RHEOLOGY AND MORPHOLOGY OF COMPATIBILIZED IMMISCIBLE PA6/ABS NANOCOMPOSITES

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The influence of nanoclay on the rheological and morphological properties of PA6/ABS blends with was investigated. The results showed that the size of dispersed phase decrease with increasing nanoclay loading. The compatibilization effect of nanoclay decreases the size of dispersed phase droplets. Also, decrement in dispersed domain size, recognized in the increased viscosity and elasticity at low frequencies. The results indicate that the enhancement of elasticity and existence of plateau at low frequencies occurs by increasing nanoclay content. Moreover, it is interesting to note that the results obtained are in good agreement.