

Nd ₆ Co ₅ Ge _{2,2}	<i>hP</i> 15	(187) <i>P</i> -6 <i>m</i> 2 – k ² j ² fca
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Nd₆Co₅Ge_{2,2} [1]

Structural features: Infinite columns of base-linked GeNd₆Nd₃ tricapped prisms separated by Co atoms; additional Ge in distorted Nd₆ trigonal prismatic voids (displaced into a rectangular face).

Salamakha P.S. et al. (1986) [1]

Co₅Ge_{2,20}Nd₆

$a = 0.9272$, $c = 0.4188$ nm, $c/a = 0.452$, $V = 0.3118$ nm³, $Z = 1$

site	Wyck.	sym.	<i>x</i>	<i>y</i>	<i>z</i>	occ.	atomic environment
Ge1	3 <i>k</i>	<i>mm</i> 2	0.2359	0.7641	1/2	0.4	cuboctahedron Co ₄ Ge ₂ Nd ₆
Nd2	3 <i>k</i>	<i>mm</i> 2	0.8696	0.1304	1/2		7-capped pentagonal prism Co ₆ Ge ₃ Nd ₈
Co3	3 <i>j</i>	<i>mm</i> 2	0.1519	0.8481	0		bicapped square antiprism Co ₂ Ge ₂ Nd ₆
Nd4	3 <i>j</i>	<i>mm</i> 2	0.5179	0.4821	0		7-capped pentagonal prism Co ₃ Ge ₆ Nd ₈
Ge5	1 <i>f</i>	-6 <i>m</i> 2	2/3	1/3	1/2		tricapped trigonal prism Nd ₉
Co6	1 <i>c</i>	-6 <i>m</i> 2	1/3	2/3	0		icosahedron Ge ₆ Co ₃ Nd ₃
Co7	1 <i>a</i>	-6 <i>m</i> 2	0	0	0		tricapped trigonal prism Co ₃ Nd ₆

Transformation from published data: -*x*, -*y*, -*z*

Experimental: single crystal, diffractometer, X-rays, R = 0.033

References: [1] Salamakha P.S., Pecharskii V.K., Bruskov V.A., Bodak O.I. (1986), Sov. Phys. Crystallogr. 31, 345-346 (Kristallografiya 31, 587-589).