

Mechanochemical synthesis of polyaluminium- and polygalliumphenylsiloxanes

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Abstract

In this paper, the interaction polyphenylsiloxanes with aluminum and gallium oxide under mechanochemical activation. Derived soluble polyaluminiumphenylsiloxanes (PAPS) to yield from 68.2% to 69.3%. It is shown that the resulting PAPS in Si/Al ratio is independent of its original value. It is shown that the siloxane bond cleavage under the action of gallium oxide during not interaction occurs planetary mill. The composition of the products investigated by elemental, X-ray diffraction, infrared spectroscopy and size exclusion chromatography.