

Hydrochemical deposition of polyvinyl acetate from aqueous dispersion

© Rinat O. Almashev,* Nadezhda Roman'ko, Anna V. Kiprova,⁺

Elena V. Nurullina, Tatiana A. Eneykina, Sergey V. Soldatov,

Anna V. Kiprova,⁺ Elvira N. Tarazova, Roza F. Gatina, and Yury M. Mikhailov

Federal State Enterprise "State Research Institute of Chemical Products". Svetlaya St., 1. Kazan, 420033.

Tatarstan Republic. Russia. E-mail: anekolab@mail.ru

*Supervising author; ⁺Corresponding author

Keywords: polyvinyl acetate, aluminum sulfate, intermolecular interaction, IR spectroscopy, UV spectroscopy.

Abstract

The interaction of aqueous dispersions of polyvinyl acetate with aluminum sulfate at different ratios of reactants has been studied. The optimum concentration of aluminum sulfate, which provides a complete replanting of the aqueous dispersion of polyvinyl acetate. There was discussed the associates formation mechanism of the type $\text{Al}^{3+} \dots \text{O}=\text{C}<$, which quantitatively fall out of dispersion as a precipitate. The course of complexing is confirmed by IR and UV spectra of aqueous solutions and precipitates.