

$\text{Nb}_{1.1}\text{Se}_2$	$hP8$	(187) $P-6m2 - ihgda$
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$\text{Nb}_{1.1}\text{Se}_2$ 2s(b) [1]

Structural features: Close-packed Se layers in BBCC stacking; Nb mainly in trigonal prismatic but also in octahedral voids. NbSe_6 trigonal prisms share edges to form infinite slabs; additional Nb in octahedral voids between the slabs (stacking sequence BaB α CbC α).

Huisman R. et al. (1967) [1]

$\text{Nb}_{1.10}\text{Se}_2$

$a = 0.3454$, $c = 1.258$ nm, $c/a = 3.642$, $V = 0.1300$ nm³, $Z = 2$

site	Wyck.	sym.	x	y	z	occ.	atomic environment
Se1	$2i$	$3m.$	$\frac{2}{3}$	$\frac{1}{3}$	0.375		octahedron Nb ₆
Se2	$2h$	$3m.$	$\frac{1}{3}$	$\frac{2}{3}$	0.125		trigonal prism Nb ₆
Nb3	$2g$	$3m.$	0	0	0.25	0.1	octahedron Se ₆
Nb4	$1d$	$-6m2$	$\frac{1}{3}$	$\frac{2}{3}$	$\frac{1}{2}$		trigonal prism Se ₆
Nb5	$1a$	$-6m2$	0	0	0		trigonal prism Se ₆

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

Experimental: powder, film, X-rays

Remarks: Homogeneity range Nb_xSe_2 , $1.05 < x < 1.10$. We assigned an approximate value to the occupancy of site Nb3 based on the nominal composition.

References: [1] Huisman R., Kadijk F., Jellinek F. (1967), J. Less-Common Met. 12, 423-424.