$Nd_4Mn[SiO_4]_3O$	*hP*60	(176) $P6_3/m$ – i^3h^3fa

$Nd_4Mn(SiO_4)_3O$ [1], apatite family
Structural features: Infinite columns of base-linked $(Mn,Nd)O_6O_3$ tricapped trigonal prisms (split O sites) share atoms with SiO_4 tetrahedra to form a 3D-framework; additional O (trigonal coordination) in infinite columns of face-linked Nd_6 octahedra parallel to [001].

Klüver E., Müller Buschbaum H. (1995) [1]
$MnNd_4O_{13}Si_3$
a = 0.94986, c = 0.6944 nm, c/a = 0.731, V = 0.5426 nm^3, Z = 2

site	Wyck.	sym.	x	y	z	occ.	atomic environment
O1	12*i*	1	0.0641	0.3068	0.0817	0.5	
O2	12*i*	1	0.1026	0.3702	0.0582	0.5	
O3	12*i*	1	0.1301	0.5971	0.2131	0.5	
Si4	6*h*	*m*..	0.0282	0.4039	$^1/_4$		
Nd5	6*h*	*m*..	0.2408	0.2293	$^1/_4$		
O6	6*h*	*m*..	0.496	0.1663	$^1/_4$		single atom Si
M7	4*f*	3..	$^1/_3$	$^2/_3$	0.0036		
O8	2*a*	-6..	0	0	$^1/_4$		coplanar triangle Nd_3

M7 = 0.5Mn + 0.5Nd
Transformation from published data: origin shift 0 0 $^1/_2$
Experimental: single crystal, diffractometer, X-rays, R = 0.031

Remarks: Short interatomic distances for partly occupied site(s). Space groups (147) $P\bar{3}$ and (173) $P6_3$ were tested and rejected (R = 0.116 and 0.050, respectively).

References: [1] Klüver E., Müller Buschbaum H. (1995), Z. Naturforsch. B 50, 61-65.