

عنوان مقاله:

Effect of organo clay on behaviors of flexible polyurethane nanocomposite based on recycled polyol

محل انتشار:

همایش منطقه ای شیمی (سال: 1389)

تعداد صفحات اصل مقاله: 1

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خلاصه مقاله:

In this work a polyurethane nanocomposite based on recycled polyol, using organically cloisite 30B montmorillonite were synthesized. Cloisite 30B was organo-modified by an alkyl ammonium cation bearing two primary hydroxyl functions prior to application in the formulation (MMT-OH₂) [1]. Different amount of organoclay (1-3 %w), was added to the polyether polyol mixture (virgin and recycled) before intruding the isocyanate portion. Thermo-mechanical properties were studied by TMA (thermal mechanical analysis), DMA (dynamic mechanical analysis) and TGA (thermal gravimetric analysis). The results showed that thermal and mechanical properties were improved. The glass transition temperature (T_g) of PU nanocomposites were increased by increasing the MMT-OH₂ content. The morphology of nanocomposites was investigated by SEM (scanning electron microscope).

کلمات کلیدی:

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