Mg_2Ni	*hP*18	(180) $P6_222$ – jfca

Mg_2Ni [2], Strukturbericht notation C_a; $MoSn_2$ [3]
Structural features: Intergrowth of slabs containing infinite columns of face-linked $NiMg_8$ square antiprisms, the prism axes in consecutive layers being rotated by 60°. See Fig. IV.41.

Soubeyroux J.L. et al. (1984) [1]
Mg_2Ni
$a = 0.5205$, $c = 1.2236$ nm, $c/a = 2.351$, $V = 0.2871$ nm^3, $Z = 6$

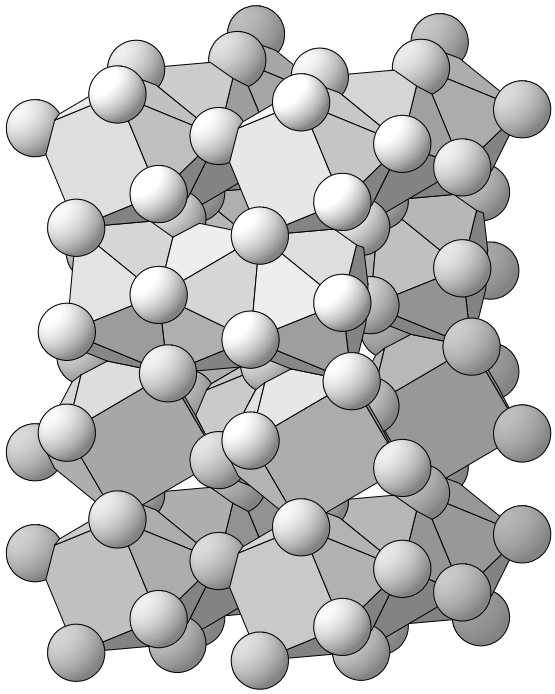

Fig. IV.41. **Mg_2Ni**

Arrangement of $NiMg_8$ square antiprisms.

site	Wyck.	sym.	*x*	*y*	*z*	occ.	atomic environment
Mg1	6*j*	..2	0.1620	0.3240	$^1/_2$		15-vertex Frank-Kasper Ni_4Mg_{11}
Mg2	6*f*	2..	$^1/_2$	0	0.3813		15-vertex Frank-Kasper Ni_4Mg_{11}
Ni3	3*c*	222	$^1/_2$	0	0		bicapped square antiprism Mg_8Ni_2
Ni4	3*a*	222	0	0	0		bicapped square antiprism Mg_8Ni_2

Transformation from published data: origin shift 0 0 $^1/_2$
Experimental: powder, diffractometer, neutrons, R = 0.044, T = 298 K

References: [1] Soubeyroux J.L., Fruchart D., Mikou A., Pezat M., Darriet B. (1984), Mater. Res. Bull. 19, 895-904. [2] Schubert K., Anderko K. (1951), Z. Metallkd. 42, 321-325. [3] Wölpl T., Jeitschko W. (1994), Z. Anorg. Allg. Chem. 620, 467-470.