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The effect of flocculants on electrokinetic and sedimentation properties of aqueous suspensions of cellulose nitrates

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Abstract

The effect of water-soluble polymers of various natures on the electrokinetic and sedimentation properties of aqueous suspensions of cellulose nitrates were studied. The greatest flocculating effect was observed upon introduction of a nonionic polymer, polyoxyethylene (0.12% with respect to dry fiber) into the nitrocellulose suspension. In this case, the electrokinetic potential decreases almost to zero. The mechanisms of action of flocculants of various natures (cationic, anionic, and nonionic) were discussed.