

Al-Sm (Aluminum-Samarium)

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The Al-Sm phase diagram in [Massalski2], redrawn from [1989Gsc], was incomplete.

[1998Sac] determined the complete Al-Sm phase diagram by means of thermal analysis, micrographic examination, microprobe, and X-ray diffraction analyses. Figure 1 shows the Al-Sm phase diagram calculated by [2004Ria] based on the data of [1998Sac].

According to [Massalski2], (α Sm) exists below 734 °C, but this phase was not taken into account in [2004Ria].

References

- 1989Gsc:** K.A. Gschneidner, Jr. and F.W. Calderwood, The Al-Sm (Aluminum-Samarium) System, *Bull. Alloy Phase Diagrams*, 1989, **10**(1), p 37-39
- 1998Sac:** A. Saccone, G. Cacciamani, D. Maccio, G. Borzone, and R. Ferro, Contribution to the Study of the Alloys and Intermetallic Compounds of Aluminum with the Rare-Earth Metals, *Intermetallics*, 1998, **6**(3), p 201-215
- 2004Ria:** P. Riani, L. Arrighi, R. Marazza, D. Mazzone, G. Zanichchi, and R. Ferro, Ternary Rare-Earth Aluminum Systems with Copper: A Review and a Contribution to Their Assessment, *J. Phase Equilib. Diffusion*, 2004, **25**(1), p 22-52

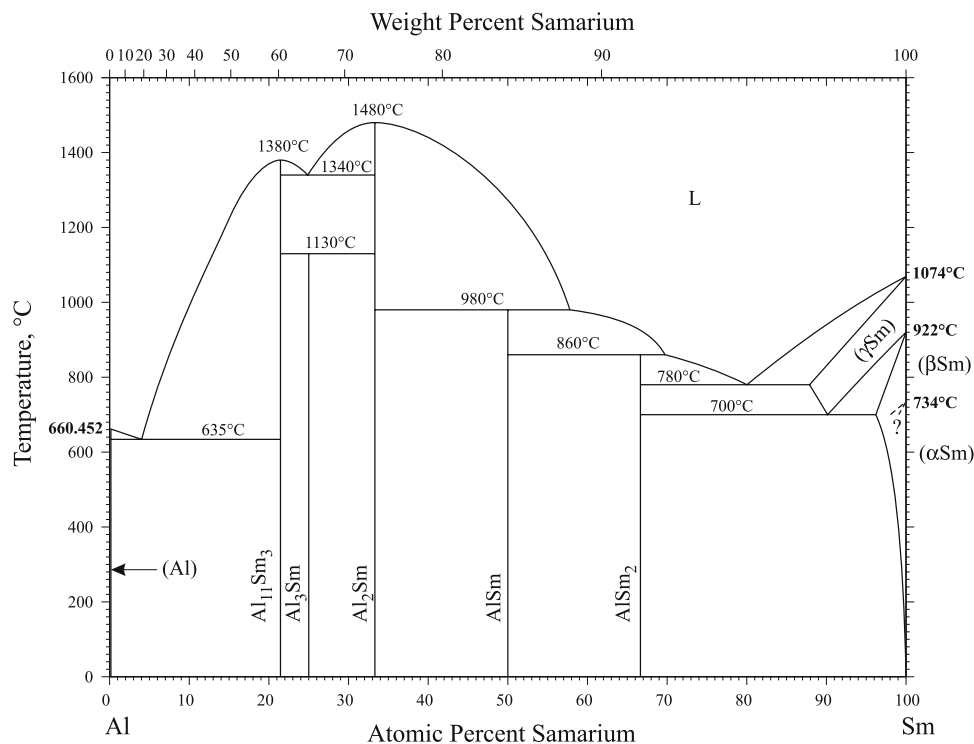


Fig. 1 Al-Sm phase diagram