$BaMnO_{2.83}$	*hP*40	(187) *P*-6*m*2 – $n^3kji^2h^2g^3da$

$BaMnO_{2.83}$ 8H [1], perovskite 8H
Structural features: Close-packed BaO_3 layers in $hchch_4$ stacking; Mn in octahedral (O_6) voids. Units of six and two face-linked MnO_6 octahedra share vertices to form a 3D-framework.

Gonzalez Calbet J.M. et al. (1993) [1]
$BaMnO_3$
a = 0.57, c = 1.9 nm, c/a = 3.333, V = 0.5346 nm^3, Z = 8

site	Wyck.	sym.	x	y	z	occ.	atomic environment
O1	6*n*	.*m*.	0.16667	0.83333	0.125		colinear Mn_2
O2	6*n*	.*m*.	0.16667	0.83333	0.375		non-colinear Mn_2
O3	6*n*	.*m*.	0.83333	0.16667	0.25		non-colinear Mn_2
O4	3*k*	*mm*2	0.83333	0.16667	$^1/_2$		non-colinear Mn_2
O5	3*j*	*mm*2	0.5	0.5	0		non-colinear Mn_2
Ba6	2*i*	3*m*.	$^2/_3$	$^1/_3$	0.125		cuboctahedron O_{12}
Ba7	2*i*	3*m*.	$^2/_3$	$^1/_3$	0.375		anticuboctahedron O_{12}
Mn8	2*h*	3*m*.	$^1/_3$	$^2/_3$	0.0625		octahedron O_6
Ba9	2*h*	3*m*.	$^1/_3$	$^2/_3$	0.25		anticuboctahedron O_{12}
Mn10	2*g*	3*m*.	0	0	0.1875		octahedron O_6
Mn11	2*g*	3*m*.	0	0	0.3125		octahedron O_6
Mn12	2*g*	3*m*.	0	0	0.4375		octahedron O_6
Ba13	1*d*	-6*m*2	$^1/_3$	$^2/_3$	$^1/_2$		anticuboctahedron O_{12}
Ba14	1*a*	-6*m*2	0	0	0		anticuboctahedron O_{12}

Transformation from published data: -*x*,-*y*,-*z*
Experimental: polycrystalline sample, electron diffraction

Remarks: O vacancies not located. On page 102 of [1] the *z*-coordinates of former O1 and O2 are interchanged (checked on interatomic distances).

References: [1] Gonzalez Calbet J.M., Parras M., Alonso J.M., Vallet Regi M. (1993), J. Solid State Chem. 106, 99-110.