

As – Zr (Arsenic – Zirconium)

Crystal structure

The intermediate phases are listed in Table 1.

Table 1. As–Zr. Crystallographic data of intermediate phases.

Phase	Structure	Prototype	Lattice parameters [nm]			Reference
			<i>a</i>	<i>b</i>	<i>c</i>	
AsZr	cub	NaCl	0.54335			[84 Wil]
As ₅ Zr ₈	ort	Nb ₈ P ₅	2.8449	1.0206	0.37619	[84 Wil]
As ₉ Zr ₁₄	ort	P ₉ Zr ₁₄	1.70987	2.82588	0.37661	[84 Wil]
AsZr ₂	mon		0.36613	1.50782	1.95317	[84 Wil]
				$\beta = 90^\circ$		
AsZr ₃	tet	PTi ₃	1.09734		0.54499	[66 Lun]
As ₂ Zr ₃	ort	S ₃ Sb ₂	1.05302	0.37271	1.02277	[84 Wil]
As ₄ Zr ₇	mon	Nb ₇ P ₄	1.62020	0.36778	1.50394	[84 Wil]

A review of the structure and properties of intermediate phases is given by Okamoto [90 Oka].

References

- [66 Lun] Lundström, T.: Acta Chem. Scand. **20** (1966) 1712
 [84 Wil] Willerström, J.-O.: Acta Chem. Scand. A **38A** (1984) 91
 [90 Oka] Okamoto, H.: Bull. Alloy Phase Diagrams **11** (1990) 574