

## **The Compatibililty of TPU and NR Blends**

### **Abstract**

The blends of thermoplastic polyurethane (TPU) with natural rubber (NR) at four different blends ratios were prepared via melt blending, with addition of liquid natural rubber (LNR) as compatibilizer. The effect of blend ratio and temperature on the tensile properties and swelling ratio was studied. The addition of NR and LNR into TPU produces a decrease of tensile strength. The swelling ratio increased with the increasing of NR content in the blends. The temperatures of blending also give effects to tensile properties and swelling behavior.

Keywords; Blend, Liquid Natural Rubber, Natural Rubber, Thermoplastic Polyurethane