

**Crystal Data:** Hexagonal. *Point Group:*  $6/m\ 2/m\ 2/m$ . As small irregular plates, sometimes striated in multiple directions producing a cross-hatching, and with hummocky surfaces.

**Physical Properties:** *Cleavage:* Perfect on {0001}. *Tenacity:* Brittle. *Hardness* = 2 VHN = n.d.  $D(\text{meas.}) = 6.9\text{--}7.2$   $D(\text{calc.}) = 7.135$

**Optical Properties:** Opaque. *Color:* White. *Streak:* White and slightly grayish. *Luster:* Metallic.  
 $R_1\text{--}R_2$ : n.d.

**Cell Data:** *Space Group:*  $P6_3/mmc$ .  $a = 2.665$   $c = 4.947$   $Z = 2$

**X-ray Powder Pattern:** Synthetic.  
 2.091 (100), 2.473 (3), 2.308 (40), 1.687 (28), 1.342 (25), 1.1729 (23), 1.332 (21)

<b>Chemistry:</b>		(1)
	Zn	~90
	Sn, Pb, Cd	~10
	Fe, Mn, B, Si, Cu, Ag, Ca, Ba	trace
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	Total	

(1) Elsa mine, Canada; combined X-ray fluorescence and spectrographic analyses.

**Occurrence:** In the oxidized zone of Pb-Zn-Ag deposits, derived from sphalerite by oxidation (Elsa mine, Canada); coatings on fibrous volcanic glass, as a volcanic sublimate (Mount Elbrus, USSR); in platinum concentrates (Aurora deposit, USSR).

**Association:** Silver, sulfur, oxidized sphalerite, "limonite", manganese oxides, cerussite, anglesite, freibergite, galena (Elsa mine, Canada); copper, Cu-Zn alloy, sphalerite, djurleite, cuprite (Dulcina mine, Chile).

**Distribution:** In the Elsa mine, Keno Hill-Galena Hill area, Yukon Territory, Canada. From Mount Elbrus, Caucasus Mountains, and the Aurora deposit, locality not otherwise specified, USSR. In the Dulcina de Lamos copper mine, near Copiapó, Chile.

**Name:** From the German *zink*, of obscure origin.

**References:** (1) Palache, C., H. Berman, and C. Frondel (1944) Dana's system of mineralogy, (7th edition), v. I, 127. (2) (1953) NBS Circ. 539, 1, 16. (3) Boyle, R.W. (1961) Native zinc at Keno Hill. *Can. Mineral.*, 6, 692-694. (4) Bartikyan, P.M. (1966) Native lead and zinc in the rocks of Armenia. *Zap. Vses. Mineral. Obshch.*, 95, 99-102 (in Russian). (5) (1962) *Mineral. Abs.*, 18, 200. (abs. ref. 4).