

Crystal Data: Orthorhombic, pseudohexagonal. *Point Group:* 222. As irregular to skeletal pseudohexagonal crystals, tabular on {001}, to 1 mm; rarely stacked || [001] and exhibiting parallel striations; massive. *Twinning:* Microscopic lamellar twinning visible on cleavage surfaces, penetration twinning on {110} also common.

Physical Properties: *Cleavage:* Perfect on {001}. *Hardness* = ~ 2 *D*(meas.) = 5.6
D(calc.) = 5.56

Optical Properties: Transparent to translucent. *Color:* Colorless to white. *Streak:* White. *Luster:* Resinous to adamantine; pearly on cleavage surfaces.
Optical Class: Biaxial (-). *Orientation:* $X = c$; $Y = b$; $Z = a$. *Dispersion:* $r < v$. $\alpha = 1.922(5)$
 $\beta = 1.933(4)$ $\gamma = 1.938(4)$ $2V(\text{meas.}) = 32(5)^\circ$

Cell Data: *Space Group:* $C222_1$. $a = 15.875(4)$ $b = 9.261(3)$ $c = 29.364(9)$ $Z = 10$

X-ray Powder Pattern: Tsumeb, Namibia.

3.65 (100b), 3.12 (80b), 14.70 (70), 2.47 (70), 7.99 (60), 1.633 (60), 1.476 (60)

Chemistry:

	(1)	(2)
SiO ₂	16.5	16.62
PbO	76.7	77.15
H ₂ O	6.2	6.23
Total	99.4	100.00

(1) Tsumeb, Namibia; by electron microprobe, H₂O by TGA. (2) $\text{Pb}_5\text{Si}_4\text{O}_8(\text{OH})_{10}$.

Occurrence: A secondary mineral developed in the oxidized zone above complex galena-bearing ores.

Association: Alamosite, melanotekite (Tsumeb, Namibia); wulfenite (Tiger, Arizona, USA).

Distribution: From Tsumeb, Namibia. In the Mammoth-St. Anthony mine, Tiger, Pinal Co., Arizona, USA.

Name: For lead, PLUMBum, in the mineral's composition, and the type locality, TSUMeb, Namibia.

Type Material: Institute for Mineralogy and Crystal Chemistry, University of Stuttgart, Germany, NM10; National Museum of Natural History, Washington, D.C., USA, 148301.

References: (1) Keller, P. and P.J. Dunn (1982) Plumbotsumit, $\text{Pb}_5(\text{OH})_{10}\text{Si}_4\text{O}_8$, ein neues Bleisilikat von Tsumeb, Namibia. Chem. Erde, 41, 1–6 (in German). (2) (1982) Amer. Mineral., 67, 1075–1076 (abs. ref. 1).