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Analysis of the predictive capability of rheological characteristics of filled lacquer compositions based on cellulose nitrate

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Abstract

The dependence of the effective viscosity of filled 2% solutions of cellulose nitrates the concentration of HMX, which has an extreme character with pronounced minima at the filler concentration ~15 and ~50 wt.% has been presented. It is established that due to the multifactorial nature of the rheological properties of heterogeneous nitrate cellulose lacquer compositions, none of the known mathematical functions can be used to predict the rheological behavior of systems in the formation of the spherical powder.