

P-Te (Phosphorus-Tellurium)

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The P-Te phase diagram was unknown in [Massalski2]. [1980Mai] determined white P (α P)-Te phase diagram (Fig. 1) and red P-Te phase diagram (Fig. 2) by means of DTA and metallography. Among various allotropic forms of P, white P is regarded as the equilibrium phase at the ambient temperature.

Table 1 shows P-Te crystal structure data.

References

1980Mai: N.G. Maisashvili, G.Z. Vinogradova, N.V. Timofeeva, and N.P. Luzhnaya, Interaction of Various Phosphorus Modifications with Tellurium, *Zh. Neorg. Khim.*, 1980, **25**(3), p 680-683, in Russian, TR: *Russ. J. Inorg. Chem.*, 1980, **25**(3), p 373-375

Table 1 P-Te crystal structure data

Phase	Composition, at.% Te	Pearson symbol	Space group	Strukturbericht designation	Prototype
(α P)	0	<i>c**</i>
(red P)	0	<i>mP84</i>	<i>P12/c1</i>
PTe	50
(Te)	100	<i>hP3</i>	<i>P3₁21</i>	<i>A8</i>	γ Se

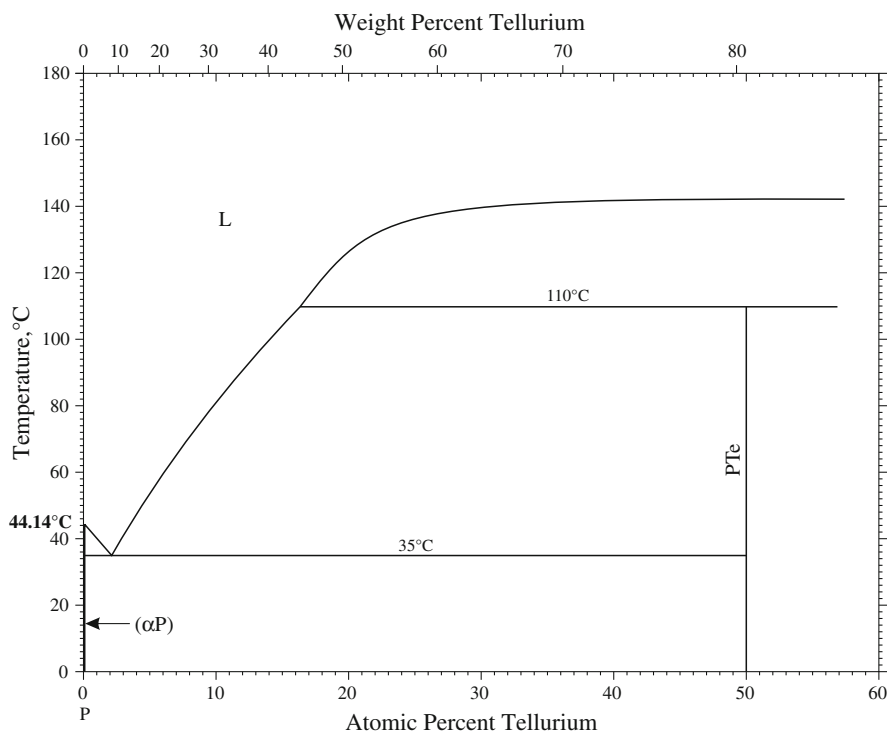


Fig. 1 White P (α P)-Te phase diagram

Section III: Supplemental Literature Review

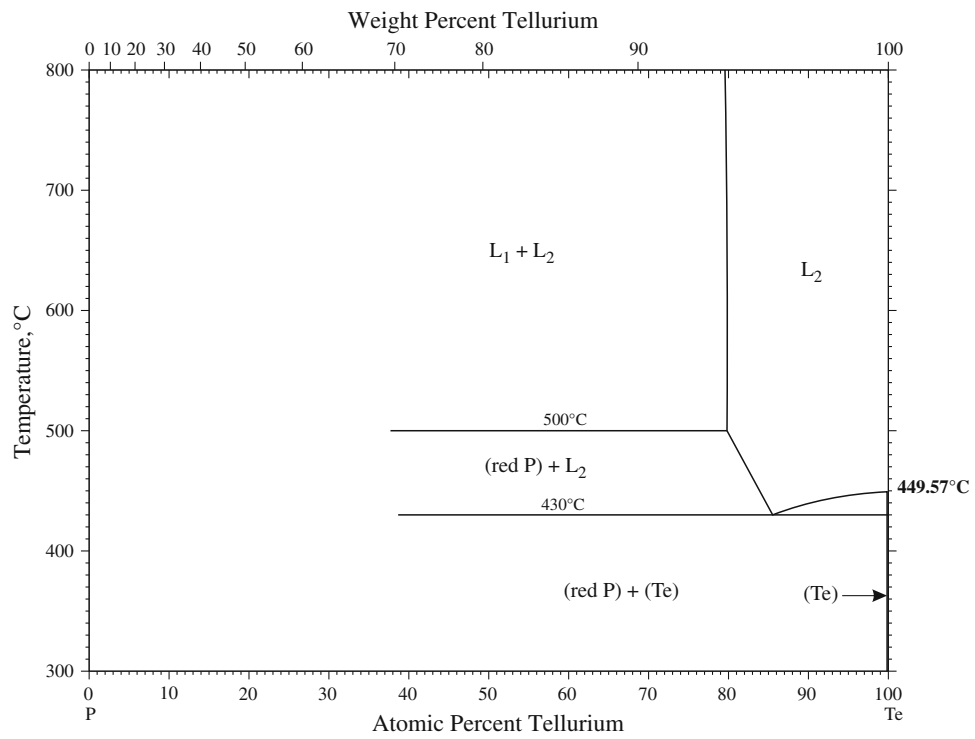


Fig. 2 Red P-Te phase diagram