

# Monimolite

# (Pb, Ca)<sub>3</sub>Sb<sub>2</sub>O<sub>8</sub>(?)

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**Crystal Data:** Cubic. *Point Group:*  $4/m\bar{3}2/m$  (probable). As octahedra with {113}, or less commonly, cube dominant, with {111} and {011}.

**Physical Properties:** *Cleavage:* Indistinct on {111}. *Fracture:* Small conchoidal to splintery. Hardness = 4.5–6 D(meas.) = 5.94–7.29 D(calc.) = n.d.

**Optical Properties:** Opaque, translucent on thin edges. *Color:* Yellow, gray-green, dark brown. *Streak:* Straw-yellow to cinnamon-brown. *Luster:* Greasy to adamantine. *Optical Class:* Isotropic; may show weak anisotropism.  $n = > 2.06$

**Cell Data:** *Space Group:* n.d.  $a = 10.47$   $Z = \text{n.d.}$

**X-ray Powder Pattern:** n.d.

Chemistry:	(1)	(2)
Sb <sub>2</sub> O <sub>5</sub>	40.51	38.18
FeO	5.38	5.57
MnO	0.41	1.16
PbO	42.74	55.33
MgO	0.56	
CaO	9.70	
Na <sub>2</sub> O	0.54	
Total	99.84	100.24

(1) Harstigen mine, Sweden. (2) Do.; corresponds to  $(\text{Pb}_{2.12}\text{Fe}_{0.66}\text{Mn}_{0.14})_{\Sigma=2.92}\text{Sb}_2\text{O}_{7.92}$ .

**Occurrence:** In calcite veins in an iron and manganese deposit.

**Association:** Tephroite, calcite.

**Distribution:** In the Harstigen mine, near Persberg, Värmland, Sweden.

**Name:** From the Greek for *stable*, as it is decomposed chemically only with great difficulty.

**References:** (1) Palache, C., H. Berman, and C. Frondel (1951) Dana's system of mineralogy, (7th edition), v. II, 1023. (2) Mason, B. and C.J. Vitaliano (1953) The mineralogy of the antimony oxides and antimonates. *Mineral. Mag.*, 30, 100–112.