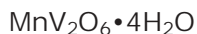


Ansermetite



MONOCLINIC

Locality: The Fianel iron–manganese mine near Ausserferrera, Ferrera Valley, Graubünden, Switzerland.

Occurrence: In thin fractures near or across palenzonaite-bearing veinlets. Associated minerals are: fianelite and iron oxyhydroxides.

General appearance: As crusts up to about 500 μm and several square centimeters in area. Also as rare single crystals up to 100 μm across.

Physical, chemical and crystallographic properties: *Luster:* adamantine. *Diaphaneity:* transparent. *Color:* crusts are bordeaux-colored, crystals are carmine red. *Streak:* orange. *Luminescence:* nonfluorescent. *Hardness:* about 3. *Tenacity:* brittle. *Cleavage:* {110} good. *Fracture:* uneven. *Density:* 2.57 g/cm^3 (meas.), 2.43 g/cm^3 (calc.). **Crystallography:** Monoclinic, $C2/c$, a 13.171, b 10.128, c 6.983 \AA , β 111.572°, V 866.3 \AA^3 , $Z = 4$, $a:b:c = 1.3005:1:0.6895$. Morphology: only {110} could be identified. Twinning: none observed. **X-ray powder-diffraction data:** 7.82(100)(110), 5.69(20)($\bar{1}11$), 5.06(20)(020), 4.51(30)(111), 3.91(30)(220), 3.029(70)($\bar{1}31$). **Optical data:** Biaxial (sign unknown), n_{\min} 1.797, n_{\max} 1.856, $2V$ (meas.) unknown, dispersion unknown; pleochroism strong, X yellow orange, Z ruby red; orientation not given. **Chemical analytical data:** Mean of eight sets of electron-microprobe data (H_2O calculated): MnO 20.85, SrO 0.14, V_2O_5 53.80, As_2O_5 0.44, H_2O (24.77), Total (100.00) wt.%. Empirical formula: $\text{Mn}_{0.93}(\text{V}_{1.87}\text{As}_{0.01})_{\Sigma 1.88}\text{O}_{5.66} \cdot 4.35\text{H}_2\text{O}$. **Relationship to other species:** None apparent.

Name: After Stefan Ansermet (b. 1964), an amateur mineralogist, in recognition of his contribution to the descriptive mineralogy and to the photography of the Alpine mineral wealth.

Comments: IMA No. 2002–017.

BRUGGER, J., BERLEPSCH, P., MEISSER, N. & ARMBRUSTER, T. (2003): Ansermetite, $\text{MnV}_2\text{O}_6 \cdot 4\text{H}_2\text{O}$, a new mineral species with V^{5+} in five-fold coordination from Val Ferrera, Eastern Swiss Alps. *Canadian Mineralogist* **41**, 1423–1431.