Vapor-Liquid Equilibria Measurement for the System of carbon dioxide(CO_2)+ 1,1,1-trifluoroethane(R143a)

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Isothermal vapor-liquid equilibria data for the binary mixture of carbon dioxide(CO2)+ 1,1,1-trifluoroethane(R143a) were measured within the range 283.15-313.13K. The data in the two-phase region were measured by using a circulation-type equilibrium apparatus in which both vapor and liquid phases were recirculated. The experimental data were correlated the Peng-Robinson equation of state(PR-EOS) combined with the Wong-Sandler mixing rule. It is confirmed that the data calculated by this equation of state are in good agreement with experimental data.