

**Crystal Data:** Monoclinic. *Point Group:* n.d. Crystals are needlelike or laths, elongated along [100] and flattened on {001}, to more than 3 mm, in fibrous masses and aggregates.

**Physical Properties:** *Cleavage:* On {010}, distinct. Hardness = n.d. D(meas.) = 2.32 D(calc.) = [2.37] Soluble in  $\text{H}_2\text{O}$ , taste bitter and acid.

**Optical Properties:** Transparent to translucent. *Color:* Grayish white; colorless in transmitted light. *Luster:* Pearly to silky.

*Optical Class:* Biaxial (+). *Orientation:*  $Z = b$ ;  $X \wedge c = 29^\circ$ .  $\alpha = 1.475(3)$   $\beta = 1.480(3)$   $\gamma = 1.487(3)$   $2V(\text{meas.}) = \text{Large}$ .

**Cell Data:** *Space Group:* n.d.  $a = 23.00$   $b = 7.104$   $c = 8.710$   $\beta = 102.66^\circ$   $Z = [2]$

**X-ray Powder Pattern:** Cape Miseno, Italy. (ICDD 41-1363).

4.24 (100), 3.648 (57), 4.92 (43), 4.83 (37), 3.592 (33), 3.490 (27), 2.892 (27)

**Chemistry:**

	(1)	(2)
$\text{SO}_3$	56.45	56.54
$\text{Al}_2\text{O}_3$		trace
$\text{K}_2\text{O}$	38.32	38.01
$\text{H}_2\text{O}$	5.23	5.45
Total	[100.00]	100.00

(1) Cape Miseno, Italy; recalculated to 100% after deduction of an unstated amount of hygroscopic  $\text{H}_2\text{O}$ . (2)  $\text{H}_6\text{K}_8(\text{SO}_4)_7$ .

**Occurrence:** Very rarely formed under fumarolic conditions.

**Association:** Potassium alum, alunogen, halotrichite, metavoltine, pickeringite, sulfur, tamarugite, voltaite (Cape Miseno, Italy).

**Distribution:** From the Grotto del Solfo fumarole, Cape Miseno, Campi Flegrei, near Naples, and on Vesuvius, Campania, Italy.

**Name:** For its occurrence on Cape Miseno, Italy.

**Type Material:** Natural History Museum, Paris, France, 100781; The Natural History Museum, London, England, 60393.

**References:** (1) Palache, C., H. Berman, and C. Frondel (1951) Dana's system of mineralogy, (7th edition), v. II, 396–397.