

As – Sc (Arsenic – Scandium)

Crystal structure

Five intermediate compounds have been found in the system. The crystallographic properties of them are given in Table 1.

Table 1. As–Sc. Structure and lattice constants of intermediate compounds [Pearson].

Phase	Structure	Prototype	Lattice parameters [nm]		
			<i>a</i>	<i>b</i>	<i>c</i>
As ₃ Sc ₇	tet	As ₃ Sc ₇	1.43743		0.80257
As ₃ Sc ₅	ort	β-Yb ₅ Sb ₃	1.07038	0.81418	0.72272
As ₂ Sc ₃	ort	S ₃ Sb ₂	1.03754	0.38063	1.03754
As ₂ Sc ₃	ort	C ₂ Cr ₃	0.71423	0.38698	1.47073
As ₂ Sc ₃	tet	As ₂ V ₃	1.03755		0.38064
AsSc	cub	NaCl	0.5487		

Reference

[Pearson] Pearson, W.B.: “Handbook of Lattice Spacings and Structure of Metals and Alloys”, Pergamon Press, New York, (1958), Vol. 1, (1967) Vol. 2