

Isothermal vapor–liquid equilibria for the binary systems of propylene oxide with ethanol and 1-propanol

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Isothermal vapor–liquid equilibrium data for the binary systems of propylene oxide with ethanol and 1-propanol were measured in a circulating water bath at 303.15, 318.15, 333.15 K. The apparatus was in-house designed and manufactured. The measured systems were correlated with a Peng–Robinson equation of state combined with Wong–Sandler mixing rule for the vapor phase, and NRTL, UNIQUAC, and Wilson activity coefficient models for the liquid phase.