Effects of rigid block content on phase state of segmented polyurethanes

It follows from (17) and (18) that w_m is unambiguously determined by the values of $\left(\frac{dw}{dt}\right)_{t=0}$ and $\left(\frac{dw}{dt}\right)_m$. On determining the value of *a* from (17) it is then possible, with the aid of (18), to calculate the values of *u* corresponding to the different values of *w*, and then, by means of (19), to calculate the corresponding values of *t*.

The above approach was also used to describe depolymerization with initiation by defective end groups. However, considerable difficulties then arise in allowing for the number of particles M*, so that this process requires additional consideration. The authors will consider the practical application of this model in a separate study on the thermal degradation of polyorganophosphazenes.

Translated by N. STANDEN

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PULSED ¹H NMR STUDY OF THE EFFECTS OF THE RIGID BLOCK CONTENT ON THE PHASE STATE OF SEGMENTED POLYURETHANES*

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The effect of the content of rigid blocks on the phase state and structure of rigid domains in segmented polyurethane based on polyethylenebutyleneglycol adipate, 1,4-butandiol, and 4,4'-diphenylmethane diisocyanate is studied with the aid of pulsed ¹H NMR. It is shown from an analysis of free induction decays and using the Goldman-Shen technique that in the specimen having the minimum rigid block length a microphase is formed whose

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