Vapor-liquid Equilibria of the Tetrafluoroethane (HFC-134a) + Isobutene System

윤용주, 임지훈, 김화용* 서울대학교 (hwayongk@snu.ac.kr*)

Thermodynamic properties of the mixtures such as vapor liquid equilibria are important to decide the optimal compositions of the mixtures and to evaluate the performance of the refrigeration cycles. In this work, binary vapor liquid equilibrium data were measured for the tetrafluoroethane (HFC-134a) + isobutene system at temperatures from 273.15 K to 348.15 K. These experiments were carried out with a circulating-type apparatus with on-line gas chromatograph analysis. The experimental data were correlated well by the Peng-Robinson equation of state using the Wong-Sandler mixing rules.