ABSTRACT DIPLOMA THESIS 2006 DARINA KUNTOVÁ

The aim of this graduation theses was to study the adhesiveness of oligoesters branched using mannitol or dipentaerythritol and plasticized 20% of ethyl pyruvate or 30% trietyl citrate under various testing conditions using Material testing machine Zwick/Roel T1-FR050TH.A1K. The maximum force (F_{max}) required to detaching the polymer systems from substrate was measured for determination of adhesiveness of oligoesters. The detachmen speed of 10 mm/min, 100 mm/min and 200 mm/min, consolidation time of 5s or 10s and contact force 10N or 20 N were tested. It was found that F_{max} of branched oligoesters was significantly higher in comparison with cellulose derivatives, acrylate derivatives or gelatine. The increase of the maximal adhesive force is due to the growing consolidation force, the contact time and sample detachment velocity.