

RELAXATION OF PA6/ABS/NANOCLAY BLENDS: RELATIONSHIP BETWEEN RELAXATION AND MORPHOLOGY

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The objective of this paper is to study the effect of nanoclay on relaxation behavior and phase morphology of immiscible polyamide 6/acrylonitrile butadiene styrene (PA6/ABS) blends. The result show that the increase in relaxation time of PA6/ABS/Nanoclay blends by rising of the nanoclay explained with deformation of droplets and also by the physical interactions across the interface that causes to enhancement of elasticity behavior at low frequencies. In other words, this occurrence causes the relaxation time slightly shifted toward higher values by increasing of nanoclay content.