

$\text{Sr}_2\text{Be}_2\text{B}_2\text{O}_7$ $hP26$ (188) $P\text{-}6c2$ – ligdca **$\text{Sr}_2\text{Be}_2\text{B}_2\text{O}_7$** [1]

Structural features: Units of two vertex-linked BeO_4 tetrahedra share vertices with approximately planar BO_3 trigonal units (perpendicular to $[001]$) to form infinite slabs; Sr in and between the slabs.

Chen C. et al. (1995) [1]

 $\text{B}_2\text{Be}_2\text{O}_7\text{Sr}_2$ $a = 0.4683$, $c = 1.5311$ nm, $c/a = 3.269$, $V = 0.2908$ nm³, $Z = 2$

site	Wyck.	sym.	x	y	z	occ.	atomic environment
O1	12l	1	0.35543	0.05987	0.1382		non-colinear BBe
B2	4i	3..	$\frac{2}{3}$	$\frac{1}{3}$	0.1279		non-coplanar triangle O ₃
Be3	4g	3..	0	0	0.1066		tetrahedron O ₄
Sr4	2d	-6..	$\frac{1}{3}$	$\frac{2}{3}$	$\frac{1}{4}$		trigonal prism O ₆
Sr5	2c	3.2	$\frac{1}{3}$	$\frac{2}{3}$	0		tricapped trigonal prism O ₉
O6	2a	3.2	0	0	0		colinear Be ₂

Transformation from published data: $-x, -y, -z$; origin shift $\frac{2}{3} \frac{1}{3} \frac{1}{2}$

Experimental: single crystal, diffractometer, X-rays, R = 0.043

Remarks: Phase referred to as SBBO.

References: [1] Chen C., Wang Y., Wu B., Wu K., Zeng W., Yu L. (1995), Nature (London) 373, 322-324.