



The results obtained indicated that reducing the viscosity of natural rubber by mastication facilitated blending of the two polymers but also resulted in poor physical properties of the blends. The optimized mixing conditions were found to be mixing temperature 175 °C , rotor speed 80 rpm. The tendency of the blends to exhibit anisotropic properties ,as the results of the milling of the samples after dumping from mixer, could be removed by aligning two sheets in perpendicular direction during compression moulding of the test samples.

Comparative study of the uses of PP copolymers and PP homopolymer for NR/PP blends of 60/40, 70/30 compositions base on various crosslinking systems, showed small differences in mechanical properties obtained. Crosslinking agent system which gave the best results was the combination of 0.5 phr Dicumyl Peroxide (DCP) and 5.0 phr Maleic Anhydride (MA). Ultimate tensile strength , elongation at break and tension set at 100% improved by 2× ,1.5× and 2.5× respectively ,compared with the blends without crosslinking agent.