

P-V-T parameters of propylencarbonate and cis-,trans-decahydronaphthalene in temperature and pressure ranges of 20-50°C and 1-1000 bar

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Abstract

The condensability of propylencarbonate and cis-,trans-decalin (40: 60 wt %) were measured using the liquid weighting method in the temperature and pressure ranges of 20-50°C and 1-1000 bar, respectively. The Tait equation coefficients C and B for this temperature interval were calculated. Taking pro-pylencarbonate as an example, it was demonstrated that equation $1/\beta T = 0.9759 \times (1000V_0/\Delta V_1 \text{ kbar}) - 4386$ proposed earlier for liquids allows us to predict C and B coefficients with good precision. © 2010 Pleiades Publishing, Ltd.

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