$BaNd_2Al_2B_{12}O_{25}$	*hP*46	(189) *P*-62*m* – $i^3h^5fe^2a$

$BaNd_2Al_2B_{12}O_{25}$ [1]
Structural features: Layers of vertex-linked BO_4 tetrahedra, layers of edge- and vertex-linked AlO_5 square pyramids and layers containing single NdO_6 trigonal prisms share atoms to form infinite slabs (cation sequence B-Nd-B-Al-B-Nd-B), which alternate with double planar layers of vertex-linked BO_3 trigonal units (partial vacancies ignored) along [001]; Ba between the two kinds of slab.

Li D. et al. (1988) [1]
$Al_2B_{12}BaNd_2O_{25}$
a = 0.4566, c = 2.492 nm, c/a = 5.458, V = 0.4499 nm^3, Z = 1

site	Wyck.	sym.	x	y	z	occ.	atomic environment
O1	6*i*	..*m*	0.3706	0	0.4576	0.667	non-colinear B_2
O2	6*i*	..*m*	0.4039	0	0.2503		non-colinear B_2
O3	6*i*	..*m*	0.42	0	0.1282		non-colinear B_2
O4	4*h*	3..	$^1/_3$	$^2/_3$	0.0472		tetrahedron BAl_3
B5	4*h*	3..	$^1/_3$	$^2/_3$	0.1056		tetrahedron O_4
B6	4*h*	3..	$^1/_3$	$^2/_3$	0.2708		tetrahedron O_4
O7	4*h*	3..	$^1/_3$	$^2/_3$	0.3282		single atom B
B8	4*h*	3..	$^1/_3$	$^2/_3$	0.4542		non-coplanar triangle O_3
Al9	3*f*	*m*2*m*	0.6126	0	0	0.667	square pyramid O_5
Nd10	2*e*	3.*m*	0	0	0.1853		trigonal prism O_6
Ba11	2*e*	3.*m*	0	0	0.3622	0.5	9-vertex polyhedron O_9
O12	1*a*	-62*m*	0	0	0		coplanar triangle Al_3

Transformation from published data: origin shift 0 0 $^1/_2$
Experimental: single crystal, diffractometer, X-rays, R = 0.088

Remarks: In the abstracts of [1] the Hermann-Mauguin symbol for the space group is misprinted as *P*6-2*m* (English) and *P*62*m* (Chinese) instead of *P*-62*m*.

References: [1] Li D., Tu H., Xu Y., Kong H., He C. (1988), Wuji Huaxue 4, 23-29.