

Crystal Data: Monoclinic. *Point Group:* 2/m. In granular or blocky aggregates and druses of crystals to 0.3 mm. *Twinning:* Common on (100).

Physical Properties: *Cleavage:* Perfect on {010}. *Tenacity:* Brittle. *Fracture:* n.d. Hardness = ~3 D(meas.) = 3.79(3) D(calc.) = 3.77(2) Nonfluorescent.

Optical Properties: Transparent. *Color:* Pale or light blue. *Streak:* White. *Luster:* Vitreous. *Optical Class:* Biaxial (-). $\alpha = 1.725(1)$ $\beta = 1.734(1)$ $\gamma = 1.740(1)$ 2V(meas.) = 80(2)° *Orientation:* $Y = b$, $X \wedge c = 49^\circ$. *Dispersion:* Weak, $r < v$.

Cell Data: *Space Group:* P2₁/c. $a = 5.8618(2)$ $b = 12.7854(5)$ $c = 5.7025(2)$ $\beta = 109.425(2)^\circ$ Z = 2

X-Ray Diffraction Pattern: Maria Catalina mine, Pampa Larga district, Tierra Amarilla, Chile. 2.827 (100), 3.377 (92), 2.983 (89), 4.177 (59), 3.190 (56), 2.114 (49), 5.087 (42)

Chemistry:	(1)
As ₂ O ₅	50.37
CaO	24.75
CuO	17.80
SO ₃	0.04
<u>H₂O</u>	<u>[6.81]</u>
Total	98.05

(1) Maria Catalina mine, Pampa Larga district, Tierra Amarilla, Chile; average electron microprobe analysis supplemented by Raman spectroscopy, water calculated by difference; corresponds to Ca_{2.01}Cu_{1.01}(AsO₄)_{2.02}·1.9H₂O.

Mineral Group: Roselite group.

Occurrence: Secondary mineral in the oxidation zone of a Cu-As ore deposit.

Association: Quartz, baryte, mansfieldite, alumopharmacosiderite, conichalcite, metazeunerite, barahonite-(Al).

Distribution: From the Maria Catalina mine, Pampa Larga district, Tierra Amarilla, Chile.

Name: For the RRUFF project, an Internet-based internally consistent and integrated database of Raman spectra, X-ray diffraction, and chemical data for minerals.

Type Material: Mineral Museum, University of Arizona (18813) and the RRUFF project (R070431), Tucson, Arizona, USA.

References: (1) Yang, H., R.A. Jenkins, R.T. Downs, S.H. Evans, and K.T. Tait (2011) Rruffite, Ca₂Cu(AsO₄)₂·2H₂O, a new member of the roselite group, from Tierra Amarilla, Chile. *Can. Mineral.*, 49, 877-884.