

$\text{Na}_4\text{SrGe}_3[\text{GeO}_4]_3\text{O}_3$ *hP52**(176) P6<sub>3</sub>/m – ih<sup>5</sup>gcb***Na<sub>4</sub>SrGe<sub>3</sub>(GeO<sub>4</sub>)<sub>3</sub>O<sub>3</sub> [1]**

Structural features: Infinite chains of edge-linked GeO<sub>6</sub> octahedra share vertices with GeO<sub>4</sub> tetrahedra to form a 3D-framework; Sr in trigonal prismatic, Na in octahedral and trigonal bipyramidal voids.

Nadezhina T.N. et al. (1975) [1]

Ge<sub>6</sub>Na<sub>4</sub>O<sub>15</sub>Sr $a = 1.0937$ ,  $c = 0.5879$  nm,  $c/a = 0.538$ ,  $V = 0.6090$  nm<sup>3</sup>,  $Z = 2$ 

site	Wyck.	sym.	<i>x</i>	<i>y</i>	<i>z</i>	occ.	atomic environment
O1	12 <i>i</i>	1	0.4682	0.1547	0.0		non-colinear Ge <sub>2</sub>
O2	6 <i>h</i>	<i>m</i> ..	0.0768	0.4632	<sup>1</sup> / <sub>4</sub>		non-colinear Ge <sub>2</sub>
Na3	6 <i>h</i>	<i>m</i> ..	0.1605	0.2841	<sup>1</sup> / <sub>4</sub>		trigonal bipyramid O <sub>5</sub>
O4	6 <i>h</i>	<i>m</i> ..	0.2065	0.082	<sup>1</sup> / <sub>4</sub>		single atom Ge
Ge5	6 <i>h</i>	<i>m</i> ..	0.3884	0.1755	<sup>1</sup> / <sub>4</sub>		tetrahedron O <sub>4</sub>
O6	6 <i>h</i>	<i>m</i> ..	0.4479	0.3604	<sup>1</sup> / <sub>4</sub>		non-coplanar triangle Ge <sub>3</sub>
Ge7	6 <i>g</i>	-1	<sup>1</sup> / <sub>2</sub>	0	0		octahedron O <sub>6</sub>
Sr8	2 <i>c</i>	-6..	<sup>1</sup> / <sub>3</sub>	<sup>2</sup> / <sub>3</sub>	<sup>1</sup> / <sub>4</sub>		tricapped trigonal prism O <sub>9</sub>
Na9	2 <i>b</i>	-3..	0	0	0		octahedron O <sub>6</sub>

Transformation from published data: origin shift 0 0 <sup>1</sup>/<sub>2</sub>

Experimental: single crystal, diffractometer, X-rays, R = 0.049

Remarks: In table 2 of [1] the *z*-coordinate of former O<sub>4</sub> is misprinted as 0.7500 instead of 0.2500 (checked on interatomic distances).

References: [1] Nadezhina T.N., Pobedinskaya E.A., Belov N.V. (1975), Sov. Phys. Crystallogr. 19, 536-538 (Kristallografiya 19, 867-869).