

**Crystal Data:** n.d. *Point Group:* n.d. In anhedral grains of 0.05 mm average diameter.

**Physical Properties:** Hardness = n.d. VHN = n.d. D(meas.) = n.d. D(calc.) = n.d.

**Optical Properties:** Opaque. *Color:* In polished section, pale gray with faint olive-brown tint. *Luster:* Metallic. *Anisotropism:* Distinct in air, strong in oil, cream to bluish green.

R<sub>1</sub>–R<sub>2</sub>: (400) —, (420) —, (440) 33.6–33.4, (460) 33.5–33.8, (480) 33.1–33.6, (500) 32.5–33.9, (520) 32.1–33.2, (540) 32.1–33.7, (560) 31.8–33.7, (580) 31.4–33.9, (600) 31.2–33.7, (620) 31.0–34.1, (640) 31.0–33.5, (660) 30.9–33.4, (680) —, (700) —

**Cell Data:** *Space Group:* n.d. Z = n.d.

**X-ray Powder Pattern:** n.d.

| Chemistry: | (1)   | (2)   | (3)  | (4)   |
|------------|-------|-------|------|-------|
| Ag         | 64.7  | 64.0  | 61.0 | 59.1  |
| Cu         | 6.2   | 5.4   | 4.3  | 6.8   |
| Pb         | 0.8   | 1.4   | 1.3  | 3.1   |
| Fe         | 1.1   | 0.8   | 1.1  | 0.6   |
| Bi         | 16.9  | 16.8  | 16.0 | 17.0  |
| Te         | 1.5   | 1.8   | 1.9  | 2.3   |
| S          | 11.6  | 12.6  | 11.8 | 13.7  |
| Total      | 102.8 | 102.8 | 97.4 | 102.6 |

(1–4) Ivigtut, Greenland; by electron microprobe, the average leading to Ag<sub>6.01</sub>Cu<sub>0.95</sub>Bi<sub>0.84</sub>Pb<sub>0.07</sub>Fe<sub>0.13</sub>Te<sub>0.18</sub>S<sub>4.01</sub>.

**Occurrence:** In a cryolite deposit.

**Association:** Galena, hessite, aikinite, matildite, berryite, tellurian canfieldite, acanthite, bismuth, quartz, fluorite, cryolite.

**Distribution:** From the Ivigtut cryolite deposit, southwestern Greenland [TL].

**Name:** For the major metallic elements in the mineral: ARgentum, *silver*; CUprum, *copper*; BISmuth and Sulfur.

**Type Material:** University of Copenhagen, Copenhagen, Denmark, 1973,114.

**References:** (1) Karup-Møller, S. (1976) Arcubisite and mineral B—two new minerals from the cryolite deposit at Ivigtut, South Greenland. *Lithos*, 9, 253–257. (2) (1978) *Amer. Mineral.*, 63, 424 (abs. ref. 1).