

Crystal Data: Monoclinic. *Point Group:* 2/m. Crystals fibrous || [010]; as radiating aggregates and balls, to 7.5 cm.

Physical Properties: *Cleavage:* Perfect on {010}. *Hardness* = 4.5 *D*(meas.) = 6.488(3) *D*(calc.) = [6.30]

Optical Properties: Transparent to translucent. *Color:* Colorless to white, cream, or light gray. *Luster:* Adamantine.

Optical Class: Biaxial (-). *Orientation:* $Y = b$. *Dispersion:* $r < v$, strong, weak inclined. $\alpha = 1.945\text{--}1.947$ $\beta = 1.955\text{--}1.961$ $\gamma = 1.959\text{--}1.968$ $2V(\text{meas.}) = 65^\circ$

Cell Data: *Space Group:* $P2/n$. $a = 12.247$ $b = 7.059$ $c = 11.236$ $\beta = 113.12^\circ$ $Z = 12$

X-ray Powder Pattern: Tsumeb, Namibia.

3.34 (100), 3.56 (95), 3.53 (75), 2.300 (75), 3.23 (70), 2.987 (70), 3.25 (60)

Chemistry:

	(1)	(2)	(3)
SiO ₂	21.11	20.01	21.21
Al ₂ O ₃		0.09	
FeO	0.09	0.18	
MnO		0.02	
PbO	78.13	78.95	78.79
CaO	trace	0.09	
insol.	0.61		
Total	99.94	99.34	100.00

(1) Alamos, Mexico. (2) Tsumeb, Namibia; by electron microprobe. (3) PbSiO₃.

Occurrence: As a rare secondary mineral in the oxidized zone of lead-bearing base metal deposits.

Association: Wulfenite, leadhillite, cerussite (Alamos, Mexico); leadhillite, anglesite, melanotekite, fleischerite, kegelite, hematite (Tsumeb, Namibia); diableite, phosgenite, cerussite, wulfenite, willemite (Tiger, Arizona, USA); melanotekite, shattuckite, wickenburgite (Rawhide mine, Arizona, USA).

Distribution: From Mexico, in Sonora, at Alamos, and the San Pascual mine, near Zimapán, Hidalgo. In the USA, from Arizona, in the Mammoth-St. Anthony mine, at Tiger, Pinal Co., the Lucky Cuss mine, Tombstone, Cochise Co., and the Rawhide mine, Artillery Mountains, Maricopa Co. As exceptional crystal groups from Tsumeb, Namibia.

Name: For the Mexican type locality at Alamos.

Type Material: Harvard University, Cambridge, Massachusetts, USA, 84859, 85509.

References: (1) Palache, C. and H.E. Merwin (1909) Alamosite, a new lead silicate from Mexico. *Amer. J. Sci.*, 27, 399–401. (2) Mackay, A.L. (1952) The unit cell and space-group of alamosite (PbSiO₃). *Mineral. Mag.*, 29, 933–945. (3) Boucher, M.L. and D.R. Peacor (1968) The crystal structure of alamosite, PbSiO₃. *Zeits. Krist.*, 126, 98–111. (4) Medenbach, O. and K. Schmetzer (1975) Alamosit (PbSiO₃) von Tsumeb — ein neuer Fundpunkt. *Neues Jahrb. Mineral., Abh.*, 123, 138–147 (in German).