

Crystal Data: Cubic. *Point Group:* $4/m\bar{3}2/m$. As small grains, less than 100 μm in diameter, rarely showing {100}.

Physical Properties: Hardness = n.d. VHN = 357 (25 g load). D(meas.) = n.d.
D(calc.) = 14.19

Optical Properties: Opaque. *Color:* In polished section, pale cream. *Luster:* Metallic.
Pleochroism: None to slight. *Anisotropism:* Slight, due to strain.

R₁-R₂: (480) 57.4–60.8, (546) 59.2–65.1, (589) 60.4–63.5, (656) 62.2–65.8

Cell Data: *Space Group:* $Fm\bar{3}m$. $a = 3.991$ $Z = 4$

X-ray Powder Pattern: Merensky Reef, South Africa.

2.295 (100), 1.202 (100), 1.408 (90), 0.9153 (90), 0.8145 (90), 1.992 (80), 0.8922 (80)

Chemistry:

	(1)
Pt	43.74
Pd	38.35
Sn	18.65
Total	100.74

(1) Merensky Reef, South Africa; by electron microprobe, corresponding to
(Pd_{1.46}Pt_{0.91})_{Σ=3.00}Sn_{0.81}.

Polymorphism & Series: Forms a series with rustenburgite.

Occurrence: As very sparse grains in concentrates of ore (Merensky Reef, South Africa).

Association: Unspecified platinum tellurides (Merensky Reef, South Africa); keithconnite, palladoarsenide (Stillwater complex, Montana, USA).

Distribution: From the Atok [TL] and Rustenburg mines, on the Merensky Reef, Bushveld complex, Transvaal, South Africa. From the Oktyabr mine, Talnakh area, Noril'sk region, western Siberia, Russia. In Montana, in the Stillwater complex, and the Revais Creek district, [??Flathead Ind Res, check mining districts??] ?? Co., USA.

Name: For its occurrence in the Atok mine, South Africa.

Type Material: n.d.

References: (1) Mihálik, P., S.A. Hiemstra, and J.P.R. de Villiers (1975) Rustenburgite and atokite, two new platinum-group minerals from the Merensky Reef, Bushveld Igneous Complex. *Can. Mineral.*, 13, 146–150. (2) (1976) *Amer. Mineral.*, 61, 340 (abs. ref. 1).