Moschelite $Hg^{1+}I$

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Crystal Data: Tetragonal. *Point Group:* $4/m \ 2/m \ 2/m$. Tabular to short prismatic crystals, irregular platy, to 0.1 mm; crystalline, in crusts.

Physical Properties: Cleavage: Imperfect. Fracture: Conchoidal. Tenacity: Sectile. Hardness = 1-2 D(meas.) = n.d. D(calc.) = 7.75

Optical Properties: Opaque, translucent on thin edges. Color: Citrus-yellow, changing immediately to dark olive-green on exposure to light. Streak: Brown. Luster: Adamantine. Optical Class: Uniaxial. $\omega = \text{high}$. $\epsilon = \text{high}$.

Cell Data: Space Group: I4/mmm. a = 4.920(3) c = 11.600(9) Z = [4]

X-ray Powder Pattern: Landsberg, Germany.

 $3.483\ (10),\ 2.231\ (9),\ 2.896\ (6),\ 2.099\ (6),\ 4.537\ (2),\ 1.881\ (2),\ 1.242\ (2)$

Chemistry:

(1) Landsberg, Germany; by electron microprobe. (2) HgI.

Occurrence: In a sandstone-hosted mercury deposit, the iodine thought to be provided from underlying coal beds.

Association: Mercury, cinnabar, metacinnabar, calomel, terlinguaite, eglestonite, tetrahedrite, malachite, azurite, gypsum, aragonite, lepidocrocite, iron oxides, quartz.

Distribution: From Landsberg, near Obermoschel, Rhineland-Palatinate, Germany.

Name: For its occurrence in the Moschel-Landsberg mines, Germany.

Type Material: n.d.

References: (1) Krupp, E.R., G. Nottes, and U. Heidtke (1989) Moschelite (Hg₂J₂): a new mercury mineral from Landsberg-Obermoschel. Neues Jahrb. Mineral., Monatsh., 524–526. (2) (1990) Amer. Mineral., 75, 1211 (abs. ref. 1).