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Kinetics of the conformer reactions: II. 1 significance of media in the electrophilic addition reactions

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Abstract

The kinetics of electrophilic addition reaction of bromine to a multiple bond in a series of conformationally unhomogenous 2-substituted 1,3-dioxo-5-cycloheptenes was studied. We found that the compounds with trans structure are formed. The partial reaction rate constant for chair and twist forms and the reaction susceptibility parameters to the substituent electronic effect at the C2 atom are obtained. Relative reactivity of the alternative steric structures is defined by the specific solvation of the substrate. The result obtained are compared with those achieved without accounting for conformational term.

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