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CHEMICAL ENGINEERING DATA

对二甲苯和醋酸二元液体混合物在不同温度下的超额摩尔体积、粘度和热容

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摘要 Experimental densities, viscosities and heat capacities at different temperatures were presented overthe entire range of mole fraction for the binary mixture of p-xylene and acetic acid. Density values were used in thedetermination of excess molar volumes, VE. At the same time, the excess viscosity and excess molar heat capacitieswere calculated. The values of VE, ηE and cpE were fitted to the Redlich-Kister equation. Good agreements wereobserved. The excess molar volumes are positive with a large maximum value located in the central concentrationrange. The excess viscosity has an opposite trend to the excess molar volume VE. ηE values are negative over theentire range of the mixture. The cure of dependence of cEp on concentration has a special shape. The molecularinteraction between p -xylene and acetic acid is discussed.

关键词 viscosity heat capacity density excess molar volume molecular interaction

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Excess Molar Volume, Viscosity and Heat Capacity for the Binary Mixture of p-Xylene and Acetic Acid at Different Temperatures

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Key words viscosity; heat capacity; density; excess molar volume; molecular interaction

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