

Crystal Data: Hexagonal. *Point Group:* $\bar{3} 2/m$. As intergrown tabular or short hexagonal prismatic crystals, to 0.5 mm.

Physical Properties: *Cleavage:* Imperfect, {101}. *Fracture:* n.d. *Hardness:* = n.d.
D(meas.) = 2.03(1) D(calc.) = 2.044

Optical Properties: Transparent. *Color:* Colorless to pale pink. *Streak:* White.
Luster: Vitreous.
Optical Class: Uniaxial (+). $\omega = 1.53$ $\epsilon = 1.56$

Cell Data: *Space Group:* $P\bar{3} 1 2/c$. $a = 10.7065(7)$ $c = 17.3077$ $Z = 4$

X-ray Powder Pattern: Aeolian Islands (Vulcano), Italy.
9.251 (100), 5.310 (83), 3.152 (43), 4.087 (33), 1.765 (20), 2.112 (17), 8.710 (13)

Chemistry:	(1)
Fe ₂ O ₃	13.96
Al ₂ O ₃	10.30
SO ₃	44.24
H ₂ O	[31.50]
Total	100.00

(1) Aeolian Islands (Vulcano), Italy; electron microprobe analysis, H₂O by difference, corresponding to Al_{1.07}Fe_{0.92}S_{2.92}H_{18.49}O₂₁.

Occurrence: A precipitate from volcanic vapors in a fumarole (< 100° C).

Association: Alunogen, coquimbite, krausite, tamarugite, yavapaiite, voltaite, pertlikite, pickeringite, metavoltine.

Distribution: Alum Grotto, Aeolian Islands (Vulcano), Italy.

Name: For its high *aluminum* content and relation to *coquimbite*.

Type Material: Department of Structural Chemistry and Inorganic Stereochemistry, University of Milan, Italy (2009-03).

References: (1) Demartin, F., C. Castellano, C.M. Gramaccioli, and I. Campostrini (2010) Aluminocoquimbite, AlFe(SO₄)₃·9H₂O, a new aluminum iron sulfate form Gortta Dell'Allume, Vulcano, Aeolian Islands, Italy. *Can. Mineral.*, 48, 1465-1468. (2) (2013) *Amer. Mineral.*, 98, 279 (abs. ref. 1).