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عنوان مقاله:

Role of Multi-walled Carbon Nanotubes on Thermal Degradation of Polyurethane Nanocomposites

محل انتشار:

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خلاصه مقاله:

Thermoset polyurethanes reinforced with different contents of multi-walled carbon nanotubes (i. e. 0.5, 1.0,1.5 and 2.0 wt%) were fabricated through solution casting method.Thermal properties of fabricated samples wereinvestigated by thermal gravimetric analysis. In order to investigate the distribution of MWCNTs in polyurethanematrix, microscopic evaluation was done using scanning electron microscopy. The results show that thermal stability ofpolyurethane improves, and degradation temperatures increase with the addition of CNTs. The microscopicobservations also show .that the MWCNTs homogeneously disperse throughout the PU matrix, and there is no anyevidence of agglomeration

کلمات کلیدی:

Polyurethane; Multi-walled Carbon Nanotubes; Nanocomposite; Thermal Properties; Degradation

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