

An Experimental Study of Vapor-Liquid Equilibrium for Ammonia+Propane Refrigerant Mixtures

J.O. Kang^{C, S}, Y.M. Park, J. Yoo, H.J. Kim and J. Lee

*Graduate School, Department of Mechanical Engineering, Ajou University, Youngtong-gu, Suwon, Korea
tweezer@ajou.ac.kr*

The equilibrium data of binary systems Ammonia Propane were measured. Fifty four equilibrium data for Ammonia+Propane system were measured between 263.15 and 313.15 K at 10 K interval and the composition range 0.2~0.8, respectively. Experiments were performed in a circulation type apparatus in which the vapor phase was forced through the liquid phase. The composition at equilibrium was measured by gas chromatography, and its response was calibrated using gravimetrically prepared mixtures. Vapor-liquid equilibrium data were calculated by using CSD, PR, RKS equation of state and compared with the experimental data.