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THERMODYNAMICS AND CHEMICAL.....

SRK状态方程用于聚合物体系的汽液和气液平衡

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摘要 A simple extension of cubic equations of state (EOS) to polymer systems has been proposed. The So-ave-Redlich-Kwong (SRK) EOS was taken as a prototype to be used to describe the PVT behavior of polymer melts in a wide temperature and pressure range. Combined with a modified Huron-Vidal gE-mixing rule it was applied for modeling vapor-liquid equilibria of polymer-solvent solutions and the solubility of supercritical gases in polymer melts. Satisfactory results are obtained.

关键词 SRK equation of state polymer phase equilibrium PVT behavior

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Modeling VLE and GLE of systems involving polymers by using SRK equation of state

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Abstract A simple extension of cubic equations of state (EOS) to polymer systems has been proposed. The So-ave-Redlich-Kwong (SRK) EOS was taken as a prototype to be used to describe the PVT behavior of polymer melts in a wide temperature and pressure range. Combined with a modified Huron-Vidal gE-mixing rule it was applied for modeling vapor-liquid equilibria of polymer-solvent solutions and the solubility of supercritical gases in polymer melts. Satisfactory results are obtained.

Key words SRK equation of state; polymer; phase equilibrium; PVT behavior

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