# KSbO₃ (High-Temperature) Structure: AB3C_cP60_201_be_fh_g-001

This structure originally had the label `AB3C_cP60_201_be_fh_g`. Calls to that address will be redirected here.

https://aflow.org/p/WX0M

https://aflow.org/p/AB3C_cP60_201_be_fh_g-001
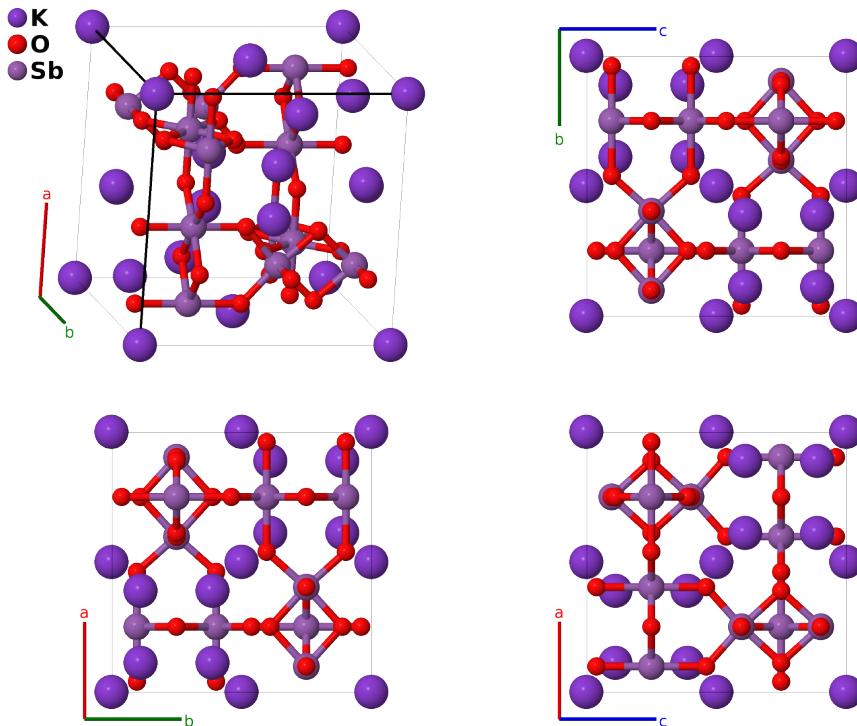
Prototype	KO_3Sb
AFLOW prototype label	AB3C_cP60_201_be_fh_g-001
ICSD	41203
Pearson symbol	cP60
Space group number	201
Space group symbol	$Pn\overline{3}$
AFLOW prototype command	aflow --proto=AB3C_cP60_201_be_fh_g-001 --params=$a, x_2, x_3, x_4, x_5, y_5, z_5$

Simple Cubic primitive vectors

1

$$\mathbf{a_1} = a\,\hat{\mathbf{x}}$$

$$\mathbf{a_2} = a\,\hat{\mathbf{y}}$$

$$\mathbf{a_3} = a\,\hat{\mathbf{z}}$$
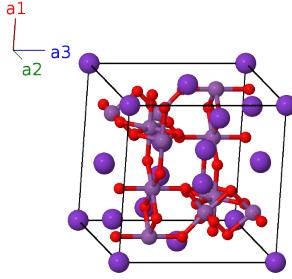
Basis vectors

		Lattice coordinates		Cartesian coordinates	Wyckoff position	Atom type
$\mathbf{B_1}$	$=$	0	$=$	0	(4b)	K I
$\mathbf{B_2}$	$=$	$\frac{1}{2}\,\mathbf{a_1} + \frac{1}{2}\,\mathbf{a_2}$	$=$	$\frac{1}{2}a\,\hat{\mathbf{x}} + \frac{1}{2}a\,\hat{\mathbf{y}}$	(4b)	K I
$\mathbf{B_3}$	$=$	$\frac{1}{2}\,\mathbf{a_1} + \frac{1}{2}\,\mathbf{a_3}$	$=$	$\frac{1}{2}a\,\hat{\mathbf{x}} + \frac{1}{2}a\,\hat{\mathbf{z}}$	(4b)	K I
$\mathbf{B_4}$	$=$	$\frac{1}{2}\,\mathbf{a_2} + \frac{1}{2}\,\mathbf{a_3}$	$=$	$\frac{1}{2}a\,\hat{\mathbf{y}} + \frac{1}{2}a\,\hat{\mathbf{z}}$	(4b)	K I
$\mathbf{B_5}$	$=$	$x_2\,\mathbf{a_1} + x_2\,\mathbf{a_2} + x_2\,\mathbf{a_3}$	$=$	$ax_2\,\hat{\mathbf{x}} + ax_2\,\hat{\mathbf{y}} + ax_2\,\hat{\mathbf{z}}$	(8e)	K II
$\mathbf{B_6}$	$=$	$-\left(x_2 - \frac{1}{2}\right)\mathbf{a_1} - \left(x_2 - \frac{1}{2}\right)\mathbf{a_2} + x_2\,\mathbf{a_3}$	$=$	$-a\left(x_2 - \frac{1}{2}\right)\hat{\mathbf{x}} - a\left(x_2 - \frac{1}{2}\right)\hat{\mathbf{y}} + ax_2\,\hat{\mathbf{z}}$	(8e)	K II
$\mathbf{B_7}$	$=$	$-\left(x_2 - \frac{1}{2}\right)\mathbf{a_1} + x_2\,\mathbf{a_2} - \left(x_2 - \frac{1}{2}\right)\mathbf{a_3}$	$=$	$-a\left(x_2 - \frac{1}{2}\right)\hat{\mathbf{x}} + ax_2\,\hat{\mathbf{y}} - a\left(x_2 - \frac{1}{2}\right)\hat{\mathbf{z}}$	(8e)	K II
$\mathbf{B_8}$	$=$	$x_2\,\mathbf{a_1} - \left(x_2 - \frac{1}{2}\right)\mathbf{a_2} - \left(x_2 - \frac{1}{2}\right)\mathbf{a_3}$	$=$	$ax_2\,\hat{\mathbf{x}} - a\left(x_2 - \frac{1}{2}\right)\hat{\mathbf{y}} - a\left(x_2 - \frac{1}{2}\right)\hat{\mathbf{z}}$	(8e)	K II
$\mathbf{B_9}$	$=$	$-x_2\,\mathbf{a_1} - x_2\,\mathbf{a_2} - x_2\,\mathbf{a_3}$	$=$	$-ax_2\,\hat{\mathbf{x}} - ax_2\,\hat{\mathbf{y}} - ax_2\,\hat{\mathbf{z}}$	(8e)	K II
$\mathbf{B_{10}}$	$=$	$\left(x_2 + \frac{1}{2}\right)\mathbf{a_1} + \left(x_2 + \frac{1}{2}\right)\mathbf{a_2} - x_2\,\mathbf{a_3}$	$=$	$a\left(x_2 + \frac{1}{2}\right)\hat{\mathbf{x}} + a\left(x_2 + \frac{1}{2}\right)\hat{\mathbf{y}} - ax_2\,\hat{\mathbf{z}}$	(8e)	K II
$\mathbf{B_{11}}$	$=$	$\left(x_2 + \frac{1}{2}\right)\mathbf{a_1} - x_2\,\mathbf{a_2} + \left(x_2 + \frac{1}{2}\right)\mathbf{a_3}$	$=$	$a\left(x_2 + \frac{1}{2}\right)\hat{\mathbf{x}} - ax_2\,\hat{\mathbf{y}} + a\left(x_2 + \frac{1}{2}\right)\hat{\mathbf{z}}$	(8e)	K II
$\mathbf{B_{12}}$	$=$	$-x_2\,\mathbf{a_1} + \left(x_2 + \frac{1}{2}\right)\mathbf{a_2} + \left(x_2 + \frac{1}{2}\right)\mathbf{a_3}$	$=$	$-ax_2\,\hat{\mathbf{x}} + a\left(x_2 + \frac{1}{2}\right)\hat{\mathbf{y}} + a\left(x_2 + \frac{1}{2}\right)\hat{\mathbf{z}}$	(8e)	K II
$\mathbf{B_{13}}$	$=$	$x_3\,\mathbf{a_1} + \frac{1}{4}\,\mathbf{a_2} + \frac{1}{4}\,\mathbf{a_3}$	$=$	$ax_3\,\hat{\mathbf{x}} + \frac{1}{4}a\,\hat{\mathbf{y}} + \frac{1}{4}a\,\hat{\mathbf{z}}$	(12f)	O I
$\mathbf{B_{14}}$	$=$	$-\left(x_3 - \frac{1}{2}\right)\mathbf{a_1} + \frac{1}{4}\,\mathbf{a_2} + \frac{1}{4}\,\mathbf{a_3}$	$=$	$-a\left(x_3 - \frac{1}{2}\right)\hat{\mathbf{x}} + \frac{1}{4}a\,\hat{\mathbf{y}} + \frac{1}{4}a\,\hat{\mathbf{z}}$	(12f)	O I
$\mathbf{B_{15}}$	$=$	$\frac{1}{4}\,\mathbf{a_1} + x_3\,\mathbf{a_2} + \frac{1}{4}\,\mathbf{a_3}$	$=$	$\frac{1}{4}a\,\hat{\mathbf{x}} + ax_3\,\hat{\mathbf{y}} + \frac{1}{4}a\,\hat{\mathbf{z}}$	(12f)	O I
$\mathbf{B_{16}}$	$=$	$\frac{1}{4}\,\mathbf{a_1} - \left(x_3 - \frac{1}{2}\right)\mathbf{a_2} + \frac{1}{4}\,\mathbf{a_3}$	$=$	$\frac{1}{4}a\,\hat{\mathbf{x}} - a\left(x_3 - \frac{1}{2}\right)\hat{\mathbf{y}} + \frac{1}{4}a\,\hat{\mathbf{z}}$	(12f)	O I
$\mathbf{B_{17}}$	$=$	$\frac{1}{4}\,\mathbf{a_1} + \frac{1}{4}\,\mathbf{a_2} + x_3\,\mathbf{a_3}$	$=$	$\frac{1}{4}a\,\hat{\mathbf{x}} + \frac{1}{4}a\,\hat{\mathbf{y}} + ax_3\,\hat{\mathbf{z}}$	(12f)	O I
$\mathbf{B_{18}}$	$=$	$\frac{1}{4}\,\mathbf{a_1} + \frac{1}{4}\,\mathbf{a_2} - \left(x_3 - \frac{1}{2}\right)\mathbf{a_3}$	$=$	$\frac{1}{4}a\,\hat{\mathbf{x}} + \frac{1}{4}a\,\hat{\mathbf{y}} - a\left(x_3 - \frac{1}{2}\right)\hat{\mathbf{z}}$	(12f)	O I
$\mathbf{B_{19}}$	$=$	$-x_3\,\mathbf{a_1} + \frac{3}{4}\,\mathbf{a_2} + \frac{3}{4}\,\mathbf{a_3}$	$=$	$-ax_3\,\hat{\mathbf{x}} + \frac{3}{4}a\,\hat{\mathbf{y}} + \frac{3}{4}a\,\hat{\mathbf{z}}$	(12f)	O I
$\mathbf{B_{20}}$	$=$	$\left(x_3 + \frac{1}{2}\right)\mathbf{a_1} + \frac{3}{4}\,\mathbf{a_2} + \frac{3}{4}\,\mathbf{a_3}$	$=$	$a\left(x_3 + \frac{1}{2}\right)\hat{\mathbf{x}} + \frac{3}{4}a\,\hat{\mathbf{y}} + \frac{3}{4}a\,\hat{\mathbf{z}}$	(12f)	O I
$\mathbf{B_{21}}$	$=$	$\frac{3}{4}\,\mathbf{a_1} - x_3\,\mathbf{a_2} + \frac{3}{4}\,\mathbf{a_3}$	$=$	$\frac{3}{4}a\,\hat{\mathbf{x}} - ax_3\,\hat{\mathbf{y}} + \frac{3}{4}a\,\hat{\mathbf{z}}$	(12f)	O I
$\mathbf{B_{22}}$	$=$	$\frac{3}{4}\,\mathbf{a_1} + \left(x_3 + \frac{1}{2}\right)\mathbf{a_2} + \frac{3}{4}\,\mathbf{a_3}$	$=$	$\frac{3}{4}a\,\hat{\mathbf{x}} + a\left(x_3 + \frac{1}{2}\right)\hat{\mathbf{y}} + \frac{3}{4}a\,\hat{\mathbf{z}}$	(12f)	O I
$\mathbf{B_{23}}$	$=$	$\frac{3}{4}\,\mathbf{a_1} + \frac{3}{4}\,\mathbf{a_2} - x_3\,\mathbf{a_3}$	$=$	$\frac{3}{4}a\,\hat{\mathbf{x}} + \frac{3}{4}a\,\hat{\mathbf{y}} - ax_3\,\hat{\mathbf{z}}$	(12f)	O I
$\mathbf{B_{24}}$	$=$	$\frac{3}{4}\,\mathbf{a_1} + \frac{3}{4}\,\mathbf{a_2} + \left(x_3 + \frac{1}{2}\right)\mathbf{a_3}$	$=$	$\frac{3}{4}a\,\hat{\mathbf{x}} + \frac{3}{4}a\,\hat{\mathbf{y}} + a\left(x_3 + \frac{1}{2}\right)\hat{\mathbf{z}}$	(12f)	O I
$\mathbf{B_{25}}$	$=$	$x_4\,\mathbf{a_1} + \frac{3}{4}\,\mathbf{a_2} + \frac{1}{4}\,\mathbf{a_3}$	$=$	$ax_4\,\hat{\mathbf{x}} + \frac{3}{4}a\,\hat{\mathbf{y}} + \frac{1}{4}a\,\hat{\mathbf{z}}$	(12g)	Sb I
$\mathbf{B_{26}}$	$=$	$-\left(x_4 - \frac{1}{2}\right)\mathbf{a_1} + \frac{3}{4}\,\mathbf{a_2} + \frac{1}{4}\,\mathbf{a_3}$	$=$	$-a\left(x_4 - \frac{1}{2}\right)\hat{\mathbf{x}} + \frac{3}{4}a\,\hat{\mathbf{y}} + \frac{1}{4}a\,\hat{\mathbf{z}}$	(12g)	Sb I
$\mathbf{B_{27}}$	$=$	$\frac{1}{4}\,\mathbf{a_1} + x_4\,\mathbf{a_2} + \frac{3}{4}\,\mathbf{a_3}$	$=$	$\frac{1}{4}a\,\hat{\mathbf{x}} + ax_4\,\hat{\mathbf{y}} + \frac{3}{4}a\,\hat{\mathbf{z}}$	(12g)	Sb I
$\mathbf{B_{28}}$	$=$	$\frac{1}{4}\,\mathbf{a_1} - \left(x_4 - \frac{1}{2}\right)\mathbf{a_2} + \frac{3}{4}\,\mathbf{a_3}$	$=$	$\frac{1}{4}a\,\hat{\mathbf{x}} - a\left(x_4 - \frac{1}{2}\right)\hat{\mathbf{y}} + \frac{3}{4}a\,\hat{\mathbf{z}}$	(12g)	Sb I

$$\mathbf{B}_{29} = \tfrac{3}{4}\,\mathbf{a}_1 + \tfrac{1}{4}\,\mathbf{a}_2 + x_4\,\mathbf{a}_3 = \tfrac{3}{4}a\,\hat{\mathbf{x}} + \tfrac{1}{4}a\,\hat{\mathbf{y}} + ax_4\,\hat{\mathbf{z}} \qquad (12g) \qquad \text{Sb I}$$

$$\mathbf{B}_{30} = \tfrac{3}{4}\,\mathbf{a}_1 + \tfrac{1}{4}\,\mathbf{a}_2 - \left(x_4 - \tfrac{1}{2}\right)\,\mathbf{a}_3 = \tfrac{3}{4}a\,\hat{\mathbf{x}} + \tfrac{1}{4}a\,\hat{\mathbf{y}} - a\left(x_4 - \tfrac{1}{2}\right)\,\hat{\mathbf{z}} \qquad (12g) \qquad \text{Sb I}$$

$$\mathbf{B}_{31} = -x_4\,\mathbf{a}_1 + \tfrac{1}{4}\,\mathbf{a}_2 + \tfrac{3}{4}\,\mathbf{a}_3 = -ax_4\,\hat{\mathbf{x}} + \tfrac{1}{4}a\,\hat{\mathbf{y}} + \tfrac{3}{4}a\,\hat{\mathbf{z}} \qquad (12g) \qquad \text{Sb I}$$

$$\mathbf{B}_{32} = \left(x_4 + \tfrac{1}{2}\right)\,\mathbf{a}_1 + \tfrac{1}{4}\,\mathbf{a}_2 + \tfrac{3}{4}\,\mathbf{a}_3 = a\left(x_4 + \tfrac{1}{2}\right)\,\hat{\mathbf{x}} + \tfrac{1}{4}a\,\hat{\mathbf{y}} + \tfrac{3}{4}a\,\hat{\mathbf{z}} \qquad (12g) \qquad \text{Sb I}$$

$$\mathbf{B}_{33} = \tfrac{3}{4}\,\mathbf{a}_1 - x_4\,\mathbf{a}_2 + \tfrac{1}{4}\,\mathbf{a}_3 = \tfrac{3}{4}a\,\hat{\mathbf{x}} - ax_4\,\hat{\mathbf{y}} + \tfrac{1}{4}a\,\hat{\mathbf{z}} \qquad (12g) \qquad \text{Sb I}$$

$$\mathbf{B}_{34} = \tfrac{3}{4}\,\mathbf{a}_1 + \left(x_4 + \tfrac{1}{2}\right)\,\mathbf{a}_2 + \tfrac{1}{4}\,\mathbf{a}_3 = \tfrac{3}{4}a\,\hat{\mathbf{x}} + a\left(x_4 + \tfrac{1}{2}\right)\,\hat{\mathbf{y}} + \tfrac{1}{4}a\,\hat{\mathbf{z}} \qquad (12g) \qquad \text{Sb I}$$

$$\mathbf{B}_{35} = \tfrac{1}{4}\,\mathbf{a}_1 + \tfrac{3}{4}\,\mathbf{a}_2 - x_4\,\mathbf{a}_3 = \tfrac{1}{4}a\,\hat{\mathbf{x}} + \tfrac{3}{4}a\,\hat{\mathbf{y}} - ax_4\,\hat{\mathbf{z}} \qquad (12g) \qquad \text{Sb I}$$

$$\mathbf{B}_{36} = \tfrac{1}{4}\,\mathbf{a}_1 + \tfrac{3}{4}\,\mathbf{a}_2 + \left(x_4 + \tfrac{1}{2}\right)\,\mathbf{a}_3 = \tfrac{1}{4}a\,\hat{\mathbf{x}} + \tfrac{3}{4}a\,\hat{\mathbf{y}} + a\left(x_4 + \tfrac{1}{2}\right)\,\hat{\mathbf{z}} \qquad (12g) \qquad \text{Sb I}$$

$$\mathbf{B}_{37} = x_5\,\mathbf{a}_1 + y_5\,\mathbf{a}_2 + z_5\,\mathbf{a}_3 = ax_5\,\hat{\mathbf{x}} + ay_5\,\hat{\mathbf{y}} + az_5\,\hat{\mathbf{z}} \qquad (24h) \qquad \text{O II}$$

$$\mathbf{B}_{38} = -\left(x_5 - \tfrac{1}{2}\right)\,\mathbf{a}_1 - \left(y_5 - \tfrac{1}{2}\right)\,\mathbf{a}_2 + z_5\,\mathbf{a}_3 = -a\left(x_5 - \tfrac{1}{2}\right)\,\hat{\mathbf{x}} - a\left(y_5 - \tfrac{1}{2}\right)\,\hat{\mathbf{y}} + az_5\,\hat{\mathbf{z}} \qquad (24h) \qquad \text{O II}$$

$$\mathbf{B}_{39} = -\left(x_5 - \tfrac{1}{2}\right)\,\mathbf{a}_1 + y_5\,\mathbf{a}_2 - \left(z_5 - \tfrac{1}{2}\right)\,\mathbf{a}_3 = -a\left(x_5 - \tfrac{1}{2}\right)\,\hat{\mathbf{x}} + ay_5\,\hat{\mathbf{y}} - a\left(z_5 - \tfrac{1}{2}\right)\,\hat{\mathbf{z}} \qquad (24h) \qquad \text{O II}$$

$$\mathbf{B}_{40} = x_5\,\mathbf{a}_1 - \left(y_5 - \tfrac{1}{2}\right)\,\mathbf{a}_2 - \left(z_5 - \tfrac{1}{2}\right)\,\mathbf{a}_3 = ax_5\,\hat{\mathbf{x}} - a\left(y_5 - \tfrac{1}{2}\right)\,\hat{\mathbf{y}} - a\left(z_5 - \tfrac{1}{2}\right)\,\hat{\mathbf{z}} \qquad (24h) \qquad \text{O II}$$

$$\mathbf{B}_{41} = z_5\,\mathbf{a}_1 + x_5\,\mathbf{a}_2 + y_5\,\mathbf{a}_3 = az_5\,\hat{\mathbf{x}} + ax_5\,\hat{\mathbf{y}} + ay_5\,\hat{\mathbf{z}} \qquad (24h) \qquad \text{O II}$$

$$\mathbf{B}_{42} = z_5\,\mathbf{a}_1 - \left(x_5 - \tfrac{1}{2}\right)\,\mathbf{a}_2 - \left(y_5 - \tfrac{1}{2}\right)\,\mathbf{a}_3 = az_5\,\hat{\mathbf{x}} - a\left(x_5 - \tfrac{1}{2}\right)\,\hat{\mathbf{y}} - a\left(y_5 - \tfrac{1}{2}\right)\,\hat{\mathbf{z}} \qquad (24h) \qquad \text{O II}$$

$$\mathbf{B}_{43} = -\left(z_5 - \tfrac{1}{2}\right)\,\mathbf{a}_1 - \left(x_5 - \tfrac{1}{2}\right)\,\mathbf{a}_2 + y_5\,\mathbf{a}_3 = -a\left(z_5 - \tfrac{1}{2}\right)\,\hat{\mathbf{x}} - a\left(x_5 - \tfrac{1}{2}\right)\,\hat{\mathbf{y}} + ay_5\,\hat{\mathbf{z}} \qquad (24h) \qquad \text{O II}$$

$$\mathbf{B}_{44} = -\left(z_5 - \tfrac{1}{2}\right)\,\mathbf{a}_1 + x_5\,\mathbf{a}_2 - \left(y_5 - \tfrac{1}{2}\right)\,\mathbf{a}_3 = -a\left(z_5 - \tfrac{1}{2}\right)\,\hat{\mathbf{x}} + ax_5\,\hat{\mathbf{y}} - a\left(y_5 - \tfrac{1}{2}\right)\,\hat{\mathbf{z}} \qquad (24h) \qquad \text{O II}$$

$$\mathbf{B}_{45} = y_5\,\mathbf{a}_1 + z_5\,\mathbf{a}_2 + x_5\,\mathbf{a}_3 = ay_5\,\hat{\mathbf{x}} + az_5\,\hat{\mathbf{y}} + ax_5\,\hat{\mathbf{z}} \qquad (24h) \qquad \text{O II}$$

$$\mathbf{B}_{46} = -\left(y_5 - \tfrac{1}{2}\right)\,\mathbf{a}_1 + z_5\,\mathbf{a}_2 - \left(x_5 - \tfrac{1}{2}\right)\,\mathbf{a}_3 = -a\left(y_5 - \tfrac{1}{2}\right)\,\hat{\mathbf{x}} + az_5\,\hat{\mathbf{y}} - a\left(x_5 - \tfrac{1}{2}\right)\,\hat{\mathbf{z}} \qquad (24h) \qquad \text{O II}$$

$$\mathbf{B}_{47} = y_5\,\mathbf{a}_1 - \left(z_5 - \tfrac{1}{2}\right)\,\mathbf{a}_2 - \left(x_5 - \tfrac{1}{2}\right)\,\mathbf{a}_3 = ay_5\,\hat{\mathbf{x}} - a\left(z_5 - \tfrac{1}{2}\right)\,\hat{\mathbf{y}} - a\left(x_5 - \tfrac{1}{2}\right)\,\hat{\mathbf{z}} \qquad (24h) \qquad \text{O II}$$

$$\mathbf{B}_{48} = -\left(y_5 - \tfrac{1}{2}\right)\,\mathbf{a}_1 - \left(z_5 - \tfrac{1}{2}\right)\,\mathbf{a}_2 + x_5\,\mathbf{a}_3 = -a\left(y_5 - \tfrac{1}{2}\right)\,\hat{\mathbf{x}} - a\left(z_5 - \tfrac{1}{2}\right)\,\hat{\mathbf{y}} + ax_5\,\hat{\mathbf{z}} \qquad (24h) \qquad \text{O II}$$

$$\mathbf{B}_{49} = -x_5\,\mathbf{a}_1 - y_5\,\mathbf{a}_2 - z_5\,\mathbf{a}_3 = -ax_5\,\hat{\mathbf{x}} - ay_5\,\hat{\mathbf{y}} - az_5\,\hat{\mathbf{z}} \qquad (24h) \qquad \text{O II}$$

$$\mathbf{B}_{50} = \left(x_5 + \tfrac{1}{2}\right)\,\mathbf{a}_1 + \left(y_5 + \tfrac{1}{2}\right)\,\mathbf{a}_2 - z_5\,\mathbf{a}_3 = a\left(x_5 + \tfrac{1}{2}\right)\,\hat{\mathbf{x}} + a\left(y_5 + \tfrac{1}{2}\right)\,\hat{\mathbf{y}} - az_5\,\hat{\mathbf{z}} \qquad (24h) \qquad \text{O II}$$

$$\mathbf{B}_{51} = \left(x_5 + \tfrac{1}{2}\right)\,\mathbf{a}_1 - y_5\,\mathbf{a}_2 + \left(z_5 + \tfrac{1}{2}\right)\,\mathbf{a}_3 = a\left(x_5 + \tfrac{1}{2}\right)\,\hat{\mathbf{x}} - ay_5\,\hat{\mathbf{y}} + a\left(z_5 + \tfrac{1}{2}\right)\,\hat{\mathbf{z}} \qquad (24h) \qquad \text{O II}$$

$$\mathbf{B}_{52} = -x_5\,\mathbf{a}_1 + \left(y_5 + \tfrac{1}{2}\right)\,\mathbf{a}_2 + \left(z_5 + \tfrac{1}{2}\right)\,\mathbf{a}_3 = -ax_5\,\hat{\mathbf{x}} + a\left(y_5 + \tfrac{1}{2}\right)\,\hat{\mathbf{y}} + a\left(z_5 + \tfrac{1}{2}\right)\,\hat{\mathbf{z}} \qquad (24h) \qquad \text{O II}$$

$$\mathbf{B}_{53} = -z_5\,\mathbf{a}_1 - x_5\,\mathbf{a}_2 - y_5\,\mathbf{a}_3 = -az_5\,\hat{\mathbf{x}} - ax_5\,\hat{\mathbf{y}} - ay_5\,\hat{\mathbf{z}} \qquad (24h) \qquad \text{O II}$$

$$\mathbf{B}_{54} = -z_5\,\mathbf{a}_1 + \left(x_5 + \tfrac{1}{2}\right)\,\mathbf{a}_2 + \left(y_5 + \tfrac{1}{2}\right)\,\mathbf{a}_3 = -az_5\,\hat{\mathbf{x}} + a\left(x_5 + \tfrac{1}{2}\right)\,\hat{\mathbf{y}} + a\left(y_5 + \tfrac{1}{2}\right)\,\hat{\mathbf{z}} \qquad (24h) \qquad \text{O II}$$

$$\mathbf{B}_{55} = \left(z_5 + \tfrac{1}{2}\right)\,\mathbf{a}_1 + \left(x_5 + \tfrac{1}{2}\right)\,\mathbf{a}_2 - y_5\,\mathbf{a}_3 = a\left(z_5 + \tfrac{1}{2}\right)\,\hat{\mathbf{x}} + a\left(x_5 + \tfrac{1}{2}\right)\,\hat{\mathbf{y}} - ay_5\,\hat{\mathbf{z}} \qquad (24h) \qquad \text{O II}$$

$$\mathbf{B}_{56} = \left(z_5 + \tfrac{1}{2}\right)\,\mathbf{a}_1 - x_5\,\mathbf{a}_2 + \left(y_5 + \tfrac{1}{2}\right)\,\mathbf{a}_3 = a\left(z_5 + \tfrac{1}{2}\right)\,\hat{\mathbf{x}} - ax_5\,\hat{\mathbf{y}} + a\left(y_5 + \tfrac{1}{2}\right)\,\hat{\mathbf{z}} \qquad (24h) \qquad \text{O II}$$

$$\mathbf{B}_{57} = -y_5\,\mathbf{a}_1 - z_5\,\mathbf{a}_2 - x_5\,\mathbf{a}_3 = -ay_5\,\hat{\mathbf{x}} - az_5\,\hat{\mathbf{y}} - ax_5\,\hat{\mathbf{z}} \qquad (24h) \qquad \text{O II}$$

$$\mathbf{B}_{58} = \left(y_5 + \tfrac{1}{2}\right)\,\mathbf{a}_1 - z_5\,\mathbf{a}_2 + \left(x_5 + \tfrac{1}{2}\right)\,\mathbf{a}_3 = a\left(y_5 + \tfrac{1}{2}\right)\,\hat{\mathbf{x}} - az_5\,\hat{\mathbf{y}} + a\left(x_5 + \tfrac{1}{2}\right)\,\hat{\mathbf{z}} \qquad (24h) \qquad \text{O II}$$

$$\mathbf{B}_{59} = -y_5\,\mathbf{a}_1 + \left(z_5 + \tfrac{1}{2}\right)\,\mathbf{a}_2 + \left(x_5 + \tfrac{1}{2}\right)\,\mathbf{a}_3 = -ay_5\,\hat{\mathbf{x}} + a\left(z_5 + \tfrac{1}{2}\right)\,\hat{\mathbf{y}} + a\left(x_5 + \tfrac{1}{2}\right)\,\hat{\mathbf{z}} \qquad (24h) \qquad \text{O II}$$

$$\mathbf{B}_{60} = \left(y_5 + \tfrac{1}{2}\right)\,\mathbf{a}_1 + \left(z_5 + \tfrac{1}{2}\right)\,\mathbf{a}_2 - x_5\,\mathbf{a}_3 = a\left(y_5 + \tfrac{1}{2}\right)\,\hat{\mathbf{x}} + a\left(z_5 + \tfrac{1}{2}\right)\,\hat{\mathbf{y}} - ax_5\,\hat{\mathbf{z}} \qquad (24h) \qquad \text{O II}$$

References

[1] P. Spiegelberg, *X-ray studies on potassium antimonates*, Arkiv för Kemi, Mineralogi och Geologi A **14** (1940).

Found in

[1] P. Villars and K. Cenzual, *Pearson's Crystal Data – Crystal Structure Database for Inorganic Compounds* (2013). ASM International.