
Supplemental Literature Review

This section is intended to provide the most current phase diagram data. Guidelines for the inclusion of new information in this section are (1) systems for which no phase diagrams are given in *Binary Alloy Phase Diagrams*, second edition; (2) complete diagrams that are substantially different from earlier versions published in *Binary Alloy Phase Diagrams*, second edition, the *Bulletin of Alloy Phase Diagrams*, or single-topic monographs; (3) partial diagrams that alter or clarify earlier versions in the above-mentioned publications; and (4) relevant new literature of interest.

Thermodynamic consistency of the new phase diagrams was checked based on phase rules, and the diagrams were modified if necessary. However, the diagrams and texts have not gone through the ordinary reviewing process, and the final evaluations may be carried out by relevant category editors of the Alloy Phase Diagram Program. For convenience, reaction tables and crystal structure data are added when new information is available.

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Supplemental Literature
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Ag-In (Silver-Indium)

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The Ag-In phase diagram in [Massalski2] was redrawn from [1992Bar] (Fig. 1).

[2005Jen] determined the liquidus curves by emf measurements, as shown with data points in Fig. 1. The result is in agreement with the phase diagram proposed by [1992Bar].

In addition, [2005Jen] calculated the Ag-In phase diagram (Fig. 2). Except for the general trend of the liquidus, [2005Jen] disagrees with [1992Bar] significantly. For example, β and Ag_3In shown in [1992Bar] are missing in [2005Jen], and the shape of the ζ phase is dissimilar. The calculated diagram of [2005Jen] may be regarded as tentative.

The very asymmetric $\zeta/\zeta + \text{Ag}_2\text{In}$ boundary in

[1992Bar], which is unlikely, is resolved in the diagram of [2005Jen]. Therefore, the latter is more attractive in this regard. A further investigation into the relationships among solid phases is needed.

References

- 1992Bar:** M.R. Barren, Ag-In (Silver-Indium), *Phase Diagrams of Indium Alloys and Their Engineering Applications*, C.E.T. White and H. Okamoto, Ed., ASM International, 1992, p 15-19
- 2005Jen:** D. Jendrzejczyk and K. Fitzner, Thermodynamic Properties of Liquid Silver-Indium Alloys Determined from e.m.f. Measurements, *Thermochim. Acta*, **433**, 2005, p 66-71

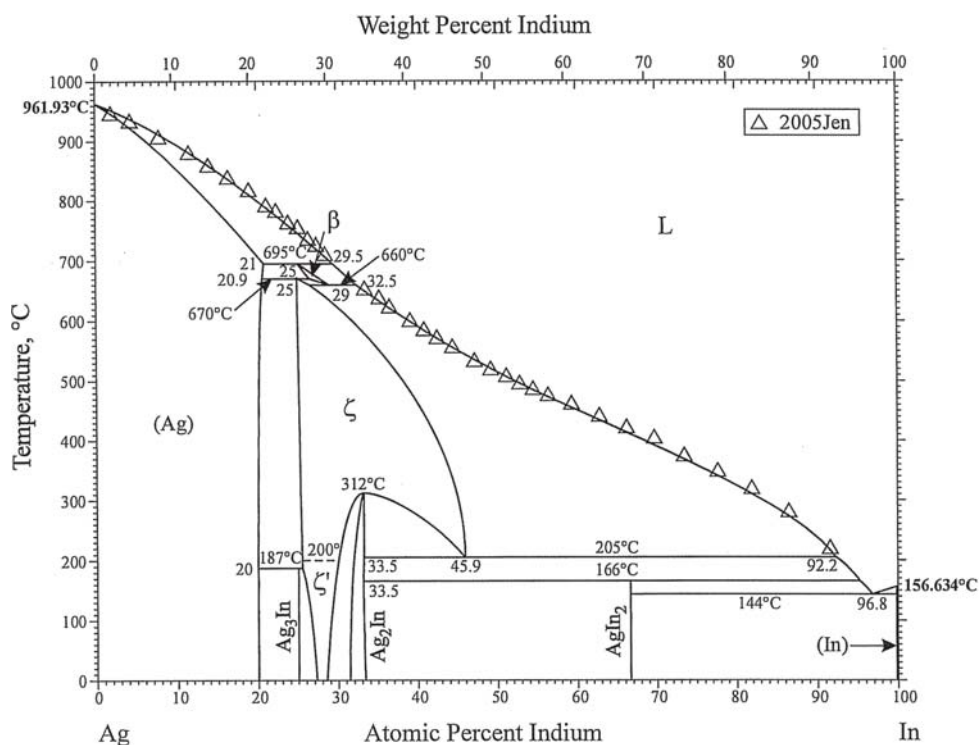


Fig. 1 Ag-In phase diagram assessed by [1992Bar] with data points from [2005Jen]

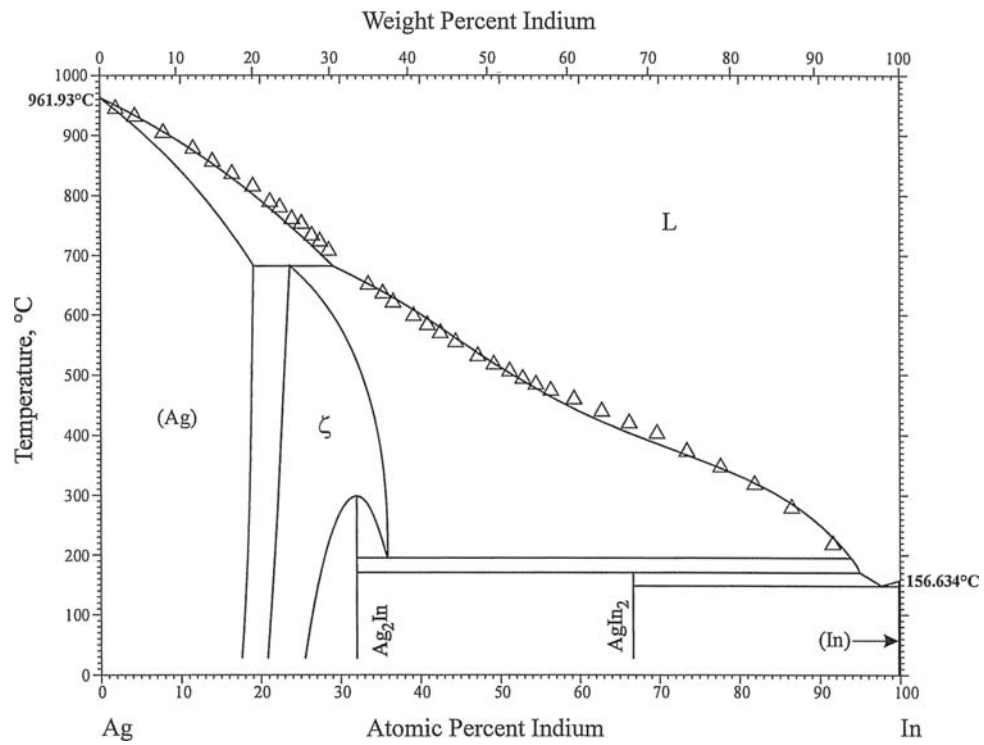


Fig. 2 Ag-In phase diagram calculated by [2005Jen]