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**Crystal Data:** Hexagonal. *Point Group:* 6mm. Short prismatic crystals, {1010}, {1011}, and {0001} prominent, to 8 mm, may be morphologically hemihedral. *Twinning:* Observed.

**Physical Properties:** Cleavage:  $\{0001\}$ , distinct. Fracture: Subconchoidal. Hardness =  $\sim 8$  D(meas.) = 4.285 D(calc.) = 4.28

**Optical Properties:** Transparent. *Color:* Colorless, pale wine-yellow to honey-yellow; colorless in transmitted light.

Optical Class: Uniaxial (-). Dispersion: Strong.  $\omega = 1.7724$   $\epsilon = 1.7700$ 

**Cell Data:** Space Group:  $P6_3mc$ . a = 5.442 c = 8.848 Z = 2

X-ray Powder Pattern: Långban, Sweden.

4.20(10), 2.72(9), 2.51(9), 2.32(9), 3.22(8), 4.70(7), 4.40(7)

Chemistry:

	(1)	(2)
$Sb_2O_5$	54.17	55.25
BeO	34.72	34.17
MgO	0.52	
CaO	0.94	
$Na_2O$	8.50	10.58
$K_2O$	0.21	
$H_2O$	0.39	
$P_2O_5$	0.23	
Total	99.68	100.00

(1) Långban, Sweden; average of three partial analyses. (2) NaBe<sub>4</sub>SbO<sub>7</sub>.

Occurrence: In skarn from a metamorphosed Fe–Mn orebody.

Association: Bromellite, richterite, manganoan biotite, calcite, hematite.

Distribution: From Långban, Värmland, Sweden.

Name: Honors Emanuel Swedenborg (1688–1772), Swedish philosopher and theologian.

**Type Material:** Swedish Museum of Natural History, Stockholm, Sweden; The Natural History Museum, London, England, 1924,560.

**References:** (1) Palache, C., H. Berman, and C. Frondel (1951) Dana's system of mineralogy, (7th edition), v. II, 1027–1029. (2) Pauling, L., H.P. Klug, and A.N. Winchell (1935) The crystal structure of swedenborgite, NaBe<sub>4</sub>SbO<sub>7</sub>. Amer. Mineral., 20, 492–501. (3) Welin, E. (1968) X-ray powder data for minerals from Långban and the related mineral deposits of Central Sweden. Arkiv Mineral. Geol., 4(30), 499–541.