

## **Solvation of Aliphatic Ketones in a Carbon Tetrachloride-Acetonitrile Mixture. Comparison of Calorimetric and IR spectral Methods**

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### **Abstract**

The enthalpies of dissolution of hexane, acetone, butanone, and 2-octanone and also the absorption frequencies of the carbonyl groups of the above-listed ketones in a series of carbon tetrachloride -acetonitrile mixtures of various compositions were determined. The enthalpy of solvation of these ketones is additive with respect to the group composition of the molecule of a compound to be dissolved. The effect of a solvent on the enthalpy of solvation of the carbonyl group principally correlates to the change in its absorption in the IR spectrum. The effect of the size of the alkyl substituent at the carbonyl group on the IR spectral parameters of the preferable solvation was found.

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