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**PP/PA6 BLENDS: EFFECT OF PA6 CONCENTRATION AND OF DIFFERENT COMPATIBILIZERS ON THE MECHANICAL PROPERTIES AND MORPHOLOGY**

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Polymer blends emerged as an alternative to the synthesis of new polymers, combining the best properties of its phases. The aim of this work is to evaluate the effect of the PA6 concentration and of different compatibilizers on the mechanical properties and morphology of PP/PA6 blends. The blends, were prepared in a counter-rotating twin screw extruder at 50 rpm and 240°C in all zones. To evaluate the effect of PA6 concentration on the mechanical properties and morphology, the composition of the PP/PA6 blends without compatibilizer was 80/20, 70/30, 60/40 and 50/50 (wt%). The 70/30 composition was chosen and the effect of PPgAA, PPgMA and E-GMA compatibilizers on the mechanical properties (tensile and impact strength) and morphology was investigated. The samples were injection molded at 240°C and the morphology was analyzed by SEM in the fracture surfaces of the samples subjected to the impact strength tests. The results showed that the impact strength increased with the increase in the PA6 concentration, while the tensile strength remained almost unchanged. PA6 fibrils were observed in the 40/60 and 50/50 PP/PA6 blends. The addition of the compatibilizers to the 70/30 PP/PA6 blend decreased the impact strength and improved the tensile strength of the blend.