

Ag – Pm (Silver – Prometium)

Phase diagram

Saccone et al. [90 Sac] have estimated phase equilibria assuming similarity to known systems of Ag with lanthanides. Okamoto [91 Oka] has discussed this procedure. The phase diagram given there is reproduced in Fig. 1.

Crystal structure

Saccone et al. [90 Sac] have predicted the structure and lattice parameters of intermediate phases. Crystallographic data of these compounds are compiled in Table 1.

Table 1. Ag-Pm. Predicted crystal structures in the Ag-Pm system.

Phase	Structure	Type	Lattice parameters [nm]		
			<i>a</i>	<i>b</i>	<i>c</i>
Ag ₅₁ Pm ₁₄	hex		1.270		0.930
β-Ag ₂ Pm					
α-Ag ₂ Pm	ort	CeCu ₂	0.470	0.693	0.816
AgPm	cub	CsCl	0.370		

Figure

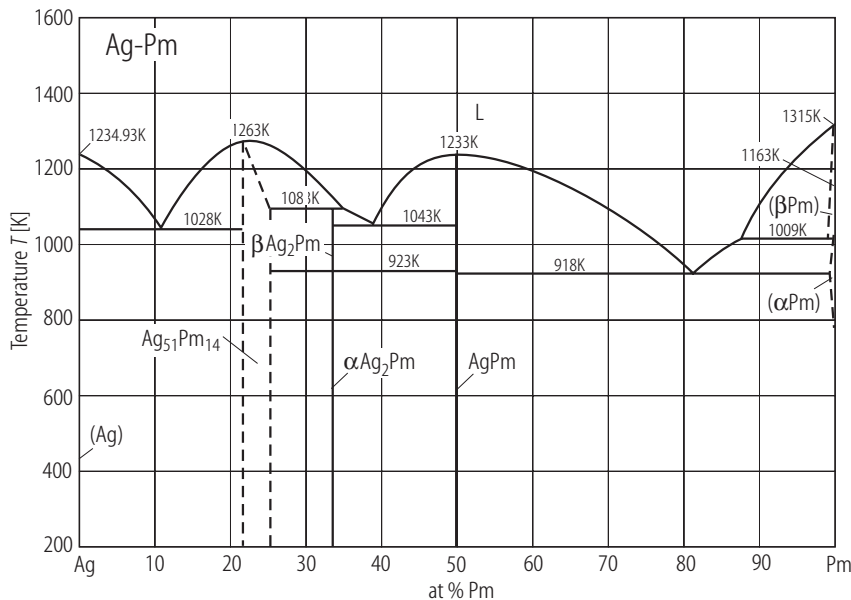


Fig. 1. Ag-Pm. Proposed phase diagram [91 Oka].

References

- [90 Sac] Saccone, A., Delfino, S., Ferro, R.: Calphad **14** (1990) 161
[91 Oka] Okamoto, H.: J. Phase Equilibria **12** (1991) 390