substance: OsSbTe
property: physical properties

energy gap

E_g	< 0.05 eV (?)	RT	60 μm thick samples were completely opaque in the wavelength range 0.5 to 25 μm		66B

resistivity

ρ	$82.2 \cdot 10^{-3}$ Ω cm	RT	sample No.7	both samples	66B
	$459 \cdot 10^{-3}$ Ω cm	T = 77 K	sample No.7	sintered at	
	$38 \cdot 10^{-3}$ Ω cm	RT	sample No.10	950...1050 K	
	$228 \cdot 10^{-3}$ Ω cm	T = 77 K	sample No.10	42...47 kbar	

thermoelectric power

S	+ 138 μV K^{-1}	T = 300 K	sample No.7	66B
	+ 188 μV K^{-1}	T = 300 K	sample No.10	

Knoop microhardness

H_K	196 kg mm^{-2}	T = 300 K	66B

decomposition temperature

T_{dec}	< 1370 K	OsSbTe decomposes when heated up to 1370 K under a pressure of ≈ 40 kbar	66B

For structure, chemical bond and comparative tables on crystallographic and physical properties of transition metal-V-VI compounds, see documents , , , .

References:

66B Banus, M. D., Lavine, M. C.: Mat. Res. Bull. 1 (1966) 3.