

substance: Nd₂Te₃

property: crystal structure, physical properties

crystal structure cubic (Th₃P₄-defect structure, T_d⁶ – I4̄3d)

lattice parameters

<i>a</i>	9.424 Å	65L
	9.421 Å	65A

density

<i>d</i>	7.09 g cm ⁻³	65H
----------	-------------------------	-----

melting point

<i>T_m</i>	1893 K	65L
----------------------	--------	-----

coordination polyhedra: Fig. 2

phase diagram [65A]

heat capacity: Fig. 1

crystal structure orthorhombic (U₂S₃-structure, D_{2h}¹⁶ – Pnma)

lattice parameters

<i>a</i>	11.93 Å	65F
<i>b</i>	12.16 Å	
<i>c</i>	4.37 Å	

References:

- 65A Abrikosov, N. Kh., Zargaryan, V. Sh.: *Izv. Acad. Nauk SSSR, Neorg. Mater.* 9 (1965) 1462.
- 65F Flahaut, J., Guittard, M., Patrie, M., Pardo, M. P., Golabi, S. M., Domange, L.: *Acta. Cryst.* 19 (1965) 14.
- 65H Haase, D. J., Steinfink, H., Weiss, E. J.: *Rare Earth Research* 3 (1965) 335; New York: Gordon and Breach, 1965.
- 65L Lin, W., Steinfink, H., Weiss, E. J.: *Inorg. Chem* 4 (1965) 877.
- 66H Holtzberg, F., Methfessel, S.: *J. Appl. Phys.* 37 (1966) 1433.
- 72S Smirnov, I. A.: *Phys. Status Solidi (a)* 14 (1972) 363.

Fig. 1.

γ -Nd₂S₃, Nd₂Se₃, Nd₂Te₃. Molar heat capacity vs. temperature [72S].

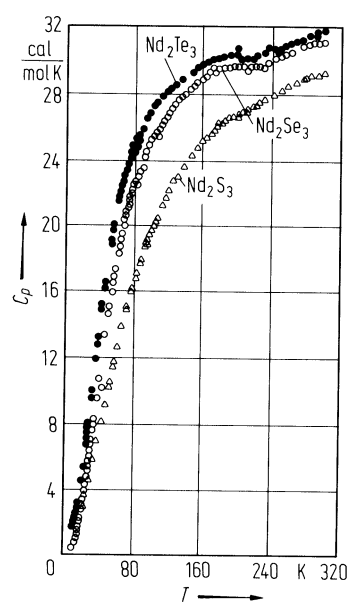


Fig. 2.

Th₃P₄-type compounds. The coordination polyhedra of the cations and the anions. Full circles: Th- atoms, other circles: P-atoms [66H].

