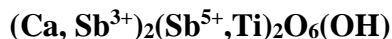


**Hydroxycalcioroméite**

**Crystal Data:** Cubic. *Point Group:*  $4/m\bar{3}2/m$ . As minute octahedra, to 1 mm, and earthy masses. *Twining:* On {111}, rare.

**Physical Properties:** *Cleavage:* {111}, nearly perfect. Hardness = 5.5 D(meas.) = 4.950 D(calc.) = 5.31

**Optical Properties:** Translucent. *Color:* Honey-yellow, amber-yellow, yellowish brown. *Streak:* Pale yellowish brown. *Luster:* Vitreous to resinous. *Optical Class:* Isotropic.  $n = n.d.$

**Cell Data:** *Space Group:*  $Fd\bar{3}m$  (ICDD 7-66).  $a = 10.264$ - $10.306$   $Z = 8$

**X-ray Powder Pattern:** Tripuhy, Brazil. (ICDD 7-66).

2.94 (100), 1.813 (100), 1.548 (100), 1.179 (50), 1.150 (50), 1.050 (50), 0.989 (50)

<b>Chemistry:</b>	(1)	(2)
Sb <sub>2</sub> O <sub>5</sub>	67.52	65.52
TiO <sub>2</sub>	11.35	11.70
FeO	4.55	6.79
MnO	0.38	
CaO	15.93	15.47
<u>Na<sub>2</sub>O</u>	<u>0.99</u>	<u>1.06</u>
Total	100.72	100.54

(1-2) Tripuhy, Brazil.

**Mineral Group:** Pyrochlore supergroup (general formula -  $A_2B_2X_6Y$ ); roméite group ( $B = Sb^{5+}$ ).

**Occurrence:** In eluvial sands (Tripuhy, Brazil).

**Association:** Mica, cinnabar, tripuhyite (Tripuhy, Brazil).

**Distribution:** At the Tripuhy cinnabar mine, Ouro Prêto, Minas Gerais, Brazil. In the Miniera del Tafone, Grosseto, Tuscany, Italy.

**Name:** For a member of the *roméite* group with prefixes to indicate dominant OH<sup>-</sup> (*hydroxy*) in the *Y* site and calcium (*calcio*) in the *A* site. Formerly 'lewisite'.

**Type Material:** The Natural History Museum, London, England (80141); National Museum of Natural History, Washington, D.C., USA (R5741).

**References:** (1) Palache, C., H. Berman, and C. Frondel (1951) Dana's system of mineralogy, (7th edition), v. II, 1020-1022 [roméite, part]. (2) Hussak, E. and G.T. Prior (1895) Lewisite and zirkelite, two new Brazilian minerals. *Mineral. Mag.*, 11, 80-83. (3) Machatschki, F. and O. Zedlitz (1932) Die Kristallstruktur des Lewisit. *Zeits. Krist.*, 82, 72-76 (in German). (4) Baptista, A. (1981) Contribution to the study of lewisite and tripuhyite. *Anais Acad. Brasileira Cienc.*, 53(2), 283-287 (in Portuguese). (5) (1981) *Chem. Abs.*, 95, 207 (abs. ref. 4). (6) Atencio, D., M.B. Andrade, A.G. Christy, R. Gieré, and P.M. Kartashov (2010) The pyrochlore supergroup of minerals: nomenclature. *Can. Mineral.*, 48, 673-698. (7) Bosi, F., A.G. Christy, and U. Hålenius (2017) Crystal-chemical aspects of the roméite group,  $A_2Sb_2O_6Y$ , of the pyrochlore supergroup. *Mineral. Mag.*, 81(6), 1287-1302 (esp 1300-1301).