

Crystal Data: Monoclinic. *Point Group:* $2/m$. As botryoidal to stalactitic masses and efflorescences.

Physical Properties: *Fracture:* Splintery to granular. *Tenacity:* [Brittle.] Hardness = 1.5
D(meas.) = 3.15 D(calc.) = 2.946 Soluble in H_2O .

Optical Properties: Semitransparent. *Color:* Grayish white, pale pink, pale red, rose-red.
Optical Class: Biaxial (+). *Orientation:* $Z = b$. $\alpha = 1.562(3)$ $\beta = 1.595(3)$ $\gamma = 1.632(3)$
 $2V(\text{meas.}) = \sim 90^\circ$

Cell Data: *Space Group:* $C2/c$ (synthetic). $a = 7.116(1)$ $b = 7.667(1)$ $c = 7.920(2)$
 $\beta = 118.11(1)^\circ$ $Z = 4$

X-ray Powder Pattern: Synthetic.

3.507 (100), 4.916 (50), 3.139 (40), 4.855 (30), 3.361 (30), 2.580 (30), 3.445 (20)

Chemistry:

	(1)	(2)
MnO	41.70	41.97
SO_3	47.27	47.37
H_2O	11.05	10.66
Total	100.02	100.00

(1) Baia Sprie, Romania; average of two analyses. (2) $\text{MnSO}_4\cdot\text{H}_2\text{O}$.

Mineral Group: Kieserite group.

Occurrence: A rare post-mining incrustation.

Association: Jokokuite (Jokoku mine, Japan).

Distribution: In Romania, from Baia Sprie (Felsőbánya) and in the Borzaş gold mine, Gutâi Mountains. In the Jokoku mine, southwest Hokkaido, Japan. At the Silver King mine, Galena Hill, Yukon Territory, Canada.

Name: Honors Ignaz Nathaniel Szmik (1815–1881), Hungarian mining official at Felsőbánya, Hungary (now Baia Sprie, Romania), who discovered the mineral.

References: (1) Palache, C., H. Berman, and C. Frondel (1951) Dana's system of mineralogy, (7th edition), v. II, 481. (2) Wildner, M. and G. Giester (1991) The crystal structures of kiserite-type compounds. I. Crystal structures of $\text{Me(II)SO}_4\cdot\text{H}_2\text{O}$ ($\text{Me} = \text{Mn, Fe, Co, Ni, Zn}$). Neues Jahrb. Mineral., Monatsh., 296–306. (3) (1979) NBS Mono 25, 16, 49.