

Crystal Data: Isometric. *Point Group:* $2/m\bar{3}$. As imperfect crystals to 0.3 mm in composite grains with other minerals.

Physical Properties: *Cleavage:* None. *Fracture:* Uneven. *Tenacity:* Brittle.
Hardness = 4-5 VHN = 429-455 (25 g load). D(meas.) = n.d. D(calc.) = 7.59

Optical Properties: Opaque. *Color:* Lead-gray, cream to creamy gray in reflected light.
Streak: Black. *Luster:* Metallic.
Optical Class: Isotropic.
R_{air/oil} = (470) 47.5/33.3, (546) 46.9/32.6, (589) 46.8/32.6, (650) 48.0/34.0

Cell Data: *Space Group:* $Pa\bar{3}$. *a* = 6.089(4) *Z* = 4

X-ray Powder Pattern: Buraco do Ouro gold mine, Cavalcante town, Goiás State, Brazil.
 1.838 (100), 1.172 (95), 0.929 (90), 1.077 (80), 3.027 (75), 0.988 (70), 0.918 (70)

| Chemistry: | (1) | (2) |
|------------|-------|--------|
| Pd | 41.32 | 40.88 |
| As | 27.49 | 28.78 |
| Bi | 0.35 | |
| Sb | 1.59 | |
| Se | 27.67 | 30.33 |
| S | 1.22 | |
| Total | 99.64 | 100.00 |

(1) Buraco do Ouro gold mine, Cavalcante town, Goiás State, Brazil; average of 8 electron microprobe analyses; corresponds to $Pd_{1.006}(As_{0.950}Sb_{0.034}Bi_{0.004})_{\Sigma=0.988}(Se_{0.908}S_{0.099})_{\Sigma=1.007}$.
 (2) PdAsSe.

Occurrence: In a hydrothermal gold deposit in quartz-muscovite-rich zones of a mylonite cutting peraluminous granite.

Association: Gold, bohdanowiczite, guanajuatite, clausthalite, stibiopalladinite, sperrylite, padmaite, chalcopyrite, muscovite, quartz, tourmaline, magnetite.

Distribution: From the Buraco do Ouro gold mine, Cavalcante town, Goiás State, central Brazil.

Name: For the *Kalunga* people, a community of descendants of African slaves living in Cavalcante and other towns near the locality that produced the first specimens.

Type Material: Natural History Museum, London, England (BM2004,35).

References: (1) Botelho, N.F., M.A. Moura, R.C. Peterson, C.J. Stanley, and D.V.G. Silva (2006) Kalungaite, PdAsSe, a new platinum-group mineral from the Buraco do Ouro gold mine, Cavalcante, Goiás State, Brazil. *Mineral. Mag.*, 70(1), 123-130. (2) (2006) *Amer. Mineral.*, 91, 1454-1455 (abs. ref. 1).