Mg-Tm (Magnesium-Thulium)

H. Okamoto

The Mg-Tm phase diagram in [Massalski2] was redrawn from [88Nay]. Only the Mg-rich region up to 12.6 at.% Tm was determined experimentally by [77Rok]. The rest of the diagram was drawn based on assumed similarity to other Mg-rare earth systems.

Figure 1 shows the Mg-Tm phase diagram determined by [95Sac] by means of XRD, metallography, SEM, DTA, and EPMA. This diagram is similar to that assessed by [88Nay],

but the existence of Mg_yTm_x with y/x slightly greater than 24/5 was not confirmed.

Cited References

- 77Rok: L.L. Rockhlin, Izv. Akad. Nauk SSSR, Met., (1), 181-183 (1977) in Russian; TR: Russ. Metall., (1), 152-154 (1977).
- 88Nay: A.A. Nayeb-Hashemi and J.B. Clark, *Phase Diagrams of Binary Magnesium Alloys*, ASM International, Metals Park, OH, 333-336 (1988).
- **95Sac:** A. Saccone, D. Macciò, S. Delfino, and, R. Ferro, J. Alloy. Compd., 220, 161-166 (1995).

