

RESEARCH NOTES

高压下甲烷在乙醇-正己烷混合溶剂中的溶解度测定与研究

华超, 马沛生, 夏淑倩, 白鹏

School of Chemical Engineering and Technology, Tianjin University, Tianjin 300072, China

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摘要 Solubility data were first presented for methane in the mixture of ethanol-hexane at temperatures from 291.15K to 318.15K and pressures up to 12.00MPa. The experimental data were correlated by PR and PRSV equations of state with rms errors of about 0.051. The A-K and Y-W-A-K models were both used to estimate liquid molar volume under high pressure. The results were satisfactory.

关键词 甲烷, 溶解度, 混合物, 己烷, 乙醇, 压力

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Solubility of Methane in the Mixture of Ethanol+ Hexane at High Pressures

HUA Chao, MA Peisheng, XIA Shuqian, BAI Peng

School of Chemical Engineering and Technology, Tianjin University, Tianjin 300072, China

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Abstract Solubility data were first presented for methane in the mixture of ethanol-hexane at temperatures from 291.15K to 318.15K and pressures up to 12.00MPa. The experimental data were correlated by PR and PRSV equations of state with rms errors of about 0.051. The A-K and Y-W-A-K models were both used to estimate liquid molar volume under high pressure. The results were satisfactory.

Key words solubility; methane; liquid molar volume; equation of state.

通讯作者:

华超

作者个人主页: 华超; 马沛生; 夏淑倩; 白鹏

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