$UNiAlH_{2.2}$	*hP*27	(189) *P*-62*m* – jhg^2f^2eca

$UNiAlH_{2.2}$ [1]
Structural features: Filled-up derivative of ZrNiAl with H in tetrahedral (U_3Ni), trigonal bipyramidal (U_5 and U_4Ni) and trigonal (U_3) voids.

Yamamoto T. et al. (1998) [1]
$AlD_{2.20}NiU$
a = 0.71713, c = 0.39757 nm, c/a = 0.554, V = 0.1771 nm^3, Z = 3

site	Wyck.	sym.	*x*	*y*	*z*	occ.	atomic environment
D1	6*j*	*m*..	0.207	0.233	0	0.09	
D2	4*h*	3..	$^1/_3$	$^2/_3$	0.432	0.4	
D3	3*g*	*m*2*m*	0.331	0	$^1/_2$		non-colinear Al_2
U4	3*g*	*m*2*m*	0.659	0	$^1/_2$		
Al5	3*f*	*m*2*m*	0.347	0	0		trigonal bipyramid D_5
D6	3*f*	*m*2*m*	0.577	0	0	0.15	
D7	2*e*	3.*m*	0	0	0.43	0.5	
Ni8	2*c*	-6..	$^1/_3$	$^2/_3$	0		colinear D_2
Ni9	1*a*	-62*m*	0	0	0		

Experimental: powder, diffractometer, neutrons

Remarks: Short interatomic distances for partly occupied site(s).

References: [1] Yamamoto T., Ishii Y., Kayano H. (1998), J. Alloys Compd. 269, 162-165.