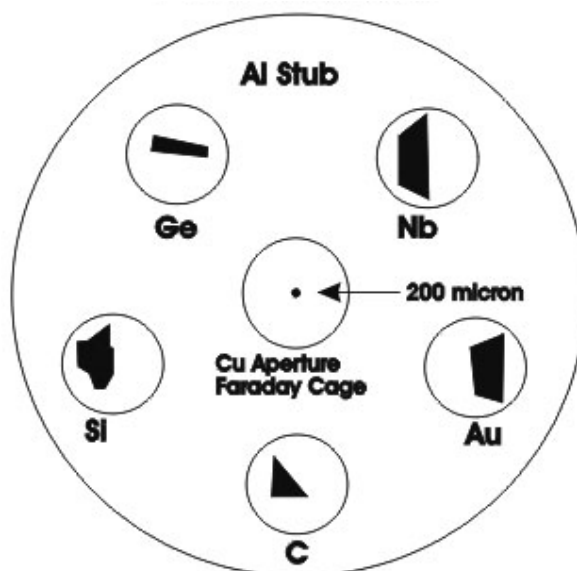


Certificate of Suitability for Purpose

PELCO[®] XCS-7 EDS Calibration Standard

Product Number 659-7



Purpose of standard: Calibration and testing backscattered electron detector response on Scanning Electron Microscopes.

Number of reference standards: 6

Composition and use of standard:

- 1) Gold (Alpha Aesar 99.9% - surface may contain diamond debris)
- 2) Niobium (Ventron 99.9% metals)
- 3) Germanium (semiconductor purity 99.999%+ AAEC)
- 4) Silicon (semiconductor purity 99.999%+ GE)
- 5) Carbon (glassy, >99.9% Sigrì Electrographit GmbH) – to be used for light element detector testing
- 6) Copper aperture (3.05 mm diameter 200 μ m) – to be used as Faraday cup and for EDS calibration.

These materials are mounted and embedded with silver-loaded epoxy cement in a 12.7 mm diameter aluminum pin stub and polished to 1 μ m 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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