Zincaluminite $Zn_6Al_6(SO_4)_2(OH)_{26}\cdot 5H_2O$

Crystal Data: Hexagonal or orthorhombic (?). *Point Group:* n.d. Minute thin hexagonal crystals, in tufts and crusts.

Physical Properties: Hardness = 2.5–3 D(meas.) = 2.26 D(calc.) = n.d.

Optical Properties: Semitransparent. *Color:* White, bluish white, pale blue; colorless in transmitted light.
Optical Class: Uniaxial (–), may be biaxial. $\omega = 1.534(3)$ $\epsilon = 1.514(3)$ 2V(meas.) = Small.

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

X-ray Powder Pattern: n.d.

Chemistry:

	(1)	(2)
SO_3	12.94	12.53
Al_2O_3	25.48	23.92
CuO	1.85	
ZnO	34.69	38.19
H_2O	25.04	25.36
Total	100.00	100.00

(1) Laurium, Greece; recalculated to 100% after deduction of minor gangue.
(2) $Zn_6Al_6(SO_4)_2(OH)_{26}\cdot 5H_2O$.

Occurrence: A rare secondary mineral in the oxidized zone of a Ag–Zn mine.

Association: Smithsonite, aurichalcite, hydrozincite, serpierite, cyanotrichite, azurite, cuproadamite, agardite-(La), calcite, chrysocolla, gibbsite.

Distribution: In Greece, from Laurium, at the Kamariza mine.

Name: For *zinc* and *aluminum* in the composition, and its similarity to *aluminite*.

Type Material: Natural History Museum, Paris, France, 96.1432.

References: (1) Palache, C., H. Berman, and C. Frondel (1951) Dana's system of mineralogy, (7th edition), v. II, 579–580.