

## عنوان مقاله:

Study of Molecular Interactions in Binary Mixtures of Ethylmethylketone and 2-alkanol by Excess Number of i and j  
(Molecules Around a Central Molecule j ( $\Delta_{nij}$ ))

## محل انتشار:

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## خلاصه مقاله:

In order to study the nature, type, and magnitude of interactions in the binary mixtures of methyl-ethyl-ketone and a series of 2-alkanol from 2-propanol up to 2-heptanol, excess (or deficit) numbers of i and j molecules around a central molecule j ( $\Delta_{nij}$ ), by being linked to the KB integrals, have been used and reported at  $T=298.15$  K. Negative values of  $\Delta_{nij}$  and  $\Delta_{nji}$  and positive values of  $\Delta_{nii}$  and  $\Delta_{njij}$  indicate the fact that in the mixtures the tendency of the similar molecular components to form the new interactions and stay together is much higher than the dissimilar molecular components. Investigating the changes in the calculated quantities for different mixtures shows that with the increase in the length of the alcoholic chain, the tendency of the heterogeneous molecules to interact with each other decreases.

## کلمات کلیدی:

Kirkwood-Buff integrals, methylethylketone, 2-Alkanol, molecular interactions

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/964627>

