

Certificate of Analysis (CoA)

Oct. 29, 2025

Product Name: Chromium Antimony (CrSb) Alloy Sputtering Target

Chemical Formula: $\text{Cr}_{0.5}\text{Sb}_{0.5}$

Composition: 50 at% Cr / 50 at% Sb

Purity: 99.9% (3N, metal basis)

Dimensions: Ø50.8 mm × 3.18 mm

Lot Number: CSJM-251027TB

Quantity: 1 Piece

Manufactured by: Thin-Film Materials

Physical Description

- Form: Metallic sputtering target
- Appearance: Metallic gray, solid
- Theoretical Density: ~7.12 g/cm³
- Fabrication: Vacuum melting, homogenization, and precision machining

Total Impurities (by ICP-OES)

Element	Symbol	Max. Content (ppm)
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Cr, Sb **Cr, Sb** **Balance (>99.9%)**

Iron Fe < 50

Arsenic As < 40

Lead Pb < 30

Sulfur S < 30

Nickel Ni < 20

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Element	Symbol	Max. Content (ppm)
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Oxygen	O	< 150
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Handling & Storage

- Store in a dry environment. Recommended to store in vacuum or inert atmosphere to prevent oxidation.
- Handle with clean gloves to avoid contamination.

Declaration

This CrSb alloy target is manufactured to exacting compositional standards, suitable for the deposition of thin films in spintronic and magnetic recording media research.

Authorized Signature:

Inspection Certificate by: Nancy Liu

Approver by: Chen Qiang

