

Rb₅BeZr₆Br₁₅*hP*68(182) *P*6₃22 – i³h³gedc**Rb₅Zr₆Br₁₅Be** [1]

Structural features: BeZr₆Br₁₈ units (a central Be atom surrounded by a Zr₆ octahedron, a Br₁₂ cuboctahedron and a Br₆ octahedron) share vertices of the Br₆ octahedron to form a 3D-framework; Rb mainly in large channels parallel to [001] (partial disorder).

Qi R.Y., Corbett J.D. (1995) [1]

BeBr₁₅Rb_{5.05}Zr₆*a* = 1.3009, *c* = 1.206 nm, *c/a* = 0.927, *V* = 1.7675 nm³, *Z* = 2

site	Wyck.	sym.	<i>x</i>	<i>y</i>	<i>z</i>	occ.	atomic environment
Zr1	12 <i>i</i>	1	0.1831	0.5184	0.1359		octahedron BeBr ₅
Rb2	12 <i>i</i>	1	0.194	0.166	0.054	0.31	
Br3	12 <i>i</i>	1	0.4966	0.3297	0.0088		non-colinear Zr ₂
Br4	6 <i>h</i>	..2	0.1647	0.3294	¹ / ₄		non-colinear Zr ₂
Br5	6 <i>h</i>	..2	0.5031	0.0062	¹ / ₄		non-colinear Zr ₂
Rb6	6 <i>h</i>	..2	0.8425	0.685	¹ / ₄	0.64	non-colinear Rb ₂
Br7	6 <i>g</i>	..2.	0.3287	0	0		non-colinear Zr ₂
Rb8	4 <i>e</i>	3..	0	0	0.179	0.49	
Rb9	2 <i>d</i>	3.2	¹ / ₃	² / ₃	³ / ₄	0.29	cuboctahedron Br ₉ Rb ₃
Be10	2 <i>c</i>	3.2	¹ / ₃	² / ₃	¹ / ₄		octahedron Zr ₆

Transformation from published data: origin shift 0 0 ¹/₂

Experimental: single crystal, diffractometer, X-rays, R = 0.044

Remarks: Short interatomic distances for partly occupied site(s).

References: [1] Qi R.Y., Corbett J.D. (1995), Inorg. Chem. 34, 1646-1651.