

Campostriniite



Crystal Data: Monoclinic. *Point Group:* 2/m. As terminated prismatic crystals, to 0.2 mm.

Physical Properties: *Cleavage:* None. *Fracture:* n.d. *Tenacity:* n.d. *Hardness* = n.d.
D(meas.) = n.d. D(calc.) = 3.87

Optical Properties: Transparent. *Color:* White. *Streak:* White. *Luster:* Vitreous.
Optical Class: Biaxial. $n(\text{calc.}) = 1.680$

Cell Data: *Space Group:* C2/c. $a = 17.748(3)$ $b = 6.982(1)$ $c = 18.221(3)$ $\beta = 113.97(1)^\circ$ $Z = 4$

X-ray Powder Pattern: La Fossa Crater, Vulcano, Aeolian Islands, Italy.
6.396 (100), 7.507 (75), 2.766 (60), 3.380 (57), 5.677 (55), 3.166 (50), 4.410 (47)

Chemistry:	(1)
Bi ₂ O ₃	46.65
SO ₃	40.33
Na ₂ O	6.21
K ₂ O	1.88
(NH ₄) ₂ O	[3.28]
<u>H₂O</u>	[1.50]
Total	99.85

(1) La Fossa Crater, Vulcano, Aeolian Islands, Italy; average of 18 electron microprobe analyses supplemented by FTIR spectrometry, H₂O and (NH₄)₂O calculated from stoichiometry; corresponding to Bi_{2.41}N_{1.52}Na_{2.41}K_{0.48}S_{6.07}H_{8.08}O₂₅.

Occurrence: A sublimate on pyroclastic breccia at a volcanic fumarole.

Association: Adranosite, demicheleite-(Br), demicheleite-(I), argesite, sassolite.

Distribution: From La Fossa Crater, Vulcano, Aeolian Islands, Italy.

Name: Honors Italo Campostrini (b. 1959), a mineralogist active in the study of volcanic sublimates.

Type Material: Department of Chemistry, University of Milan, Italy (2013-03).

References: (1) Demartin, F., C. Castellano, and C.M. Gramaccioli (2015) Campostriniite, (Bi³⁺,Na)₃(NH₄,K)₂Na₂(SO₄)₆·H₂O, a new sulfate isostructural with görgeyite, from La Fossa Crater, Vulcano, Aeolian Islands, Italy. Mineral. Mag., 79(4), 1007-1018. (2) (2016) Amer. Mineral., 101, 1241-1242 (abs. ref. 1).