

$\text{K}_4\text{Sr}_2\text{SnAs}_4$ $hP66$ (185) $P6_3cm - d^3c^5$ **$\text{K}_4\text{Sr}_2\text{SnAs}_4$ form II [1]**Structural features: Single SnAs_4 tetrahedra.

Eisenmann B., Rössler U. (2000) [1]

 $\text{As}_4\text{K}_4\text{SnSr}_2$ $a = 1.8013$, $c = 0.767$ nm, $c/a = 0.426$, $V = 2.1553$ nm³, $Z = 6$

site	Wyck.	sym.	x	y	z	occ.	atomic environment
As1	12d	1	0.14324	0.46167	0.4481		single atom Sn
K2	12d	1	0.1825	0.5234	0.0293		16-vertex Frank-Kasper $\text{As}_5\text{K}_8\text{Sr}_2\text{Sn}$
Sr3	12d	1	0.18729	0.3278	0.2233		16-vertex Frank-Kasper $\text{As}_6\text{Sn}_2\text{K}_5\text{Sr}_3$
K4	6c	$\dots m$	0.1296	0	0.0525		16-vertex Frank-Kasper $\text{As}_5\text{Sr}_4\text{K}_6\text{Sn}$
As5	6c	$\dots m$	0.19197	0	0.4589		single atom Sn
As6	6c	$\dots m$	0.3151	0	0.0		single atom Sn
Sn7	6c	$\dots m$	0.33075	0	0.3429		tetrahedron As_4
K8	6c	$\dots m$	0.5299	0	0.2258		16-vertex Frank-Kasper $\text{As}_6\text{K}_6\text{Sn}_2\text{Sr}_2$

Transformation from published data: $-x, -y, -z$; origin shift 0 0 0.1571Experimental: single crystal, diffractometer, X-rays, $R = 0.027$

References: [1] Eisenmann B., Rössler U. (2000), Z. Anorg. Allg. Chem. 626, 1373-1379.