

Rheological properties of epoxy oligomers and their mixtures in a wide temperature range

Amirova L., Andrianova K., Ganiev M., Ziganshin M.
Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

The rheological properties of a series of epoxy-diane and epoxy-novolac oligomers and active diluents were studied in a wide temperature range. The activation energies of their viscous flow in the regions of low and high temperatures were calculated. In a series of active diluents, the efficiency of decreasing viscosity of their mixtures with epoxy oligomers correlates with the glass transition temperature of the diluent. © 2014 Springer Science+Business Media, Inc.

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Keywords

Activation temperature, Active diluents, Diane resins, Epoxy oligomer, Glass transition temperature, Novolac resins, Rheology, Viscous flow