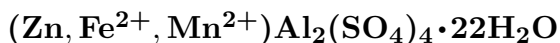


Dietrichite



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Crystal Data: Monoclinic. *Point Group:* $2/m$. Fibrous, in tufted aggregates; as incrustations and efflorescences.

Physical Properties: Hardness = 2 D(meas.) = n.d. D(calc.) = [1.85] Soluble in H_2O .

Optical Properties: Transparent. *Color:* Dirty white to brownish yellow; colorless in transmitted light. *Luster:* Silky.

Optical Class: Biaxial (+). *Orientation:* $X = b$; $Z \wedge c \simeq 29^\circ$. $\alpha = 1.475(3)$ $\beta = 1.480(3)$ $\gamma = 1.488(3)$ $2V(\text{meas.}) = \text{Large}$.

Cell Data: *Space Group:* $P2_1/c$. $a = 6.240$ $b = 24.434$ $c = 21.379$ $\beta = 100.1^\circ$ $Z = 4$

X-ray Powder Pattern: Baia Sprie, Romania. (ICDD 25-1173).
4.33 (100), 4.84 (40), 4.99 (30), 4.15 (30), 4.20 (20), 6.09 (15), 4.64 (15)

Chemistry:

	(1)
SO_3	35.94
Al_2O_3	10.92
FeO	3.11
MnO	1.74
ZnO	3.70
MgO	0.33
H_2O	44.38
Total	100.12

(1) Baia Sprie, Romania; corresponds to $(\text{Zn}_{0.40}\text{Fe}_{0.38}\text{Mn}_{0.22})_{\Sigma=1.00}\text{Al}_{1.91}(\text{SO}_4)_{4.00} \cdot 21.95\text{H}_2\text{O}$.

Mineral Group: Halotrichite group.

Occurrence: As post-mining efflorescences in abandoned mine workings.

Distribution: From Baia Sprie (Felsőbánya), Romania.

Name: To honor Dr. Gustav Heinrich Dietrich, Příbram, Czech Republic, who analyzed the first specimens.

Type Material: Royal Ontario Museum, Toronto, Canada, M7078.

References: (1) Palache, C., H. Berman, and C. Frondel (1951) Dana's system of mineralogy, (7th edition), v. II, 528–529.