$LaNi_2(Ni_{0.92}Pt_{0.08})_3H_{5.23}$	*hP*26	(183) *P*6*mm* – e^2dcb^2a

$LaNi_{4.75}Pt_{0.25}H_{5.23}$ [1]
Structural features: Filled-up derivative of $CaCu_5$ ($PrNi_2Al_3$) with H in tetrahedral ($La_2(Ni,Pt)_2$, $LaNi_2(Ni,Pt)$ and $Ni(Ni,Pt)_3$) and trigonal ($La(Ni,Pt)_2$) voids.

Joubert J.M. et al. (2003) [1]
$D_{5.28}LaNi_{4.75}Pt_{0.25}$
a = 0.5358, c = 0.4225 nm, c/a = 0.789, V = 0.1050 nm^3, Z = 1

site	Wyck.	sym.	x	y	z	occ.	atomic environment
D1	6*e*	.*m*.	0.145	0.855	0.5	0.218	
D2	6*e*	.*m*.	0.173	0.827	0.634	0.17	
D3	6*d*	..*m*	0.465	0	0.101	0.42	
M4	3*c*	2*mm*	$^1/_2$	0	0.5		
Ni5	2*b*	3*m*.	$^1/_3$	$^2/_3$	0.0		
D6	2*b*	3*m*.	$^1/_3$	$^2/_3$	0.634	0.215	
La7	1*a*	6*mm*	0	0	0.0		

M4 = 0.917Ni + 0.083Pt
Experimental: powder, diffractometer, neutrons, R_B = 0.033

Remarks: Short interatomic distances for partly occupied site(s). Refinement of the site occupancies of the counterparts of sites D2, D3 and D6 in space group (191) *P*6/*mmm* showed no significant deviation from unity. In table 2 of [1] the *z*-coordinate of former D4,2 is misprinted as -*z*(D4,2) instead of -*z*(D4,1) (from the description of the structure).

References: [1] Joubert J.M., Charton J., Percheron Guégan A. (2003), J. Solid State Chem. 173, 379-386.