

P-Sb (Phosphorus-Antimony)

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The partial P-Sb phase diagram (95 to 100 at.% Sb) in [Massalski2] was redrawn from [1952Vog] (see the assessment of this system by [1991Oka]). The complete phase diagram of this system was proposed by [1994Ans] based on thermodynamic modeling. Figure 1 shows the P-Sb phase diagram under the ambient pressure. The boiling point of Sb is 1587 °C according to [Massalski2], but it is shown at a temperature about 50 °C lower. Figure 2 shows the P-Sb phase diagram for the condensed phases (the gas phase is suppressed).

References

- 1952Vog:** R. Vogel and D. Horstmann, The Diagram of State for Iron-Phosphorus-Antimony, *Arch. Eisenhüttenwes.*, 1952, **23**, p 127-128, in German
- 1991Oka:** H. Okamoto, The P-Sb System, *J. Phase Equilib.*, 1991, **12**(2), p 214-215
- 1994Ans:** I. Ansara, C. Chatillon, H.L. Lukas, T. Nishizawa, H. Ohtani, K. Ishida, M. Hillert, B. Sundman, B.B. Argent, A. Watson, T.G. Chart, and T. Anderson, A Binary Database for III-V Compound Semiconductor Systems, *Calphad*, 1994, **18**(2), p 177-222

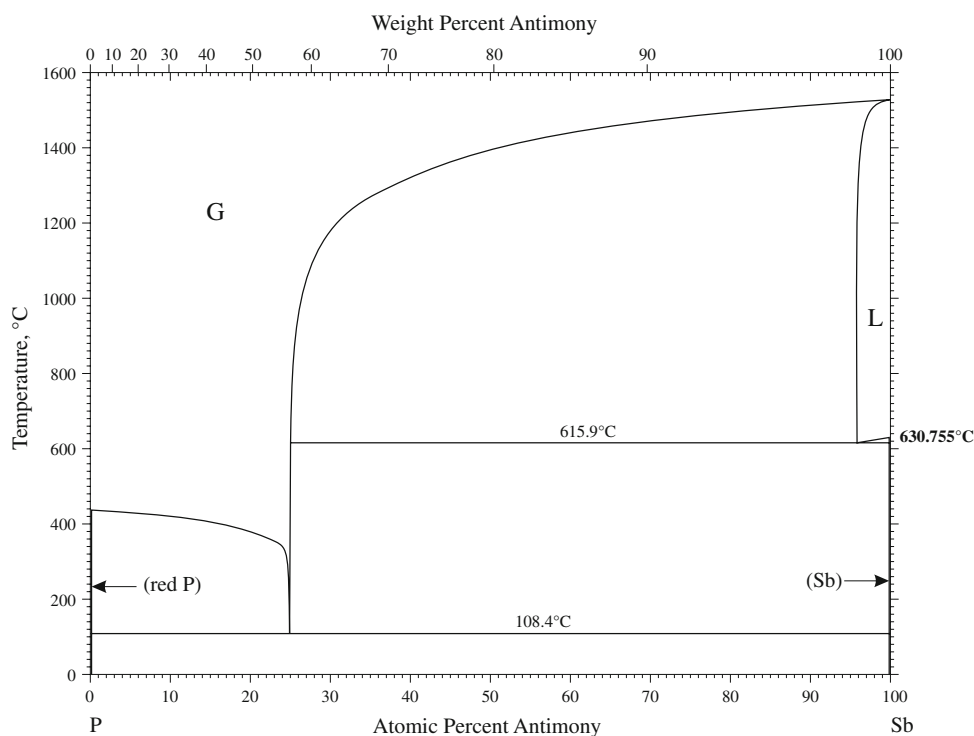


Fig. 1 P-Sb phase diagram at 1 atm. pressure

Section III: Supplemental Literature Review

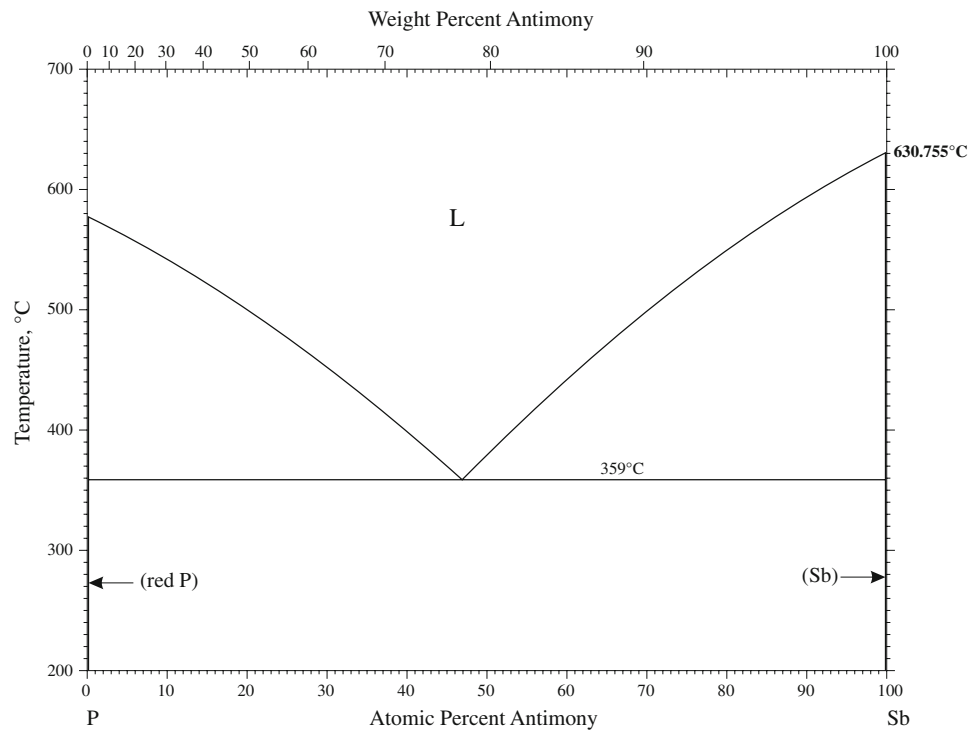


Fig. 2 P-Sb phase diagram for condensed phases