Bi-Pb (Bismuth-Lead)

H. Okamoto

The Bi-Pb phase diagram for condensed phases was reviewed by [1994Oka]. The result is shown in the temperature range below 350 °C in Fig. 1.

[2009Vol] calculated the gas-liquid phase transition of this system on the basis of the values of vapor pressure of the components for pressures decreasing stepwise by one order of magnitude from 10^5 Pa to 1 Pa. Figure 1 shows the result for near the ambient pressure (10^5 Pa).

According to this calculation, the gas-liquid transition becomes azeotropic under pressures lower than 19.4 kPa.

References

- 1994Oka:** H. Okamoto, Comment on Bi-Pb (Bismuth-Lead), *J. Phase Equilib.*, 1994, **15**(3), p 361-362
2009Vol: V.N. Volodin, Liquid-Vapor Phase Transition Upon Pressure Decrease in the Lead-Bismuth System, *Zh. Fiz. Khim.*, 2008, **83**(11), p 2187-2189, in Russian, TR: *Russ. J. Phys. Chem. A*, 2008, **83**(11), p 1993-1995

Fig. 1 Bi-Pb phase diagram