

Arhbarite**Cu₂(AsO₄)(OH)·6H₂O**

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Crystal Data: n.d. *Point Group:* n.d. As needlelike individual crystals, in spherulitic or disklike aggregates, to 0.5 mm.

Physical Properties: Hardness = n.d. D(meas.) = n.d. D(calc.) = n.d.

Optical Properties: Semitransparent. *Color:* Dark blue. *Streak:* Sky-blue.

Luster: Vitreous.

Optical Class: Biaxial. *Pleochroism:* X' = turquoise-blue; Z' = deep turquoise-blue.

Orientation: Extinction ~45° to elongation. α = 1.720(5) || length. β = n.d. γ = 1.740(5) ⊥ length. 2V(meas.) = ~90°

Cell Data: *Space Group:* n.d. Z = n.d.

X-ray Powder Pattern: Arhbar mine, Morocco.

4.57 (100), 4.51 (90), 3.72 (60), 2.603 (50), 2.474 (50), 3.25 (40), 2.891 (40)

Chemistry:

	(1)	(2)
As ₂ O ₅	29.19	29.38
FeO	0.04	
CoO	0.03	
CuO	41.00	40.68
ZnO	0.01	
H ₂ O	[29.73]	29.94
Total	[100.00]	100.00

(1) Arhbar mine, Morocco; by electron microprobe, average of three analyses, H₂O by difference.

(2) Cu₂(AsO₄)(OH)·6H₂O.

Occurrence: A rare secondary mineral in polymetallic hydrothermal ore deposits.

Association: Dolomite, hematite, löllingite, pharmacolite, erythrite, talc, mcguinnessite (Arhbar mine, Morocco); chrysocolla, brochantite, olivenite, iodargyrite, dolomite (Emma Louisa mine, Chile).

Distribution: From the Arhbar mine, Bou Azzer district, Morocco. In the [Emma Luisa gold mine,] Guanaco district, about 100 km east-northeast of Taltal, Antofagasta, Chile.

Name: For the Arhbar (Aghbar) mine, Morocco, in which the mineral was first found to occur.

Type Material: National Museum of Natural History, Washington, D.C., USA, 160383.

References: (1) Schmetzer, K., G. Tremmel, and O. Medenbach (1982) Arhbarit, Cu₂[OH|AsO₄]·6H₂O, ein neues Mineral von Bou-Azzer, Marokko. Neues Jahrb. Mineral., Monatsh., 529–533 (in German with English abs.). (2) (1983) Amer. Mineral., 68, 1038 (abs. ref. 1).