

## Vapor-Liquid Equilibria for the Binary System of Difluoromethane and Dimethyl Ether

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The Difluoromethane (HFC-32) and Dimethyl ether (DME) may have good potential 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 Difluoromethane (HFC-32) + Dimethyl ether (DME) were measured at 283.15, 293.15 and 303.15K. 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 well correlated by Peng-Robinson equation of state with the Wong-Sandler mixing rules.