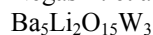
*hP50*(186) $P6_3mc - c^5b^7a^3$ **Ba₁₀W₆Li₄O₃₀** [1], perovskite 10H

Structural features: Close-packed BaO₃ layers in hc₄ stacking; Li and W in octahedral voids. Units of two face-linked octahedra (centered by Li and W, respectively) share vertices with additional WO₆ and LiO₆ octahedra to form a 3D-framework.

Negas T. et al. (1973) [1]

 $a = 0.57603$, $c = 2.3742$ nm, $c/a = 4.122$, $V = 0.6822$ nm³, $Z = 2$

site	Wyck.	sym.	<i>x</i>	<i>y</i>	<i>z</i>	occ.	atomic environment
O1	6 <i>c</i>	. <i>m</i> .	0.16667	0.83333	0.1		colinear WLi
O2	6 <i>c</i>	. <i>m</i> .	0.16667	0.83333	0.4		non-colinear WLi
O3	6 <i>c</i>	. <i>m</i> .	0.5	0.5	0.0		colinear W ₂
O4	6 <i>c</i>	. <i>m</i> .	0.5	0.5	0.3		colinear WLi
O5	6 <i>c</i>	. <i>m</i> .	0.83333	0.16667	0.2		colinear WLi
W6	2 <i>b</i>	3 <i>m</i> .	$\frac{1}{3}$	$\frac{2}{3}$	0.05		octahedron O ₆
Ba7	2 <i>b</i>	3 <i>m</i> .	$\frac{1}{3}$	$\frac{2}{3}$	0.2		cuboctahedron O ₁₂
Li8	2 <i>b</i>	3 <i>m</i> .	$\frac{1}{3}$	$\frac{2}{3}$	0.35		octahedron O ₆
W9	2 <i>b</i>	3 <i>m</i> .	$\frac{1}{3}$	$\frac{2}{3}$	0.45		octahedron O ₆
Ba10	2 <i>b</i>	3 <i>m</i> .	$\frac{1}{3}$	$\frac{2}{3}$	0.6		cuboctahedron O ₁₂
W11	2 <i>b</i>	3 <i>m</i> .	$\frac{1}{3}$	$\frac{2}{3}$	0.75		octahedron O ₆
Ba12	2 <i>b</i>	3 <i>m</i> .	$\frac{1}{3}$	$\frac{2}{3}$	0.9		anticuboctahedron O ₁₂
Ba13	2 <i>a</i>	3 <i>m</i> .	0	0	0.0		cuboctahedron O ₁₂
Li14	2 <i>a</i>	3 <i>m</i> .	0	0	0.15		octahedron O ₆
Ba15	2 <i>a</i>	3 <i>m</i> .	0	0	0.3		cuboctahedron O ₁₂

Transformation from published data: origin shift 0 0 0.85

Experimental: powder, diffractometer, X-rays

Remarks: Idealized coordinates.

References: [1] Negas T., Roth R.S., Parker H.S., Brower W.S. (1973), J. Solid State Chem. 8, 1-13.