



**EFFECT OF SEBS-G-MAH ON THE PHASE MORPHOLOGY AND IMPACT PROPERTIES OF
POLYPROPYLENE/POLYCARBONATE/SEBS TERNARY POLYMER BLENDS**

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In this work, five ternary blends based on 70% by weight (wt%) of polypropylene (PP) with 30% wt of polycarbonate (PC)/ poly(styrene-*b*-(ethylene-co-butylene)-*b*-styrene)(SEBS) dispersed phase consists of 15wt% PC and 15 wt% reactive (maleic anhydride grafted) and non reactive SEBS mixtures at various ratios were prepared in a co-rotating twin screw extruder. SEM micrographs showed that the blends containing only non-reactive SEBS exhibited a fine dispersion of core-shell particles. With decreasing the SEBS / SEBS-g-MAH weight ratio, the morphology changed from the core-shell particles to a mixed of core-shell, rod like and individual particles. These variations in phase morphology affected the thermal and mechanical properties of the blends. These effects could be attributed to the formation of those especial microstructures revealed by the SEM studies.