

Ba ₂ NiSi ₃	<i>hP</i> 18	(189) <i>P</i> -62 <i>m</i> – kgf ² ca
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Ba₂NiSi₃ [1]

Structural features: Si₃ triangles alternate with Ni atoms to form infinite NiSi₃ chains (infinite columns of base-linked NiSi₆ trigonal prisms).

Goodey J. et al. (2000) [1]

Ba₂NiSi₃

a = 1.1392, *c* = 0.3938 nm, *c/a* = 0.346, *V* = 0.4426 nm³, *Z* = 3

site	Wyck.	sym.	<i>x</i>	<i>y</i>	<i>z</i>	occ.	atomic environment
Si1	6 <i>k</i>	<i>m</i> ..	0.3161	0.5354	¹ / ₂		4-vertex polyhedron Ni ₂ Si ₂
Si2	3 <i>g</i>	<i>m2m</i>	0.1244	0	¹ / ₂		4-vertex polyhedron Ni ₂ Si ₂
Ba3	3 <i>f</i>	<i>m2m</i>	0.3819	0	0		pseudo Frank-Kasper Si ₁₀ Ni ₃ Ba ₅
Ba4	3 <i>f</i>	<i>m2m</i>	0.7128	0	0		16-vertex Frank-Kasper Ni ₃ Si ₈ Ba ₅
Ni5	2 <i>c</i>	-6..	¹ / ₃	² / ₃	0		trigonal prism Si ₆
Ni6	1 <i>a</i>	-62 <i>m</i>	0	0	0		trigonal prism Si ₆

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

Experimental: single crystal, diffractometer, X-rays, R = 0.050, T = 298 K

References: [1] Goodey J., Mao J., Guloy A.M. (2000), J. Am. Chem. Soc. 122, 10478-10479.