عنوان مقاله:

NRTL and UNIQUAC Models for Liquid–Liquid Equilibrium in the System of Furfural and Light Lubricating Oil

محل انتشار:

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خلاصه مقاله:

According to complex and undefined compounds in lube cuts, this complex material needs more definition and specialization. In this paper, lube cut as a mixture of aromatic group and nonaromaticgroups (including paraffin and naphthene) is considered and each group considered as a pseudo component. The results of the UNIQUAC (Universal QUAsi Chemical) and NRTL models -applied in LLE system- by using numerical solution in different temperatures and differentvolume ratios of solvent-to-feed is compared with the results of PNA method (RIAZI et al) basedon experimental data. There is a good agreement between the numerical method results and theexperimental data. The results of numerical method using UNIQUAC model are closer to theexperimental data in comparison with the results of numerical method using NRTL model. Comparison values are include, equilibrium components weight or mole fractions, yield and other parameter, in extract and raffinate phases

کلمات کلیدی:

Lube Cut, Furfural, Liquid-Liquid Equilibrium, UNIQUAC Model, NRTL model

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