

Certificate of Suitability for Purpose

PELCO® XCS-10 EDS Calibration Standard

Product Number 659-10

PELCO® XCS-10



Purpose of standard: Calibration and testing of energy-dispersive X-ray systems and backscattered electron detectors.

Number of reference standards: 11

Composition and use of standard:

- 1) Carbon (glassy, >99.9% Sigris Electrographit GmbH) – to be used for light element detector testing
- 2) Silicon (>99.99% pure – Alfa Ventron) *
- 3) Titanium metal (>99.7% – Alfa Ventron) *
- 4) Cobalt metal (>99.99% – Alfa Ventron) *
- 5) Germanium (semiconductor grade >99.999% - AAEC)*
- 6) Niobium metal (>99.9% – Alfa Ventron) *
- 7) Tin metal (>99.99% – Alfa Ventron) *
- 8) Holmium metal (>99.9% – Alfa Ventron) *
- 9) Iridium metal (>99.8% – Alfa Aesar) *
- 10) Bismuth metal (>99.99% – Alfa Ventron) *
- 11) Copper aperture (3.05 mm diameter 200 µm) – to be used as Faraday cup and for EDS calibration.

* These materials can be used for calibration of backscattered electron detector response.

These materials are mounted and embedded with silver-loaded epoxy cement in a 12.7 mm diameter aluminum pin stub and polished to 1 µm finish. The aluminum used to make the stub is free-machining grade and may contain alloying inclusions of Cu/Bi/Pb.

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