

عنوان مقاله:

Study of Vapor-liquid phase equilibria of systems of n.butanol / n.octanol and terc.butanol/ n.octanol Experimental and UNIQUAC and NRTL models

محل انتشار:

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خلاصه مقاله:

Vapor liquid phase equilibria for the system of tert-butanol (TBA) + n.octanol (IOA) and n-butanol (NBA) + IOA were investigated experimentally at temperatures in the range of 353.15- 458.15 K is reported at 101.3 kPa. The experimental values Vapor liquid have been obtained by gas chromatography (GC). These results were correlated simultaneously by the UNIQUAC and NRTL models. The results were used to estimate the interaction parameters between each pair of components in the system of the UNIQUAC and NRTL models. The UNIQUAC model for the systems TBA + IOA and NBA+IOA, fit the experimental data with an average root mean square deviation (RMSD). Of 4.71 % and 6.43% respectively, the NRTL model for the systems TBA+IOA and NBA+IOA RMSD of 7.78 and 9.6% respectively.

کلمات کلیدی:

Vapor liquid equilibria; binary system; Uniquac and NRTL; Models; Gas chromatography (GC); coefficients of activities; energy excess

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