

Excess Molar Properties (H^E , V^E and Δn_D) for Binary Systems of {1,2-dichloropropane + 2-alkoxyethanols} at 298.15 K and 101.3 kPa

심효원, 이정하, 김문갑[†]

경북대학교

(mg_kim@knu.ac.kr[†])

The excess molar enthalpies, volumes and deviations in refractive indices for the binary systems of 1,2-dichloropropane (1,2-DCP) + 2-alkoxyethanols. The 2-alkoxyethanols selected in this work were: 2-isopropoxyethanol (C-C, single bond), 2-allyloxyethanol (C=C, double bond) and 2-phenoxyethanol (C₆H₅-, phenyl group). These experimental data (H^E , V^E and Δn_D) were measured over the whole composition range at T=298.15 K and 101.3 kPa using an isothermal calorimeter, densimeter and refractometer, respectively. The experimental results of H^E , V^E and Δn_D were fitted to modified Redlich-Kister equation to present the composition dependence of excess properties. The H^E values were also correlated using thermodynamic models (Wilson, NRTL, and UNIQUAC).