

Crystal Data: Hexagonal. *Point Group:* $\bar{3} 2/m$. As a single 50 μm grain, in an athenite-potarite-hematite aggregate.

Physical Properties: *Cleavage:* Very good on {001}. *Fracture:* n.d. *Tenacity:* Brittle. Hardness = ~ 3.5 VHN = 119-245 (10 g load) [Synthetic]. $D(\text{meas.}) = 10.9$ $D(\text{calc.}) = 10.35$

Optical Properties: Opaque. *Color:* Gray, light gray in reflected light [Synthetic]. *Streak:* Gray [Synthetic]. *Luster:* Metallic. *Optical Class:* n.d. *Pleochroism:* Bluish gray to rusty brown. *Anisotropism:* Weak to distinct. R_1 - R_2 : (470) 47.4-51.1, (546) 48.2-50.5, (589) 48.0-49.6, (650) 47.1-47.8

Cell Data: *Space Group:* $P\bar{3} m1$. $a = 7.3477(2)$ $c = 5.2955(1)$ $Z = 2$

X-ray Powder Pattern: Synthetic Pt₂HgSe₃. 5.292 (100), 1.765 (37), 2.035 (18), 2.727 (16), 1.324 (11), 1.0448 (11), 1.0449 (11)

Chemistry:	(1)
Pt	37.3
Pd	5.91
Hg	25.72
Ag	0.16
Cu	0.82
Se	31.48
Total	101.39

(1) Cauê deposit, Itabira District, Minas Gerais, Brazil; average of 3 electron microprobe analyses; corresponding to $(\text{Pt}_{1.46}\text{Pd}_{0.42}\text{Cu}_{0.10}\text{Ag}_{0.01})_{\Sigma=1.99}\text{Hg}_{0.98}\text{Se}_{3.04}$.

Occurrence: In heavy-mineral concentrate from a friable, hematite-rich auriferous vein that cuts metamorphosed banded iron formation.

Association: Potarite, atheneite, hematite.

Distribution: Cauê iron-ore deposit, Itabira District, Minas Gerais, Brazil.

Name: After vein-type gold mineralization rich in specular hematite, known as “jacutinga” in Minas Gerais, Brazil.

Type Material: GeoMuseum, Technical University of Clausthal, Germany (# 26580).

References: (1) Vymazalová, A., F. Laufek, M. Drábek, A.R. Cabral, J. Haloda, T. Sidorinová, B. Lehmann, H.F. Galbiatti, and J. Drahokoupil (2012) Jacutingaite, Pt₂HgSe₃, a new platinum-group mineral species from the Cauê iron-ore deposit, Itabira District, Minas Gerais, Brazil. *Can. Mineral.*, 50(2), 431-440. (2) Drábek, M., A. Vymazalová, and A.R. Cabral (2012) The system Hg-Pt-Se at 400°C: phase relations involving jacutingaite. *Can. Mineral.*, 50(2), 441-446. (3) (2014) *Amer. Mineral.*, 99, 2154 (abs. refs. 1 & 2).