

UNiAlH_{0.7}*hP*13(189) *P*-62*m* – hgfd**UNiAlH_{0.7}** [1]Structural features: Filled-up derivative of ZrNiAl with H in trigonal bipyramidal (U₃Ni₂) voids.

Yamamoto T. et al. (1994) [1]

AlD_{0.67}NiU $a = 0.6962$, $c = 0.3992$ nm, $c/a = 0.573$, $V = 0.1676$ nm³, $Z = 3$

site	Wyck.	sym.	<i>x</i>	<i>y</i>	<i>z</i>	occ.	atomic environment
D1	4 <i>h</i>	3..	$\frac{1}{3}$	$\frac{2}{3}$	0.012	0.5	
Al2	3 <i>g</i>	<i>m2m</i>	0.239	0	$\frac{1}{2}$		
U3	3 <i>f</i>	<i>m2m</i>	0.592	0	0		
Ni4	2 <i>d</i>	-6..	$\frac{1}{3}$	$\frac{2}{3}$	$\frac{1}{2}$		
Ni5	1 <i>a</i>	-62 <i>m</i>	0	0	0		tricapped trigonal prism Al ₆ U ₃

Transformation from published data: origin shift 0 0 $\frac{1}{2}$

Experimental: powder, diffractometer, neutrons

Remarks: Short interatomic distances for partly occupied site(s). In table 1 of [1] the Wyckoff position of former Ni(2) is misprinted as 2*d* instead of 2*c*.

References: [1] Yamamoto T., Kayano H., Yamawaki M. (1994), J. Alloys Compd. 213, 533-535.