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KINETICS OF GELATIN HARDENING BY CERTAIN ALDEHYDE AND EPOXY HARDENERS IN CONCENTRATED MEDIA.

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Abstract

Study of the influence of gelatin concentration on the rate of its hardening by hardeners differing in activity showed that in the case of highly reactive hardeners in concentrated solutions the process is controlled by diffusion and the reaction rate falls sharply. In the case of hardeners of low reactivity the reaction rate is independent of concentration. The results obtained provide a link between the kinetic parameters of gelatin hardening in dilute and concentrated solutions, making it possible to calculate the time required for any specified degree of hardening in solutions of any concentration.