

Eu-Sn (Europium-Tin)

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Due to lack of data, a Eu-Sn phase diagram was not included in [Massalski2]. The Eu-Sn phase diagram was determined experimentally by [1998Pal] and was included in the updates of [2000Oka] (dashed lines in Fig. 1). Solid lines in Fig. 1 show the Eu-Sn phase diagram as thermodynamically assessed by [2004Liu] on the basis of the experimental data of [1998Pal]. In general, the calculated phase diagram appears to be a better presentation of the experimental data due to, for example, less asymmetry in the Eu_2Sn liquidus around the melting point. However, when the Eu_2Sn liquidus is extrapolated to the Eu rich side beyond the eutectic point, a sudden change of curvature becomes inevitable, as shown with dotted line in Fig. 1. This is an unlikely situation according to [1993Oka]. The

trend shown by [1998Pal] appears to be normal in this range.

References

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- 1993Oka:** H. Okamoto and T.B. Massalski, Guidelines for Binary Phase Diagram Assessment, *J. Phase Equilibria*, Vol 14 (No. 3), 1993, p 316-335
- 2004Liu:** L. Liu, C. Li, F. Wang, Z. Du, and W. Zhang, Thermodynamic Assessment of the Eu-Sn System, *J. Alloys Compds.*, Vol 379, 2004, p 148-153

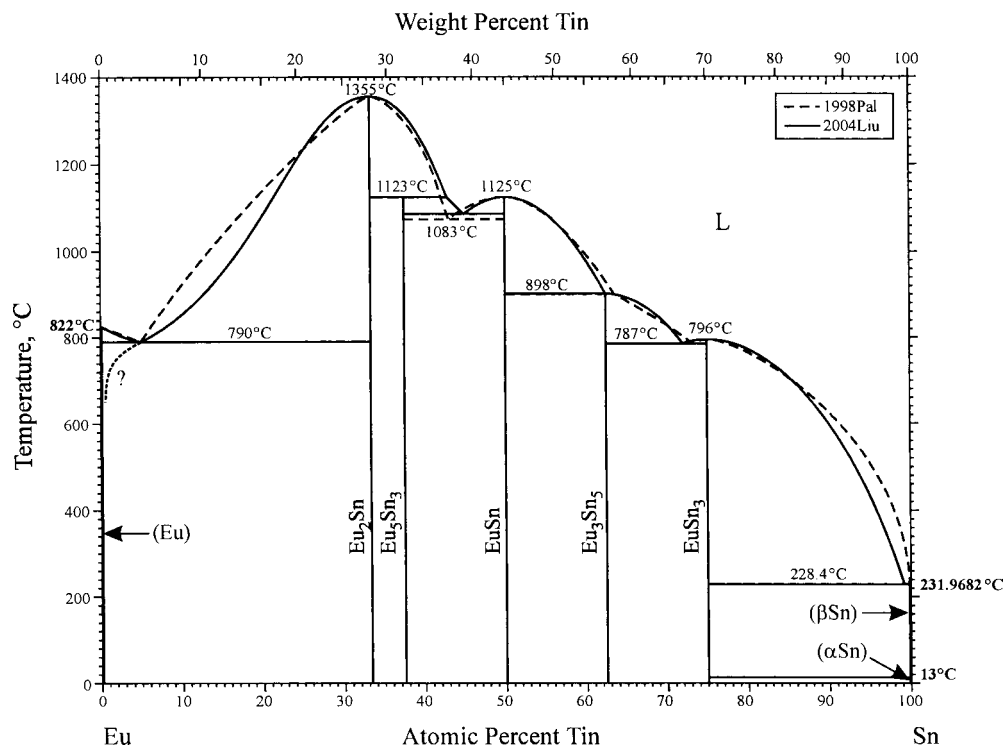


Fig. 1 Eu-Sn phase diagram