

Crystal Data: Triclinic. *Point Group:* $\bar{1}$. Diamond-shaped crystals, tabular on {001} and elongated on [010], form cockscomb aggregates. Crystals display {001}, {100}, {110}, and {010}. *Twining:* As ubiquitous polysynthetic twins on {001} or by rotation on [010] with composition planes {010} and $\{1\bar{1}0\}$, forming star-like sixlings, which are slightly concave/convex (dish-like).

Physical Properties: *Cleavage:* Perfect on {001}, good on {010} and $(1\bar{1}0)$. *Fracture:* Irregular. *Tenacity:* Flexible. *Hardness* = ~ 1.5 D(meas.) = 2.39(3) D(calc.) = 2.394

Optical Properties: Transparent. *Color:* Colorless to white; on weathered surfaces, white to cream to yellowish. *Streak:* White. *Luster:* Pearly; dull on weathered surfaces. *Optical Class:* Biaxial(+). $\alpha = 1.554(1)$ $\beta = 1.558(1)$ $\gamma = 1.566(1)$ 2V(meas.) = 70(5)° 2V(calc.) = 71° *Orientation:* $Y \approx a$; b is at roughly equal angles (~ 55°) to X and Z .

Cell Data: *Space Group:* $P\bar{1}$. $a = 7.386(3)$ $b = 7.716(3)$ $c = 11.345(4)$
 $\alpha = 99.773(5)^\circ$ $\beta = 91.141(6)^\circ$ $\gamma = 115.58(5)^\circ$ $Z = 2$

X-ray Powder Pattern: Fumade, Castelnau-de-Brassac, Tarn, France.
 11.089 (100), 3.540 (81), 5.484 (79), 2.918 (60), 3.089 (33), 4.022 (30), 6.826 (23)

Chemistry:	(1)	(2)
Al_2O_3	40.20	36.41
P_2O_5	38.84	35.17
H_2O	25.64	[28.42]
Total	103.68	100.00

(1) Fumade, Castelnau-de-Brassac, Tarn, France; average of 4 electron microprobe analyses, PO_3OH , OH and H_2O confirmed by IR and Raman spectroscopy, H_2O by CHN.

(2) Fumade, Castelnau-de-Brassac, Tarn, France; normalized electron microprobe analyses supplemented by IR and Raman spectroscopy, H_2O calculated from structure analysis.

Occurrence: A secondary mineral formed by remobilization and crystallization during low-temperature hydrothermal activity and/or weathering and ground water activity.

Association: Matulaite, variscite (France); kobokoboite (Democratic Republic of Congo).

Distribution: From Fumade, Castelnau-de-Brassac, Tarn, France. From the Bachman mine, Hellertown, Pennsylvania, USA. From the Kobokobo pegmatite, Democratic Republic of Congo.

Name: Honors the Association Française de Microminéralogie (AFM), an amateur association devoted to the collection and study of micro-minerals.

Type Material: Natural History Museum of Los Angeles County, Los Angeles, California, USA. (#55425).

References: (1) Kampf, A.R., S.J. Mills, G.R. Rossman, I.M. Steele, J.J. Pluth, and G. Favreau (2011) Afmite, $\text{Al}_3(\text{OH})_4(\text{H}_2\text{O})_3(\text{PO}_4)(\text{PO}_3\text{OH})\cdot\text{H}_2\text{O}$, a new mineral from Fumade, Tarn, France: description and crystal structure. *Eur. J. Mineral.*, 23, 269-277. (2) (2011) *Amer. Mineral.*, 96, 1654-1655 (abs. ref. 1).