Manganolangbeinite

\[ K_2\text{Mn}^{2+}(\text{SO}_4)_3 \]


Physical Properties: Hardness = n.d. D(meas.) = 3.02–3.03 D(calc.) = 3.057

Optical Properties: Semitranparent. Color: Rose-red. Optical Class: Isotropic. \( n = 1.572 \)

Cell Data: Space Group: \( P2_13 \). \( a = 10.014 \) \( Z = 4 \)

X-ray Powder Pattern: Synthetic.
3.198 (100), 2.702 (50), 3.047 (18), 1.6401 (16), 4.128 (14), 2.064 (14), 1.984 (14)

Chemistry: (1) Natural material has not been analyzed, but was determined to contain potassium and manganese; identification then depended additionally on the correspondence of the isotropic index of refraction with that of synthetic material.

Occurrence: In a cavern in lava, in thénardite and halite stalactites, formed by fumarolic action.

Association: Thénardite, halite, sylvite, aphthitalite.

Distribution: On Vesuvius, Campania, Italy.

Name: As a manganese compound analogous to langbeinite.

Type Material: University of Florence, Florence, Italy, 1975/I.