

The influence of fillers on process of formation and structure of the polyurethane coatings based on polyethers

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Abstract

Polyurethane coatings based on polyethers filled with natural mineral shungite and solid particulate inorganic chemical production waste – wasted and sub-standard dryers: aluminum oxide, silica gel, zeolite was synthesized. The influence of fillers on process of formation and structure of polyurethane coatings by IR spectroscopy is studied. It is shown that the amount of fillers has an effect on the rate of polyurethane coatings curing. Optimum amounts for filling compositions with silica gel and aluminum oxide is 30 wt. %, with zeolite is 40 wt. %, with shungite 50 wt. %.

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