

Vapor-Liquid Equilibria Measurements of Dimethyl Ether Containing System

박유석, 김재덕^{1,*}, 강정원
고려대학교; ¹한국과학기술연구원
(jdkim@kist.re.kr*)

Dimethyl ether (DME) and Difluoromethane (HFC-32) have been used as an alternative refrigerant of Chlorofluorocabons (CFCs). It is important to obtain the phase equilibria data for the development of refrigerant. Isothermal vapor-liquid equilibria data of the binary mixtures of Dimethyl ether (DME) + Difluoromethane (HFC-32) were measured at (283.15~303.15)K. The experiment was carried out in a circulation-type equilibrium apparatus with measurement of temperature, pressure and the compositions of the liquid and vapor phase sample. The experimental data were correlated by Peng-Robinson equation of state with the Wong-Sandler mixing rules.