

THERMODYNAMICS

二元混合物环丁烷和对二甲苯、乙苯在温度范围为303.15—353.15K下的密度、黏度及其相关性质

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摘要 Densities and viscosities of the binary systems of sulfolane+ethylbenzene, sulfolane+p-xylene have been experimentally determined in temperature interval 303.15—

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关键词 密度 黏度 二甲苯 硫化工艺 温度 硫化物

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Densities, Viscosities and Related Properties for Binary Mixtures of Sulfolane + p-Xylene, Sulfolane + Ethylbenzene in the Temperature Range from 303.15K to 353.15K

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Abstract Densities and viscosities of the binary systems of sulfolane+ethylbenzene, sulfolane+p-xylene have been experimentally determined in temperature interval 303.15—353.15 K and at atmospheric pressure for the whole composition range. The excess molar volumes and viscosity deviations were computed. The computed quantities have been fitted to Redlich-Kister equation. Excess molar volumes and viscosity deviation show a systematic change with increasing temperature. Two mixtures exhibit negative excess volumes with a minimum which occurs approximately at $x = 0.5$. The effect of the size, shape and interaction of components on excess molar volumes and viscosity deviations is discussed.

Key words density, viscosity, excess molar volume, sulfolane.

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