Thematic course: Kinetics and mechanism of acyl transfer reactions. Part 8.

Influence of the solvent water-2 propanol composition on the kinetics of alyphatic amines reactions with 4-nitro phenylbenzoate

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Abstract

Influence of the composition of the binary system water-2-propanol on the kinetics of diethyl amine and dibutyl amine reactions with 4-nitro phenylbenzoate is investigated. The equations are obtained that connect rate constants of the reactions with the binary solvent composition. A compensation effect is detected. Quantum chemical simulation of diethyl amine and dibutyl amine H-complexes with the solvent components is carried out. The kinetic data are compared with orbital characteristics of the solvate complexes.