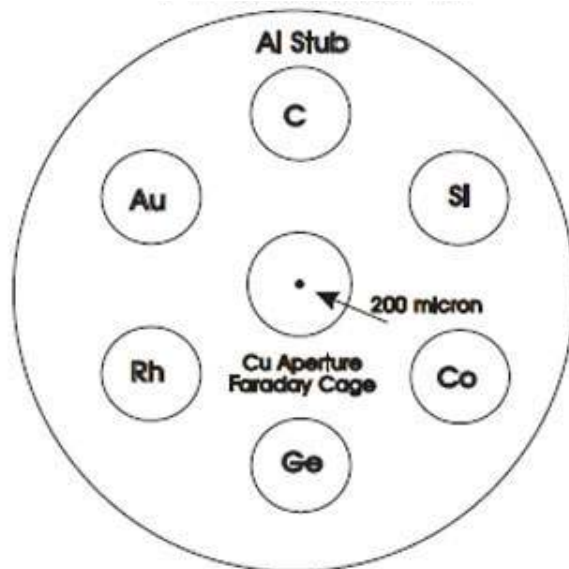


# Certificate of Suitability for Purpose

PELCO® XCS-22 EDS Calibration Standard

Product Number 659-22



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

**Number of component standards:** 7

**Composition/components and use of standard:**

- 1) Gold (Alpha Alesar 99.9% - surface may contain diamond debris)
- 2) Rhodium (Alpha Alesar 99.8% metals)
- 3) Cobalt metal (HCL Chemicals Ltd 99.98% Metals )
- 4) Germanium (semiconductor purity 99.999%+ AAEC)
- 5) Silicon (semiconductor purity 99.999%+ GE)
- 6) Carbon (glassy, >99.9% Sigri Electrographit GmbH) – to be used for light element detector testing
- 7) Copper aperture (3.05 mm diameter 200  $\mu$ 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  $\mu$ 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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