Imiterite Ag_2HgS_2

Crystal Data: Monoclinic. *Point Group:* $2/m$. As crystals, to 1 cm, and anhedral grains.

Physical Properties: Hardness = n.d. VHN = 86 (100 g load). D(meas.) = n.d. D(calc.) = 7.846(4)

Optical Properties: Opaque. *Color:* Pale gray, steel-gray; pale greyin reflected light. *Luster:* Brilliant metallic. *Pleochroism:* Bluish to pinkish. *Anisotropism:* Strong, from bluish gray to reddish brown. *Bireflectance:* Strong.
R_1–R_2: (400) — , (420) 29.8–33.8, (440) 33.4–38.3, (460) 32.1–36.4, (480) 31.3–34.8, (500) 30.6–33.7, (520) 29.9–32.8, (540) 29.5–32.1, (560) 29.2–31.5, (580) 28.9–31.1, (600) 28.8–30.8, (620) 28.6–30.5, (640) 28.5–30.3, (660) 28.2–29.9, (680) 27.9–29.7, (700) 27.5–29.4

Cell Data: *Space Group:* $P2_1/c$. $a = 4.0394(8)$ $b = 8.0050(6)$ $c = 6.5812(8)$ $\beta = 107.12(2)^\circ$ $Z = 2$

X-ray Powder Pattern: Imiter mine, Morocco.
2.768 (100), 2.746 (100), 2.461 (80), 3.466 (50), 1.467 (35), 4.88 (30), 3.138 (30)

Chemistry:

	(1)	(2)	(3)
Ag	42.89	43.3	44.90
Hg	42.64	41.8	41.75
S	13.34	13.0	13.35
Total	98.87	98.1	100.00

(1) Imiter mine, Morocco; by electron microprobe, average of 20 analyses; corresponding to $Ag_{1.91}Hg_{1.02}S_{2.00}$. (2) Ramsbeck, Germany; by electron microprobe, corresponding to $Ag_{1.96}Hg_{1.02}S_{2.00}$. (3) Ag_2HgS_2.

Occurrence: In a pyritic deposit (Imiter mine, Morocco); in a hydrothermal vein deposit (Ramsbeck, Germany).

Association: Chalcopyrite, sphalerite, acanthite, polybasite, galena, arsenopyrite (Imiter mine, Morocco); acanthite, pyrite, marcasite, polybasite, calcite (Ramsbeck, Germany).

Distribution: From the Imiter mine, Djebel Sarhro, Anti-Atlas Mountains, Morocco [TL]. At Ramsbeck, North Rhine-Westphalia, Germany.

Name: For the Imiter mine locality in Morocco.

Type Material: Bureau de Recherches Géologiques et Minières (B.R.G.M.), Orléans; National School of Mines, Paris, France.

References: (1) Guillou, J.-J., J. Monthel, P. Picot, F. Pillard, J. Protas, and J.-C. Samama (1985) L'imitérite, Ag_2HgS_2, nouvelle espèce minérale; propriététes structure cristalline. Bull. Minéral., 108, 457–464 (in French with English abs.). (2) (1986) Amer. Mineral., 71, 1277–1278 (abs. ref. 1). (3) Walenta, K. and H. Hess (1985) Imiterit, ein silber- und quecksilberhaltiges Sulfidmineral von Ramsbeck im Sauerland. Aufschluss, 36, 209–215 (in German with English abs.).