

Mn-Pr (Manganese-Praseodymium)

H. Okamoto

The Mn-Pr phase diagram in [Massalski2] was redrawn from [1985Sac]. According to [1994Oka], the change in the liquidus slopes between the (γ Mn) and (β Mn) phases in this phase diagram was too large in view of the small enthalpy of transformation between these two phases.

Figure 1 shows the Mn-Pr phase diagram calculated by [2009Wan]. This phase diagram is based on the same phase boundary data used by [1985Sac], but the interpretation of the data points seems to be better because the problem described above was solved.

References

- 1985Sac:** A. Saccone, S. Delfino, and R. Ferro, Alloying Behavior of Manganese with Basic Metals: Pr-Mn System, *J. Less-Common Met.*, 1985, **108**, p 89-105
- 1994Oka:** H. Okamoto and T.B. Massalski, Binary Alloy Phase Diagrams Requiring Further Studies, *J. Phase Equilib.*, 1994, **15**(5), p 500-521
- 2009Wan:** C.P. Wang, Z. Lin, and X.J. Liu, Thermodynamic Assessments of the Dy-Mn and Mn-Pr Systems, *J. Alloys Compd.*, 2009, **469**, p 123-128

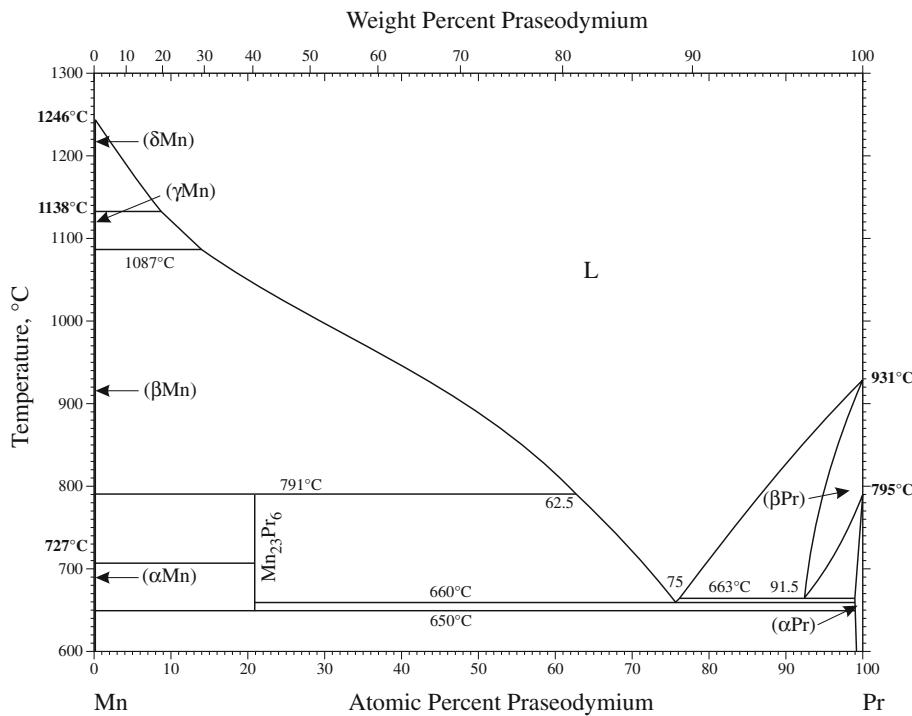


Fig. 1 Mn-Pr phase diagram