Dilutor Method를 이용한 DMC 포함계의 무한희석활동도계수

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The knowledge of activity coefficients at infinite dilution (γ^{∞}) are of particular importance for the synthesis, design, and optimization of separation processes because the largest separation effort is required to remove the last traces of impurities. Furthermore, reliable γ^{∞} values are required to select selective solvents (entrainers) for separation processes such as extractive distillation, extraction, and so forth or to check for separation problems(azeotropic points and miscibility gaps). In this work γ^{∞} values for dimethyl carbonate(DMC)+ methanol mixture and different hydrocarbons (n-heptane and benzene) for DMF and DMF/water mixtures measured with the help of the dilutor technique in the temperature of 30, 40 and 50 °C are reported, and the experimental data are compared with the estimated values using modified UNIFAC(Dortmund).