Al-In (Aluminum-Indium)

H. Okamoto

The Al-In phase diagram in [Massalski2] was redrawn from [1983Mur]. The miscibility gap in the liquid phase of this phase diagram is shown in Fig. 1 with a dashed line. This assessed line was created by depressing a thermodynamically calculated curve by up to about 25 °C only around the critical point for consistency with available experimental data.

Since then, the miscibility gap was determined by viscosity measurements [1995Her] and surface tension/density measurements [2010Kab]. These results were in good agreement with the results of thermal analysis measurements [1965Pre]. The Al-In phase diagram shown in Fig. 1 with solid lines was calculated by [2010Kab] based on these new experimental results. The critical temperature of the miscibility gap was lowered by about 40 °C in comparison with [1983Mur].

References

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Fig. 1 Al-In phase diagram