

Isothermal vapor–liquid equilibria for the binary systems of propylene oxide with propylene and propane

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Isothermal vapor–liquid equilibrium data for the binary systems of propylene oxide with propylene and propane were measured at various temperatures. The experiments were carried out using a circulation-type equilibrium apparatus to measure temperature, pressure, and the compositions. The compositions at equilibrium were measured by gas chromatography. The apparatus was in-house designed and manufactured. The measured systems were correlated with Redlich–Kwong–Soave equation of state combined with van der Waals One-fluid mixing rule for both vapor and liquid phases. All the measured systems showed good agreement with the correlation results.

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References

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