

Plumbopharmacosiderite**Crystal Data:** Cubic. *Point Group:* $\bar{4} 3m$. As cubes to 50 μm .**Physical Properties:** *Cleavage:* n.d. *Fracture:* Irregular. *Tenacity:* Brittle.
Hardness = 2.5-3 (by analogy to group members). *D(meas.)* = n.d. *D(calc.)* = 2.89**Optical Properties:** Transparent. *Color:* Pale green to yellowish-green. *Streak:* White.
Luster: Vitreous to resinous.
Optical Class: Isotropic. $n = 1.73(1)$ **Cell Data:** Space Group: $P\bar{4} 3m$. $a = 7.9791(2)$ $Z = 1$ **X-ray Powder Pattern:** Monte Falò mine, near Coiromonte, Armeno Municipality, Italy.
8.024 (100), 1.879 (29), 3.252 (23), 3.980 (18), 2.830 (18), 5.859 (15), 4.558 (12)

Chemistry:	(1)	(2)
As ₂ O ₅	38.41	38.23
P ₂ O ₅	0.07	
SO ₃	0.03	
SiO ₂	0.04	
Al ₂ O ₃	1.30	
Fe ₂ O ₃	33.37	35.41
CaO	0.03	
BaO	2.61	
ZnO	0.05	
PbO	10.59	12.37
Na ₂ O	0.12	
K ₂ O	1.08	
H ₂ O	[14.17]	13.98
Total	101.87	100.00

(1) Monte Falò mine, near Coiromonte, Armeno Municipality, Italy; average of 8 electron microprobe analyses, H₂O calculated for charge balance; corresponds to $(\text{Pb}_{0.42}\text{K}_{0.20}\text{Ba}_{0.15}\text{Na}_{0.03}\text{Ca}_{0.01})_{\Sigma=0.81}(\text{Fe}^{3+}_{3.69}\text{Al}_{0.22})_{\Sigma=3.91}(\text{As}_{2.95}\text{Si}_{0.01})_{\Sigma=2.96}\text{O}_{12}(\text{OH})_{\Sigma=3.90} \cdot 5\text{H}_2\text{O}$.(2) $\text{Pb}_{0.5}\text{Fe}^{3+}_4(\text{AsO}_4)_3(\text{OH})_4 \cdot 5\text{H}_2\text{O}$.**Mineral Group:** Pharmacosiderite supergroup, pharmacosiderite group.**Occurrence:** On fracture surfaces and formed by weathering of primary Pb-Fe-sulfide minerals.**Association:** Arsenopyrite, scorodite, beudantite, segnitite, marcasite, galena, sphalerite, mimetite.**Distribution:** At Monte Falò Pb-Zn Mine, near Coiromonte, Armeno Municipality, Novara Province, Italy.**Name:** The prefix *plumbo* for the essential lead component and relation to *pharmacosiderite*.**Type Material:** Mineralogical Collection, Laboratoire de Minéralogie, University of Liège, Belgium (20392).**References:** (1) Vignola, P., N. Rotiroli, F. Hatert, F. Dal Bo, P. Gentile, C. Albertini, M. Merlini, A. Risplendente, and A. Pavese (2018) Plumbopharmacosiderite, $\text{Pb}_{0.5}\text{Fe}^{3+}_4(\text{AsO}_4)_3(\text{OH})_4 \cdot 5\text{H}_2\text{O}$, a new mineral species from the Monte Falò Pb-Zn Mine Near the Village of Coiromonte in the Armeno Municipality, Novara Province, Italy. *Can. Mineral.*, 56(2), 143-150. (2) (2019) *Amer. Mineral.*, 104(5), 783 (abs. ref 1).