

Manganlotharmeyerite $\text{Ca}(\text{Mn}^{3+}, \square, \text{Mg})_2\{\text{AsO}_4, [\text{AsO}_2(\text{OH})_2]\}_2(\text{OH}, \text{H}_2\text{O})_2$

©2001-2005 Mineral Data Publishing, version 1

Crystal Data: Cubic. *Point Group:* 23. Small tetrahedral crystals.

Physical Properties: Hardness = n.d. $D(\text{meas.}) = 3.02\text{--}3.03$ $D(\text{calc.}) = 3.057$

Optical Properties: Semitransparent. *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, apthitalite.

Distribution: On Vesuvius, Campania, Italy.

Name: As a manganese compound analogous to langbeinite.

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

References: (1) Palache, C., H. Berman, and C. Frondel (1951) Dana's system of mineralogy, (7th edition), v. II, 435. (2) (1968) NBS Mono. 25, 6, 43.