

**Crystal Data:** Tetragonal. *Point Group:* 4/m 2/m 2/m. Platy, to about 0.5 mm.

**Physical Properties:** *Cleavage:* Perfect on {001}. Hardness = n.d. VHN = 146–186 (50 g load). D(meas.) = n.d. D(calc.) = 8.041

**Optical Properties:** Transparent. *Color:* Yellow to yellow-green. *Streak:* Light yellow to white. *Luster:* Adamantine.

*Optical Class:* Uniaxial (-).  $\omega = 2.39$   $\epsilon = 2.32$  *Anisotropism:* Weak in oil, gray; not noticeable in air.

R<sub>1</sub>–R<sub>2</sub>: (400) 20.6–20.7, (420) 19.8–19.8, (440) 19.0–19.15, (460) 18.5–18.65, (480) 18.1–18.2, (500) 17.7–17.9, (520) 17.4–17.55, (540) 17.15–17.3, (560) 16.9–17.0, (580) 16.7–16.8, (600) 16.6–16.7, (620) 16.5–16.5, (640) 16.3–16.4, (660) 16.2–16.3, (680) 16.1–16.2, (700) 16.0–16.1

**Cell Data:** *Space Group:* I4/mmm.  $a = 3.897(2)$   $c = 22.81(2)$   $Z = 1$

**X-ray Powder Pattern:** Kombat mine, Namibia.

2.957 (100), 2.752 (60), 1.627 (60), 1.602 (50), 3.46 (40), 1.984 (40), 1.747 (40)

**Chemistry:**

	(1)
SiO <sub>2</sub>	2.0
PbO	93.7
Cl	4.4
–O = Cl <sub>2</sub>	1.0
Total	99.1

(1) Kombat mine, Namibia; by electron microprobe, average of three analyses, corresponding to Pb<sub>7</sub>Si<sub>0.55</sub>O<sub>7.07</sub>Cl<sub>2.02</sub>.

**Occurrence:** In manganese silicate lenses nearby a sulfide ore body.

**Association:** Hematophanite, barite, jacobsonite, hematite, copper, molybdophyllite, chlorite.

**Distribution:** In the Kombat mine, 49 km south of Tsumeb, Namibia.

**Name:** For the Asis Farm, location of the Kombat mine, which in the Nama language means *drinking place*.

**Type Material:** Canadian Geological Survey, Ottawa, Canada, 64565; The Natural History Museum, London, England, 1986,304.

**References:** (1) Rouse, R.C., D.R. Peacor, P.J. Dunn, A.J. Criddle, C.J. Stanley, and J. Innes (1988) Asisite, a silicon-bearing lead oxychloride from the Kombat mine, South West Africa (Namibia). *Amer. Mineral.*, 73, 643–650.