$H_2Pb_5[BO_3]_3O[OH][H_2O]$	*hP*126	(185) $P6_3cm$ – $d^4c^9b^4a^4$

$Pb_5B_3O_8(OH)_3 \cdot H_2O$ [1]
Structural features: $O(OH)_3Pb_7$ clusters (a central OPb_4 tetrahedron sharing edges with three non-planar $(OH)Pb_3$ trigonal units) and BO_3, $B(O_2[OH])$ and $B(OH)_3$ trigonal units (perpendicular to [001]) share atoms to form infinite slabs (Pb electron lone-pairs in the interlayers).

Rastsvetaeva R.K. et al. (1998) [1]
$B_3H_5O_{12}Pb_5$
$a = 0.9067$, $c = 2.4637$ nm, $c/a = 2.717$, $V = 1.7541$ nm^3, $Z = 6$

site	Wyck.	sym.	*x*	*y*	*z*	occ.	atomic environment
O1	12*d*	1	0.135	0.293	0.427		single atom B
O2	12*d*	1	0.2	0.52	0.101		single atom B
O3	12*d*	1	0.325	0.515	0.229		single atom B
Pb4	12*d*	1	0.3438	0.4227	0.327	0.5	
(OH)5	6*c*	..*m*	0.154	0	0.736		single atom B
O6	6*c*	..*m*	0.156	0	0.111		single atom B
Pb7	6*c*	..*m*	0.2469	0	0.0179		6-vertex polyhedron $O_4(OH)_2$
(OH)8	6*c*	..*m*	0.297	0	0.538		single atom Pb
B9	6*c*	..*m*	0.318	0	0.426		non-coplanar triangle $(OH)O_2$
Pb10	6*c*	..*m*	0.3255	0	0.216		single atom (OH_2)
(OH_2)11	6*c*	..*m*	0.333	0	0.311		single atom Pb
(OH)12	6*c*	..*m*	0.464	0	0.427		single atom B
Pb13	6*c*	..*m*	0.6495	0	0.1251		single atom (OH)
B14	4*b*	3..	$^1/_3$	$^2/_3$	0.1		non-coplanar triangle O_3
B15	4*b*	3..	$^1/_3$	$^2/_3$	0.228		non-coplanar triangle O_3
O16	4*b*	3..	$^1/_3$	$^2/_3$	0.345		tetrahedron Pb_4
Pb17	4*b*	3..	$^1/_3$	$^2/_3$	0.4373		single atom O
O18	2*a*	3.*m*	0	0	0.0		tetrahedron Pb_4
B19	2*a*	3.*m*	0	0	0.11		non-coplanar triangle O_3
B20	2*a*	3.*m*	0	0	0.235		non-coplanar triangle $(OH)_3$
Pb21	2*a*	3.*m*	0	0	0.4		7-vertex polyhedron O_7

Transformation from published data: *-x*,*-y*,*-z*; origin shift 0 0 0.6
Experimental: single crystal, diffractometer, X-rays, R = 0.067

Remarks: Short interatomic distances for partly occupied site(s). Hydrogen atoms are not taken into consideration for Pearson symbol, Wyckoff sequence and atomic environments.

References: [1] Rastsvetaeva R.K., Arakcheeva A.V., Pushcharovsky D.Y., Vinogradova S.A., Dimitrova O.V., Stefanovich S.Y. (1998), Z. Kristallogr. 213, 240-245.