

EFFECTS OF NANOCCLAY ON PHASE MORPHOLOGY OF POLYAMIDE 6/ACRYLONITRILE-BUTADIENE-STYRENE NANOCOMPOSITES

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The objective of this research is to study the influence of nanoclay on the morphological properties of polyamide 6/acrylonitrile butadiene styrene (PA6/ABS) blends. Consequently, the size of dispersed phase domain is effectively reduced by increasing of nanoclay loading and the polydispersity index of the domain size becomes narrower. This is also by the reason of a greater breakup in all of the blends, which could lead to an increase of uniformity of particle size distribution of the dispersed phase. We concluded that the adding nanoclay to PA6/ABS blends stabilizes the phase morphology due to the compatibilization effect.