

$\text{Mn}_2\text{Ni}_6\text{PbTe}_3\text{O}_{18}$	<i>hP60</i>	(176) $P6_3/m - i^3h^3fb$
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PbMn₂Ni₆Te₃O₁₈ [1]

Structural features: MnO₆ trigonal prisms, NiO₆ and TeO₆ octahedra share atoms to form a 3D-framework; Pb in channels of hexagonal cross-section parallel to [001].

Wedel B. et al. (1999) [1]

$\text{Mn}_2\text{Ni}_6\text{O}_{18}\text{PbTe}_3$

$a = 0.9294$, $c = 0.8823$ nm, $c/a = 0.949$, $V = 0.6600$ nm³, $Z = 2$

site	Wyck.	sym.	<i>x</i>	<i>y</i>	<i>z</i>	occ.	atomic environment
O1	12 <i>i</i>	1	0.1011	0.306	0.0915		non-coplanar triangle TeNi ₂
Ni2	12 <i>i</i>	1	0.3482	0.3602	0.089		octahedron O ₆
O3	12 <i>i</i>	1	0.5222	0.1296	0.088		tetrahedron TeNi ₂ Mn
O4	6 <i>h</i>	<i>m</i> ..	0.1325	0.581	$\frac{1}{4}$		non-coplanar triangle TeNi ₂
O5	6 <i>h</i>	<i>m</i> ..	0.2923	0.185	$\frac{1}{4}$		non-coplanar triangle TeNi ₂
Te6	6 <i>h</i>	<i>m</i> ..	0.3622	0.0247	$\frac{1}{4}$		octahedron O ₆
Mn7	4 <i>f</i>	3..	$\frac{1}{3}$	$\frac{2}{3}$	0.0602		trigonal prism O ₆
Pb8	2 <i>b</i>	-3..	0	0	0		octahedron O ₆

Experimental: single crystal, diffractometer, X-rays, R = 0.026, T = 293 K

References: [1] Wedel B., Sugiyama K., Hiraga K., Itagaki K. (1999), Mater. Res. Bull. 34, 2193-2199.