

substance: PtSb₂

property: lattice properties

Comparative tables on structural data of transition metal dipnictides:

structure, chemical bond: see document ,

crystallographical data of compounds with octahedrally coordinated cations, see document

interatomic distances in pyrite- and pararammelsbergite-type compounds, see document .

melting point

T_m	1499 K		congruent	58H, 65D
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Debye temperature

Θ_D	330 K	$T = 0$ K	from heat capacity on 7 g single	82K
	260 K	$T = 30$ K	crystal which at 77 K showed	
	280 K	$T = 100$ K	$\rho = 0.037 \Omega \text{ cm}$,	
	325 K	$T = 300$ K	$R_H = -2.89 \text{ cm}^3 \text{ C}^{-1}$,	
			$n = 2.26 \cdot 10^{18} \text{ cm}^{-3}$,	
			close to degeneracy	

elastic moduli

(in $10^{11} \text{ dyn cm}^{-2}$)

c_{11}	26.0	RT	calculated from sound velocity measure-	65D
			ments made by the pulse-echo technique	
c_{12}	6.8	RT		
c_{44}	5.9	RT		

References:

- 58H Hansen, M., Anderko, K.: Constitution of Binary Alloys, McGraw Hill, New York, second ed. 1958, 1138.
- 65D Damon, D. H., Miller, R. C., Sagar, A.: Phys. Rev. A 138 (1965) 636.
- 82K Kundrotas, J., Dargys, A.: Litov. Fiz. Sb. 22 (1982) 74.