

**Crystal Data:** Hexagonal. *Point Group:* 3. As curved flattened plates to 0.5 mm, displaying {0001}, {000 $\bar{1}$ }, {10 $\bar{1}$ 0}, {01 $\bar{1}$ 0}, {11 $\bar{2}$ 0} and { $\bar{1}$ 210}, also in compact spherical aggregates.

**Physical Properties:** *Cleavage:* Perfect on {0001}. *Fracture:* Irregular. *Tenacity:* Sectile. Hardness = ~ 1 D(meas.) = n.d. D(calc.) = 4.886

**Optical Properties:** Transparent. *Color:* Sky-blue to medium greenish blue. *Streak:* Pale greenish blue. *Luster:* Adamantine, pearly or dull. *Optical Class:* Uniaxial (-). *n(ave.)* = 1.95 *Absorption:* O >> E. *Pleochroism:* O = greenish blue, E = light greenish blue.

**Cell Data:** *Space Group:* R3. *a* = 8.316(2) *c* = 13.202(6) *Z* = 3

**X-ray Powder Pattern:** Mojave Desert, San Bernardino County, California, USA. 2.512 (100), 4.403 (91), 1.570 (39), 1.889 (34), 1.481(34), 2.672 (28), 2.110 (27)

Chemistry:	(1)	(2)
CuO	56.74	62.68
Bi <sub>2</sub> O <sub>3</sub>	0.33	
PbO	2.14	
TeO <sub>3</sub>	21.12	23.06
Cl	4.51	4.66
-O = Cl <sub>2</sub>	1.02	1.05
H <sub>2</sub> O	[9.71]	10.65
Total	93.53	100.00

(1) Otto Mountain, San Bernardino County, California, USA; average of 5 electron microprobe analyses supplemented by Raman spectroscopy, H<sub>2</sub>O from structure analysis, low analytical total due to porosity of sample; corresponding to Cu<sub>5.92</sub>Te<sub>1.00</sub>Pb<sub>0.08</sub>Bi<sub>0.01</sub>O<sub>4</sub>(OH)<sub>8.94</sub>Cl<sub>1.06</sub>.

(2) Cu<sub>6</sub>[TeO<sub>4</sub>(OH)<sub>2</sub>](OH)<sub>7</sub>Cl.

**Occurrence:** A secondary copper mineral formed by decomposition of hessite and chalcopyrite under mildly acidic conditions.

**Association:** Cerussite, chrysocolla, khinite, perite, quartz (Aga mine); andradite, chrysocolla, cerussite, burckhardtite, galena, goethite, khinite, mc Alpineite, thorneite, timroseite, paratimroseite, quartz, wulfenite (Bird Nest drift); kettnerite, chlorargyrite (Blue Bell claims).

**Distribution:** From the E pit, Blue Bell claims, Soda Mountains, 11 km west of Baker, and the Aga mine and Bird Nest drift, Otto Mountain, San Bernardino County, central Mojave Desert, California, USA.

**Name:** For the *Mojave* Desert, USA, where the first specimens were collected.

**Type Material:** Natural History Museum of Los Angeles County, Los Angeles, California, USA (64091-64094), and in the Geosciences collections, Museum Victoria, Melbourne, Victoria, Australia (M53019).

**References:** (1) Mills, S.J., A.R. Kampf, A.G. Christy, R.M. Housley, G.R. Rossman, R.E. Reynolds and J. Marty (2014) Bluebellite and mojaveite, two new minerals from the central Mojave Desert, California, USA. *Mineral. Mag.*, 78(5), 1325-1340. (2) (2016) *Amer. Mineral.*, 101, 1013-1014 (abs. ref. 1).