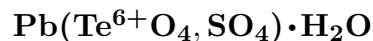


Schieffelinite



©2001-2005 Mineral Data Publishing, version 1

Crystal Data: Orthorhombic. *Point Group:* $2/m\ 2/m\ 2/m$. Crystals are very rare, flattened on {010}, modified by {001}, {320}, {133}; typically platy or scaly, to 1 mm, in random aggregates.

Physical Properties: *Cleavage:* On {010}, easy. Hardness = 2 D(meas.) = 4.98(12)
D(calc.) = 5.15

Optical Properties: Transparent to translucent. *Color:* Colorless, milky white.
Luster: Adamantine.

Optical Class: Biaxial (-). *Orientation:* $X = b$; $Y = c$; $Z = a$. *Dispersion:* $r < v$, weak.
 $\alpha = 1.897$ $\beta = 1.940$ $\gamma = 1.942$ $2V(\text{meas.}) = 24^\circ$

Cell Data: *Space Group:* $Cmcm$. $a = 9.67$ $b = 19.56$ $c = 10.47$ $Z = 16$

X-ray Powder Pattern: Joe shaft, Tombstone, Arizona, USA.
9.778 (10), 3.426 (6), 3.250 (6b), 3.560 (5b), 3.338 (5), 3.033 (5), 2.934 (5)

Chemistry:	(1)
	SO ₃ 6.8
	TeO ₃ 28.6
	PbO 58.2
	H ₂ O 4.7
	<hr/>
	Total 98.3

(1) Joe shaft, Tombstone, Arizona, USA; average of two analyses, H₂O by the Penfield method; corresponds to $\text{Pb}_{1.05}(\text{Te}_{0.66}\text{S}_{0.34})_{\Sigma=1.00}\text{O}_4 \cdot 1.06\text{H}_2\text{O}$.

Occurrence: In the oxidized zone of tellurium-bearing hydrothermal precious metal deposits.

Association: Rodalquilarite, girdite, bromargyrite, gold, pyrite, empressite, goethite, quartz.

Distribution: On the dumps of the Joe shaft and at the Grand Central mine, Tombstone, Cochise Co., Arizona, USA.

Name: To honor Edward Schieffelin (1847–1897), a discoverer of the mines at Tombstone, Arizona, USA.

Type Material: Natural History Museum, Paris, France; The Natural History Museum, London, England, 1980,539; University of Arizona Mineral Museum, Tucson, Arizona; National Museum of Natural History, Washington, D.C., USA, R18474.

References: (1) Williams, S.A. (1980) Schieffelinite, a new lead tellurate-sulphate from Tombstone, Arizona. *Mineral. Mag.*, 43, 771–773. (2) (1981) *Amer. Mineral.*, 66, 219 (abs. ref. 1).