

Crystal Data: Cubic. *Point Group:* $\bar{4}3m$. As tetrahedra, (+) and (-) forms of which may be balanced to give pseudo-octahedra, or, with the cube, to give pseudocubo-octahedra, to 1 mm; cube faces striated || tetrahedral faces. In crystalline crusts and aggregates. *Twining:* On {111}, may be repeated.

Physical Properties: *Cleavage:* {011}, perfect. *Fracture:* Conchoidal. *Tenacity:* Somewhat brittle. Hardness = 2.5 D(meas.) = 5.64 D(calc.) = 5.67

Optical Properties: Transparent. *Color:* Canary-yellow; in transmitted light, pale yellow. *Streak:* Canary-yellow. *Luster:* Adamantine. *Optical Class:* Isotropic; slight anomalous anisotropism. $n = 2.20(2)$

Cell Data: *Space Group:* $F\bar{4}3m$. $a = 6.504$ $Z = 4$

X-ray Powder Pattern: Locality not stated [Broken Hill, Australia]. 3.23 (s), 2.28 (m), 1.948 (m), 3.72 (w), 1.489 (vw), 1.320 (vw), 1.290 (vw)

Chemistry:	(1)	(2)
Ag	38.17	45.95
Cu	5.64	
I	56.58	54.05
Total	100.39	100.00

(1) Broken Hill, Australia. (2) AgI.

Occurrence: A rare mineral in the oxidized zone of some Pb-Zn-Cu-Ag deposits, especially in arid regions.

Association: Iodargyrite, chlorargyrite, malachite, cerussite, cuprite (Broken Hill, Australia); gerhardtite, likasite (Likasi, Congo).

Distribution: From Broken Hill, New South Wales, Australia. In the USA, at the Contention mine and Joe shaft, Tombstone; in the Southwest mine, Bisbee, Cochise Co.; and from the Mildren and Steppe claim, South Comobabi Mountains, Pima Co., Arizona. In the Likasi mine, Katanga Province, Congo (Shaba Province, Zaire).

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Type Material: Natural History Museum, Paris, France, 112.405; The Natural History Museum, London, England, 83822.

References: (1) Palache, C., H. Berman, and C. Frondel (1951) Dana's system of mineralogy, (7th edition), v. II, 19-20. (2) Barclay, C.J. and J.B. Jones (1971) The Broken Hill silver halides. J. Geol. Soc. Austr., 18, 149-157. (3) Waldo, A.W. (1935) Identification of the copper ore minerals by means of X-ray powder diffraction patterns. Amer. Mineral., 20, 575-597, esp. 585.