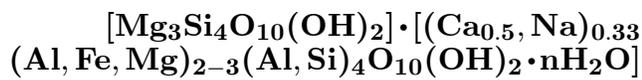


Aliettite



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Crystal Data: n.d. *Point Group:* n.d. Irregular, tabular to platy crystals, < 2 μm , with curled edges when viewed under the electron microscope; as microscopic rounded aggregates.

Physical Properties: Hardness = Soft. D(meas.) = n.d. D(calc.) = n.d. Positive identification of minerals in the smectite group may need data from DTA curves, dehydration curves, and X-ray powder patterns before and after treatment by heating and with organic liquids.

Optical Properties: Translucent. *Color:* Colorless, pale yellow or green.

Optical Class: n.d. $n = 1.558\text{--}1.567$

Cell Data: *Space Group:* n.d. $Z = \text{n.d.}$

X-ray Powder Pattern: Taro Valley, Italy.

24.8 (100), 12.4 (67), 3.10 (12), 8.27 (6), 4.96 (2), 3.54 (2), 2.48 (0.5)

Chemistry:

	(1)
SiO ₂	53.15
Al ₂ O ₃	3.48
Fe ₂ O ₃	3.48
MnO	0.03
MgO	27.40
CaO	1.10
Na ₂ O	1.18
H ₂ O	10.18
<u>Total</u>	<u>100.00</u>

(1) Taro Valley, Italy; by AA and XRF.

Polymorphism & Series: Talc-saponite mixed-layer mineral.

Mineral Group: Smectite group.

Occurrence: An alteration product in serpentinized ophiolites and residual in soils derived therefrom; in altered dolostones.

Association: Talc, chlorite, serpentine, calcite.

Distribution: In Italy, in Emilia-Romagna, at Monte Chiaro, Taro Valley; Frassinoro, Modena; and Ferriere, Nure Valley. From Kinshasa, Katanga Province, Congo (Shaba Province, Zaire).

Name: To honor Professor Andrea Alietti (1923–), of the University of Modena, Modena, Italy, who first studied the structure of the mineral.

Type Material: n.d.

References: (1) Alietti, A. (1958) Some interstratified clay minerals of the Taro Valley. *Clay Minerals Bull.*, 3, 207–211. (2) Veniale, F. and H.W. van der Marel (1969) Identification of some 1:1 regular interstratified trioctahedral clay minerals. *Proc. Int. Clay Conf.*, Tokyo, 1, 233–244. (3) (1972) *Amer. Mineral.*, 57, 598 (abs. ref. 2). (4) Alietti, A. and J. Mejsner (1980) Structure of a talc/saponite mixed-layer mineral. *Clays and Clay Minerals*, 28, 388–390. (5) Bailey, S.W. (1982) Nomenclature for regular interstratifications. *Amer. Mineral.*, 67, 394–398.