

Kinetics modelling of oligoorganosiloksan curing

© Yury T. Panov,^{*+} Vladimir Y. Chuhlanov, and Elena S. Ilina

Department of Polymer Materials. Vladimir State University Named by A.G. and N.G. Stoletovs.
Gorky St., 87. Vladimir, 600000. Vladimir region. Russia. Phone: +7 (4922) 47-96-19.
E-mail: vladsilan@mail.ru

^{*}Supervising author; ⁺Corresponding author

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Abstract

This paper introduces the kinetic scheme of binder polycondensation in obtaining silicon composites with hollow spherical glass filler, on the basis of which a mathematical description of the process is made. The paper presents the algorithms and methods of calculating effective constants polycondensation based on experimental data. An average molecular weight of intermediate products formed during the reaction at different temperatures and concentrations of the curing agent are mainly used as these data.