

As – Rb (Arsenic – Rubidium)

Phase diagram

The phase diagram has been assessed by Sangster et al. [93 San] and redrawn by [Moffatt]. From there information has been obtained to draw Fig. 1.

Crystal structure

Five intermediate phases have been identified in this system. Their crystallographic properties are given in Table 1 ([Massalski], [Pearson]).

Table 1. As–Rb. Crystallographic data of intermediate phases [Pearson], [Massalski].

Phase	Structure	Prototype	Lattice parameters [nm]		
			<i>a</i>	<i>b</i>	<i>c</i>
β -As ₇ Rb ₃ > 608 K	cub		1.1360		
As ₇ Rb ₃					
AsRb	ort	NaP	0.6915	0.6575	1.2040
AsRb ₃	hex	AsNa ₃	0.6052		1.073
As ₆ Rb ₄	ort	Rb ₄ P ₆			
α - As ₁₁ Rb ₃	ort	α - Na ₃ P ₁₁	1.0628	1.5381	1.1134

Figure

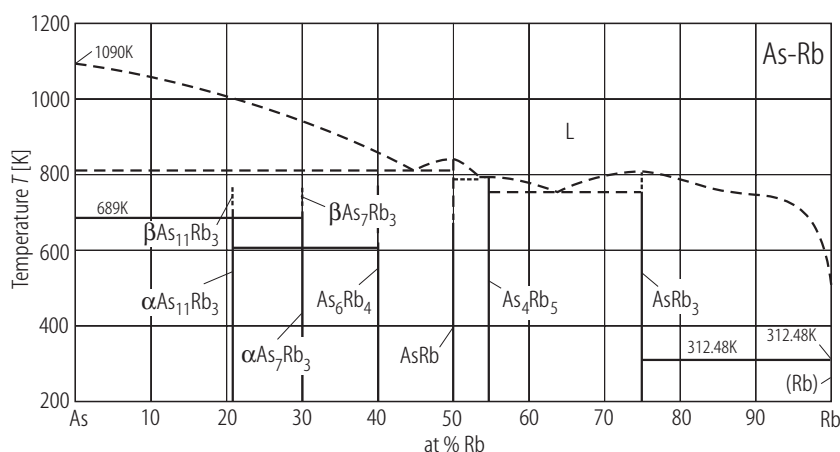


Fig. 1. As–Rb. Phase diagram of the As-Rb system [Moffatt].

References

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