

Crystal Data: Monoclinic. *Point Group:* 2/m. As euhedral equant crystals (M_1) to 0.80 mm or aggregates of bladed crystals (M_2) elongated along [001].

Physical Properties: *Cleavage:* Perfect on {101}. *Tenacity:* Brittle. *Fracture:* n.d. Hardness = ~2 D(meas.) = 2.12(2) M_1 ; 2.10(2) M_2 D(calc.) = 2.138 M_1 ; 2.086 M_2

Optical Properties: Transparent. *Color:* Greenish blue in transmitted light. *Streak:* White. *Luster:* Vitreous.

Optical Class: Biaxial (-). M_1 : $\alpha = 1.595(3)$ $\beta = 1.629(8)$ $\gamma = 1.645(5)$ $2V(\text{meas.}) = 69(2)^\circ$ $2V(\text{calc.}) = 67^\circ$ *Orientation:* $X \wedge c = 42^\circ$, $Y = b$. *Pleochroism:* $X = Z =$ light blue-green, $Y =$ blue-green. *Dispersion:* Weak, $v > r$. M_2 : $\alpha = 1.520(5)$ $\beta = 1.578(6)$ $\gamma = 1.610(5)$ $2V(\text{meas.}) = 73(2)^\circ$ $2V(\text{calc.}) = 70^\circ$ *Orientation:* $X \wedge c = 36^\circ$, $Y = b$. *Pleochroism:* $X = Z =$ pale blue, $Y =$ greenish blue. *Dispersion:* Weak, $v > r$.

Cell Data: *Space Group:* $P2_1/n$.

M_1 : $a = 5.1049(2)$ $b = 8.6742(4)$ $c = 7.7566(3)$ $\beta = 106.834(2)^\circ$ $Z = 2$

M_2 : $a = 5.1977(3)$ $b = 7.4338(4)$ $c = 8.8091(4)$ $\beta = 101.418(2)^\circ$ $Z = 2$

M_1 has $b > c$, with $\beta = 106.8^\circ$, whereas M_2 has $b < c$, with $\beta = 101.4^\circ$

X-Ray Diffraction Pattern: Pusch Ridge, Santa Catalina Mountains, Pima Co., Arizona, USA. 5.64 (100), 3.34 (63), 4.77 (52), 3.23 (25), 2.22 (25), 2.09 (22), 2.50 (22)

Chemistry:	(1)	(2)
Cu	30.17	29.98
C	22.6	22.2
H	[2.84]	[2.83]
O	[45.23]	[44.94]
Total	100.84	99.95

(1) Pusch Ridge, Santa Catalina Mountains, Pima Co., Arizona, USA; electron microprobe analysis for Cu, an Elemental Combustion System equipped with mass spectrometry for C; H and O calculated from structure; M_1 corresponds to $\text{Cu}_{1.01}(\text{C}_{1.99}\text{H}_{2.99}\text{O}_3)_2$. (2) Do.; M_2 corresponds to $\text{Cu}_{1.01}(\text{C}_{1.98}\text{H}_{3.00}\text{O}_3)_2$

Polymorphism & Series: Two polytypes M_1 and M_2

Occurrence: Formed by the interaction of fluids containing glycolic acid (C₂H₄O₃) with copper produced by the oxidation of primary and secondary minerals.

Association: Chrysocolla, malachite, wulfenite, mimetite, hydroxylpyromorphite, hematite, microcline, muscovite, quartz.

Distribution: From the western end of Pusch Ridge, at elevation (975 m), Santa Catalina Mountains, north of Tucson, Pima Co., Arizona, USA.

Name: Honors the finders of the studied material, Warren G. Lazar and Beverly Raskin, avid prospectors and hunters of meteorites and minerals.

Type Material: University of Arizona Mineral Museum, Tucson, Arizona, USA (22052 and 22381 for lazaraskeite- M_1 and - M_2 , respectively) and the RRUFF Project (R180026 and R190015).

References: (1) Yang, H., X. Gu, R.B. Gibbs, S.H. Evans, R.T. Downs, and Z. Jibrin (2022) Lazaraskeite, Cu(C₂H₃O₃)₂, the first organic mineral containing glycolate, from the Santa Catalina Mountains, Tucson, Arizona, U.S.A. *Amer. Mineral.*, 107, 509-516.