

**Crystal Data:** Hexagonal. *Point Group:*  $\bar{3} 2/m$ . Tabular to prismatic hexagonal crystals, to 1  $\mu\text{m}$ , may be fan-shaped, in crudely hemispherical aggregates. *Twinning:* Observed.

**Physical Properties:** *Fracture:* Earthy to conchoidal in compact masses. Hardness = Soft. D(meas.) = 3.213(3) D(calc.) = 3.358

**Optical Properties:** Semitransparent. *Color:* Yellowish white, greenish gray; very pale yellow to brown in transmitted light. *Streak:* Yellowish-white. *Optical Class:* Uniaxial, very low birefringence.  $n(\text{calc.}) = 1.797$   $\omega = \text{n.d.}$   $\varepsilon = \text{n.d.}$

**Cell Data:** *Space Group:*  $P\bar{3} c1$ .  $a = 8.9232(2)$   $c = 9.296(3)$   $Z = 6$

**X-ray Powder Pattern:** Kaňk, Czech Republic.

4.076 (100), 2.806 (68), 3.053 (67), 4.973 (61), 2.661 (59), 2.520 (54), 4.184 (44)

Chemistry:	(1)	(2)
SO <sub>3</sub>	1.53	
P <sub>2</sub> O <sub>5</sub>	0.84	
As <sub>2</sub> O <sub>5</sub>	44.45	49.79
Al <sub>2</sub> O <sub>3</sub>	0.17	
Fe <sub>2</sub> O <sub>3</sub>	34.55	34.60
H <sub>2</sub> O <sup>+</sup>	16.81	
H <sub>2</sub> O <sup>-</sup>	1.60	
<u>H<sub>2</sub>O</u>		<u>15.61</u>
Total	99.95	100.00

(1) Kaňk, Czech Republic; average of two analyses, corresponding to (Fe<sub>0.98</sub>Al<sub>0.01</sub>) $_{\Sigma=0.99}$ [(AsO<sub>4</sub>)<sub>0.88</sub>(SO<sub>4</sub>)<sub>0.04</sub>(PO<sub>4</sub>)<sub>0.03</sub>] $_{\Sigma=0.95}$ ·2.05H<sub>2</sub>O. (2) FeAsO<sub>4</sub>·2H<sub>2</sub>O.

**Polymorphism & Series:** Dimorphous with scorodite.

**Occurrence:** A rare secondary mineral in mine dumps, presumed to be a pre-mining weathering product of arsenopyrite (Kaňk, Czech Republic).

**Association:** Scorodite, pitticite, bukovskýite, kaňkite, zýkaite, gypsum, jarosite, iron hydroxides (Kaňk, Czech Republic); scorodite, kaňkite, arsenic, pyrite, proustite (Svornost mine, Czech Republic).

**Distribution:** From the Kuntéry mine, Kaňk, Kutná Hora district, and in the Svornost mine, Jáchymov (Joachimsthal), central Bohemia, Czech Republic.

**Name:** From the Greek *para*, for *near*, and the dimorphic relation to *scorodite*.

**Type Material:** National Museum, Prague, Czech Republic, P1p 25/98.

**References:** (1) Ondruš, P., R. Skála, C. Viti, F. Veselovský, F. Novák, and J. Jansa (1999) Parascorodite, FeAsO<sub>4</sub>·2H<sub>2</sub>O - a new mineral from Kaňk near Kutná Hora, Czech Republic. *Amer. Mineral.*, 84, 1439-1444. (2) Perchiazzi, N., R. Ondruš, R. Skála (2004) Ab initio X-ray powder structure determination of parascorodite, Fe(H<sub>2</sub>O)<sub>2</sub>AsO<sub>4</sub>. *Eur. J. Mineral.* 16, 1003-1007. (3) (2005) *Amer. Mineral.*, 90(8), 1469 (abs. ref. 2).