

2016

Effet du traitement Thermique (Trempe libre) sur les propriétés thermiques et thermo-dynamique du polypropylène (PP)

Merabet Safia, Rouabah Farid

Abstract : This work deals on the study of the thermal properties of polypropylene (PP) in the presence of residual stress (CR). A laboratory scale, two valid methods for introducing residual stresses in the polymer, which are non-uniform cooling (thermal quenching), and the non-uniform plastic deformation (cold rolling) is known. The results obtained by the DMA analysis result presentation of two relaxations, for all the samples studied. DSC results show a decrease in the crystallinity of the polymer at free quenching temperature of 20°C.

Keywords : Polypropylene, Quenching, Thermal history.