

In-Pb (Indium-Lead)

H. Okamoto

In addition to the assessed In-Pb phase diagram in [Masalski2], [1987Nab] showed a calculated In-Pb phase diagram, as shown with dashed lines in Fig. 1. Because essentially no experimental phase boundary data are available to show phase relationships among solid phases, all solvus phase boundaries were shown with vertical lines in [Masalski2]. The liquidus and solidus boundaries of all solid phases shown by [1987Nab] were supported by [2003Min] by means of differential thermal analysis (DTA).

Solid lines in Fig. 1 show the In-Pb phase diagram calculated by [2004Dav] based on more experimentally established thermodynamic data. The results of [1987Nab] and [2004Dav] are in good agreement except the $\alpha + (\text{Pb})$

boundaries at low temperatures. No experimental data are available in this range.

References

- 1987Nab:** J.P. Nabot and I. Ansara, The In-Pb (Indium-Lead) System, *Bull. Alloy Phase Diagrams*, 1987, **8**(3), p 246-255
- 2003Min:** D. Minic, D. Zivkovic, Z. Zivkovic, and L. Stuparevic, Contribution to Phase Diagram Investigation of Pb-In Binary System, *J. Therm. Anal. Calorim.*, 2003, **74**, p 915-922
- 2004Dav:** N. David, K. El Aissaoui, J.M. Fiorani, J. Hertz, and M. Vilasi, Thermodynamic Optimization of the In-Pb-Sn System Based on New Evaluations of the Binary Borders In-Pb and In-Sn, *Thermochim. Acta*, 2004, **413**, p 127-137

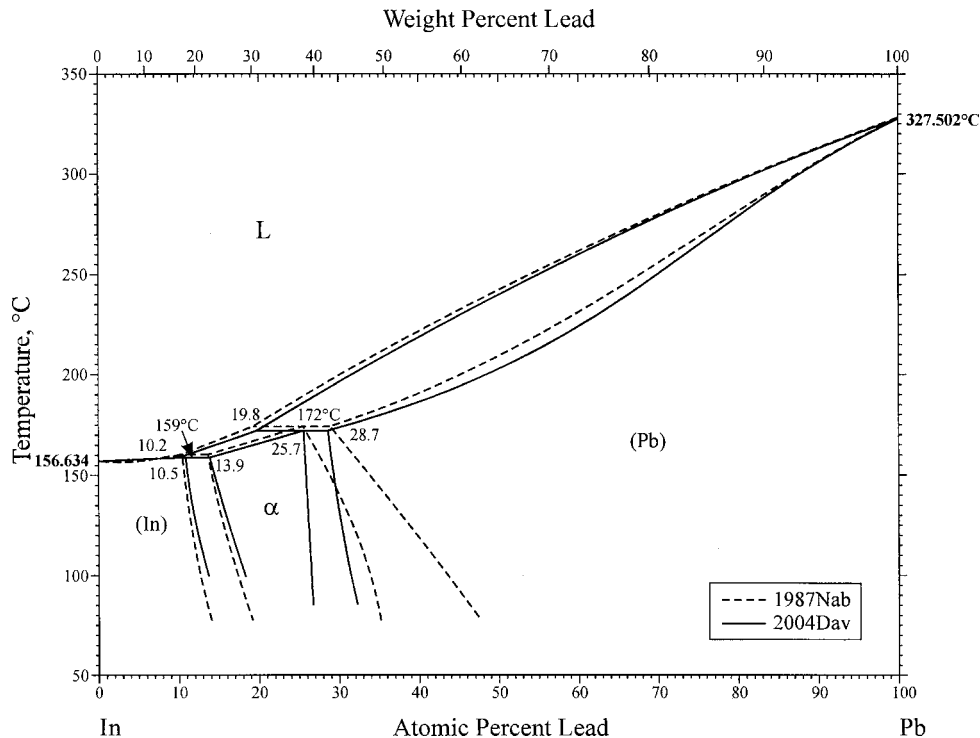


Fig. 1 In-Pb phase diagram