

Crystal Data: Monoclinic, pseudotetragonal. *Point Group:* 2/m. Crystals are thin, scaly, to 2 mm, in seams and aggregates.

Physical Properties: *Cleavage:* On {010}, perfect. Hardness = 2-3 D(meas.) = 7.38-8.00 D(calc.) = 8.096

Optical Properties: Semitransparent. *Color:* Pale sulfur-yellow, pale greenish yellow, bright yellow, to orange.

Optical Class: Biaxial (-). *n* = Very high. 2V(meas.) = 96.5° *Orientation:* X = b.

Cell Data: *Space Group:* C2/c. *a* = 12.710(13) *b* = 22.498(8) *c* = 11.360(9) β = 118.99(3)° *Z* = 4

X-ray Powder Pattern: Långban, Sweden; close to kombatite.
3.011 (10), 2.946 (10), 2.814 (9), 1.754 (8), 2.249 (7), 1.985 (5), 2.021 (4)

Chemistry:	(1)	(2)	(3)
As ₂ O ₅	6.57	5.3	6.63
CO ₂	0.43		
PbO	89.33	91.1	90.20
CaO	0.46		
Cl	4.05	4.0	4.09
H ₂ O	0.10		
- O = Cl ₂	0.91	0.9	0.92
Total	100.03	99.5	100.00

(1) Långban, Sweden, average of two analyses; after deduction of Ca and CO₂ as calcite, corresponds to Pb_{13.70}O_{8.85}(AsO₄)_{1.95}Cl_{3.92}. (2) Do.; by electron microprobe. (3) Pb₁₄O₉(AsO₄)₂Cl₄.

Occurrence: In a metamorphosed Fe-Mn orebody (Långban, Sweden); in layered hausmannite-barite ore (Kombat mine, Namibia).

Association: Hausmannite, manganhumite, forsterite, dolomite (Långban, Sweden); copper, jacobsite, hausmannite, baryte (Kombat mine, Namibia).

Distribution: From Långban, Värmland, Sweden. At the Kombat Cu-Pb-Ag mine, 49 km south of Tsumeb, Namibia.

Name: To honor Dr. Carl *Sahlin* (1861-1943), General Manager of the iron works at Laxå, Sweden.

Type Material: Swedish Museum of Natural History, Stockholm, Sweden; National Museum of Natural History, Washington, D.C., USA, B13892.

References: (1) Palache, C., H. Berman, and C. Frondel (1951) Dana's system of mineralogy, (7th edition), v. II, 775. (2) Rouse, R.C. and P.J. Dunn (1985) A re-examination of sahlinites from Långban, Sweden. *Neues Jahrb. Mineral., Monatsh.*, 127-131. (3) Bonaccorsi, E. and M. Pasero (2003) Crystal structure refinement of sahlinites, Pb₁₄(AsO₄)₂O₉Cl₄. *Mineral. Mag.*, 67, 15-21. (4) (2004) *Amer. Mineral.*, 89, 471 (abs. ref. 3).