

Erikapohlite **$\text{Cu}_3(\text{Zn,Cu,Mg})_4\text{Ca}_2(\text{AsO}_4)_6 \cdot 2\text{H}_2\text{O}$**

Crystal Data: Monoclinic. *Point Group:* 2/m. As very thin lamellar crystals to 0.7 mm.

Physical Properties: *Cleavage:* n.d. *Fracture:* n.d. *Tenacity:* n.d. *Hardness:* = n.d.
D(meas.) = n.d. D(calc.) = 4.55

Optical Properties: Transparent. *Color:* Deep blue. *Streak:* Pale blue. *Luster:* Vitreous.
Optical Class: n.d. *n*(calc.) = 1.78

Cell Data: *Space Group:* C2/c. *a* = 12.6564(6) *b* = 12.7282(8) *c* = 6.9148(3) β = 113.939(4)°
Z = 2

X-ray Powder Pattern: Tsumeb mine, Otjikoto region, Namibia.

2.892 (100), 3.304 (49), 2.788 (40), 3.160 (32), 2.764 (14), 1.728 (10), 1.650 (10)

Chemistry:	(1)
CuO	22.42
ZnO	14.45
CaO	8.21
MgO	2.21
FeO	0.03
As ₂ O ₅	51.02
H ₂ O	[1.66]
Total	100.00

(1) Tsumeb mine, Namibia; average of several electron microprobe analyses, H₂O by difference, AsO₄, OH, H₂O confirmed by Raman spectroscopy; corresponding to
 $\text{Cu}_3(\text{Zn}_{2.48}\text{Cu}_{0.93}\text{Mg}_{0.77}\text{Fe}_{0.01})_{\Sigma=4.19}\text{Ca}_{2.04}\text{As}_{6.20}\text{O}_{24.71} \cdot 1.29\text{H}_2\text{O}$.

Occurrence: A secondary mineral formed by weathering tennantite-rich veins in the oxidized zone of a dolostone-hosted, hydrothermal polymetallic deposit.

Association: Lammerite, conichalcite, quartz.

Distribution: From level 44, Tsumeb mine, Otjikoto (Oshikoto) region, Namibia.

Name: Honors Erika Pohl (b. 1919) who donated her mineral collection of more than 40,000 specimens to the Bergakademie Freiberg, Saxony, Germany, on the condition that it should be accessible to a broad public and scientifically supervised. The collection is on display in the Freudenstein Castle in the center of Freiberg.

Type Material: Mineralogical Museum, University of Hamburg, Hamburg, Germany (TS 117c).

References: (1) Schlüter, J., T. Malcherek, B. Mihailova, and G. Gebhard (2013) The new mineral erikapohlite, $\text{Cu}_3(\text{Zn,Cu,Mg})_4\text{Ca}_2(\text{AsO}_4)_6 \cdot 2\text{H}_2\text{O}$, the Ca-dominant analog of keyite, from Tsumeb, Namibia. *Neues Jahrbuch für Mineralogie Abhandlungen*, 190/3, 319-325. (2) (2015) *Amer. Mineral.*, 100, 2007 (abs. ref. 1).