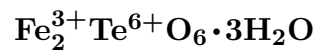


Cuzticiticite



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Crystal Data: Hexagonal. *Point Group:* n.d. Minute scales, aggregated in warty to stalactitic crusts.

Physical Properties: Hardness = 3, on compact material. $D(\text{meas.}) = 3.9$
 $D(\text{calc.}) = 4.01$

Optical Properties: Semitransparent. *Color:* Yellow to brown; dark yellow in thin section.
Optical Class: Uniaxial (-). $\omega = 2.06$ $\epsilon = 2.05$

Cell Data: *Space Group:* n.d. $a = 5.045$ $c = 14.63$ $Z = 2$

X-ray Powder Pattern: Moctezuma mine, Mexico.
3.256 (10), 2.518 (7), 4.871 (4), 2.239 (3), 1.564 (3), 1.457 (3), 1.994 (2)

Chemistry:	(1)	(2)
TeO ₃	45.1	45.10
TeO ₂	trace	
Fe ₂ O ₃	41.1	41.02
Mn ₂ O ₃	~0.4	
PbO	0.0	
H ₂ O	13.6	13.88
Total	100.2	100.00

(1) Moctezuma mine, Mexico; average of three analyses, total Mn as Mn³⁺, H₂O by the Penfield method on a separate sample. (2) Fe₂TeO₆•3H₂O.

Occurrence: Very rare in oxidized ore in a matrix of intensely silicified and brecciated rhyolite vitrophyre cemented by drusy quartz and carrying pyrite and tellurides.

Association: Eztlite, emmonsite, schmitterite, kuranakhite, pyrite.

Distribution: From the Moctezuma (Bambolla) mine, 12 km south of Moctezuma, Sonora, Mexico.

Name: From the Nahuatl language for *something yellow*, in allusion to the color.

Type Material: The Natural History Museum, London, England, 1984,467.

References: (1) Williams, S.A. (1982) Cuzticiticite and eztlite, two new tellurium minerals from Moctezuma, Mexico. *Mineral. Mag.*, 46, 257–259. (2) (1983) *Amer. Mineral.*, 68, 471 (abs. ref. 1).