CO_2 + 1,1,1,2-Tetrafluoroethane (HFC-134a) VLE Measurement at 323.15K to 343.15K

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Isothermal vapor-liquid equilibrium data for the binary system of carbon dioxide + 1,1,1,2-tetrafluoroethane (HFC-134a) were measured at various temperatures (323.15, 328.15, 333.15, 338.15 and 343.15 K) using a circulation type equilibrium apparatus in which both vapor and liquid phases were recirculated. The equilibrium composition for both vapor and liquid phase were analyzed by a gas chromatograph.
Azeotropic point was not found in this study. Peng-Robinson equation of state with Wong-Sandler mixing rule can be used to estimate the thermodynamic properties of the binary system of CO_2 (1) + HFC-134a (2)