang

Chen Qiang