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The influence of mineral fillers on mechanical properties of polyvinyl chloride composites

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Abstract

The paper reports the investigation results of tensile stress-strain properties of filled PVC composite during static and low cycle testing. The distinctive features of composite mechanical behavior depending on the content of dispersed mineral fillers which are basically industrial waste are established. It is revealed that small filler additives have a strong influence on the structural behavior that manifest itself as their abnormal change depending on the filler content. The experimental data obtained are explained based on the modern ideas about structural morphological model of base polymer structure. © IDOSI Publications, 2013.

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Keywords

Chloride, Composites, Fillers, Polyvinyl