Konderite PbCu₃(Rh, Pt, Ir)₈S₁₆

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Crystal Data: Hexagonal. Point Group: 6/m, 6, 6/m 2/m 2/m, 622, or 6/m2. As inclusions in Pt–Fe alloy.


Optical Properties: Opaque. Color: Steel-gray. Luster: Metallic. R₁–R₂: (400) —, (420) 43.3–45.1, (440) 42.8–44.6, (460) 42.6–44.4, (480) 42.4–44.4, (500) 42.3–44.6, (520) 42.5–44.8, (540) 43.8–45.1, (560) 43.1–45.4, (580) 43.4–45.8, (600) 43.8–46.2, (620) 43.9–46.5, (640) 44.2–46.6, (660) 44.4–46.8, (680) 44.8–47.0, (700) 45.0–47.4

Cell Data: Space Group: P6/m, P6, P6/mmm, P622, or P6m2. a = 7.024(20) c = 16.48(2) Z = n.d.

X-ray Powder Pattern: Konder massif, Russia. 2.98 (10), 1.763 (10), 2.459 (9), 2.85 (5), 1.715 (5), 1.291 (3), 5.10 (2)

Chemistry: (1) Rh 14.2 Pt 25.2 Ir 19.2 Pb 9.53 Cu 8.25 Fe 0.28 Ni 0.38 S 23.7 Total 100.74

(1) Konder massif, Russia; by electron microprobe, average of 10 analyses; corresponding to Pb₁.₀₀(Cu₂.₈₁Ni₀.₁₄Fe₀.₁₁)Σ=3.₉₆(Rh₂.₉₉Pt₂.₈₀Ir₂.₁₆)Σ=7.₉₉S₁₆.₀₀.

Occurrence: As inclusions in a Pt–Fe alloy from an alkalic ultramafic massif.

Association: Pt–Fe alloy, erlichmanite.

Distribution: From the Konder massif, Aldan Shield, Sakha, Russia [TL].

Name: For the occurrence in the Konder massif, Russia.

Type Material: Mining Institute, St. Petersburg, Russia, 1500/1.