

Effects of temperature and concentration factors on the conformational state and reactivity of potassium poly(oxyethylene glycolate)

Davletbaeva I., Shkodich V., Gumerov A., Vasil'Ev G.
Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

With the use of pulsed magnetic-field gradient NMR, self-diffusion coefficients of potassium poly(oxyethylene glycolate) macromolecules and solvent molecules (acetone) and the variation in the dimensions of supramolecular structures of potassium poly(oxyethylene glycolate) with temperature and its concentration in acetone are measured. It is discovered that the temperature dependences of change in the rate constants of reactions that proceed during the interaction of potassium poly(oxyethylene glycolate) with 2,4-toluylene diisocyanate do not fit Arrhenius coordinates. © 2010 Pleiades Publishing, Ltd.

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