

**Crystal Data:** Cubic. *Point Group:*  $2/m\bar{3}$ . As euhedral to subhedral crystals, showing {100}, {110}, {111}, to 400  $\mu\text{m}$ , in aggregates.

**Physical Properties:** *Fracture:* Conchoidal. *Tenacity:* Brittle. Hardness = n.d. VHN = 420–514, 464 average (100 g load). D(meas.) = 7.2 D(calc.) = 7.63 (for CoSb<sub>3</sub>).

**Optical Properties:** Opaque. *Color:* Tin-white in reflected light. *Streak:* Gray. *Luster:* Metallic.

R: (470) 59.0, (546) 58.7, (589) 58.7, (650) 58.7

**Cell Data:** *Space Group:*  $Im\bar{3}$ .  $a = 9.0411(3)$   $Z = 8$

**X-ray Powder Pattern:** Tunaberg, Sweden.

2.86 (10), 2.02 (8), 0.933 (8), 1.331 (7), 2.42 (6), 1.77 (6), 1.55 (6)

**Chemistry:**

	(1)
Co	12.8
Ni	0.7
Cu	0.2
Fe	0.3
Sb	85.8
Cl	0.3
Total	100.1

(1) Tunaberg, Sweden; by electron microprobe, average of 30 analyses; corresponding to  $(\text{Co}_{0.91}\text{Ni}_{0.05}\text{Fe}_{0.02}\text{Cu}_{0.02})_{\Sigma=1.00}(\text{Sb}_{2.97}\text{Cl}_{0.03})_{\Sigma=3.00}$ .

**Occurrence:** In a polymetallic sulfide skarn deposit.

**Association:** Chalcopyrite, dyscrasite, bornite, galena, bismuth, silver, gudmundite, tetrahedrite.

**Distribution:** From Tunaberg, Sweden [TL].

**Name:** Honors Dr. Cornelis Kieft (1924– ), for his contributions to ore mineralogy.

**Type Material:** Institute of Earth Sciences, Free University of Amsterdam, Amsterdam, The Netherlands.

**References:** (1) Dobbe, R.T.M., W.J. Lustenhouwer, M.A. Zakrzewski, K. Goubitz, J. Fraanje, and H. Schenk (1994) Kieftite, CoSb<sub>3</sub>, a new member of the skutterudite group from Tunaberg, Sweden. *Can. Mineral.*, 32, 179–183. (2) (1995) *Amer. Mineral.*, 80, 185 (abs. ref. 1).