

Al – Rh (Aluminum – Rhodium)

Phase diagram

Using X-ray diffraction, scanning microscopy and transmission electron microscopy, Gruschko et al. [00 Gru] have investigated Al-Rh alloys with concentration between 15 and 30 at% Rh. The results were plotted in Fig. 1.

Crystal structure

Structure and lattice constants of intermediate phases found by [00 Gru] are given in Table 1.

Table 1. Al–Rh. Intermediate phases found in the Al-Rh system.

Phase	Structure	Lattice parameters [nm]			Reference
		<i>a</i>	<i>b</i>	<i>c</i>	
Al ₉ Rh ₂		1.0149	0.6290 $\beta = 142.4^\circ$	0.8557	[67 Eds]
Al ₃ Rh	ort	2.38	1.64	3.28	[00 Gru]
Al ₅ Rh ₂	hex	0.7905		0.7861	[67 Eds]
	cub	0.7680			[99 Gru] [97 Gri]
Al ₇ Rh ₃		1.0309	0.3808 $\beta = 102.4^\circ$	0.6595	[99 Gru]
AlRh	cub	0.2980			[89 Shi]

Figures

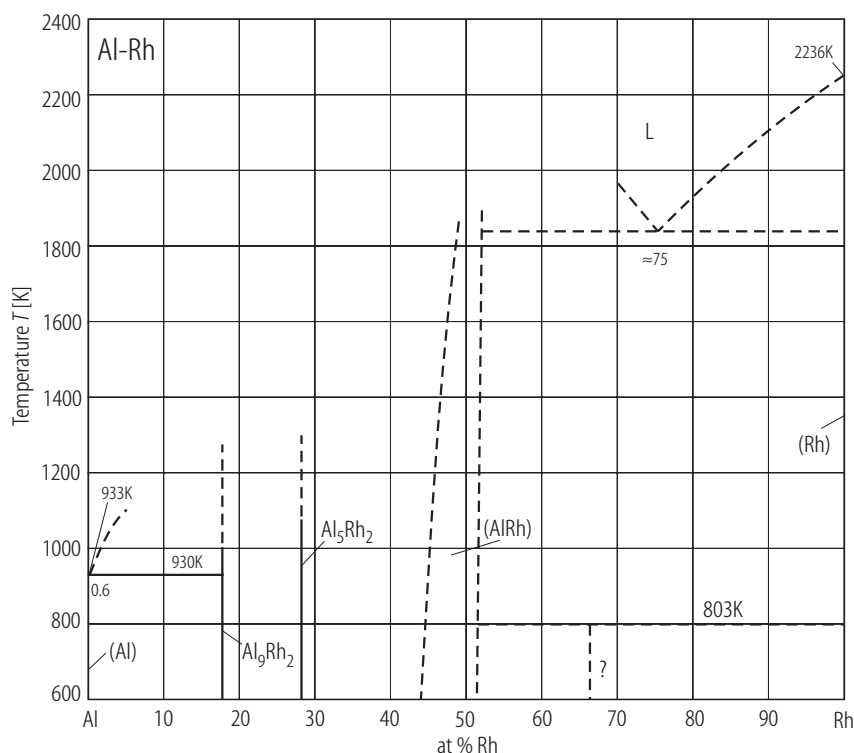


Fig. 1. Al–Rh. Partial phase diagram of the system Al-Rh taken from [00 Gru].

References

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