

# Ce-Mn (Cerium-Manganese)

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The Ce-Mn phase diagram in [Massalski2] was explained in detail in the assessment by [1996Pal]. The existence of a miscibility gap in the liquid phase was a unique feature of this phase diagram among Rare Earth-Mn phase diagrams.

Figure 1 shows the Ce-Mn phase diagram determined by [2007Tan] by means of x-ray diffraction analysis, differential thermal analysis, and thermodynamic modeling. It was concluded that the miscibility gap does not exist.

Figure 2 shows the Ce-rich corner of the Ce-Mn phase diagram.

## References

- 1996Pal: A. Palenzona and S. Cirafici, The Ce-Mn (Cerium-Manganese) System, *J. Phase Equilibria*, 1997, 17(1), p 53-56
- 2007Tan: C. Tang, Y. Du, L. Zhang, H. Xu, and Z. Zhu, Thermodynamic Assessment of the Ce-Mn System, *J. Alloys Compd.*, 2007, 437, p 102-106

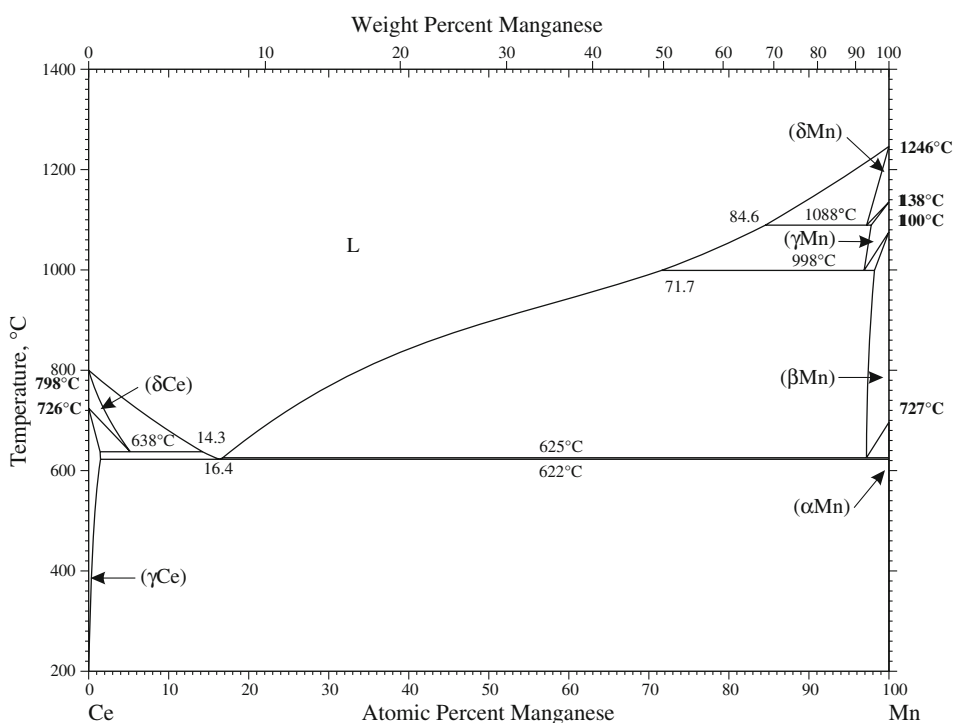


Fig. 1 Ce-Mn phase diagram

