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Simulation and modeling complex for vinyl chloride polymerization by suspension method

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Abstract

This article describes the results of investigations of the physico-chemical properties of polyvinyl chloride using a simulation-modeling complex of polymerization process by vinyl chloride suspension method. Simulation and modeling system allows you to define the technological parameters of the process, not amenable to direct measurement (amount of polymer-monomer particles, the temperature distribution inside the particles, the distribution of molecular mass of the polymer); provides automatic control and maintenance of optimal modes of carrying out chemical transformations. Simulation and modeling software operating in the training mode allows to acquire the skills of process control and in supervisory mode to evaluate the level of training of operating personnel.