

عنوان مقاله:

Effect of Soft Segment Structure on Thermal Properties and Stability of Polyurethanes

محل انتشار:

دوازدهمین سمینار بین المللی علوم و تکنولوژی پلیمر (سال: 1395)

تعداد صفحات اصل مقاله: 2

نویسندگان:

.Mojgan A Moghanizadeh - *Biomaterials Dept., Iran Polymer and Petrochemical Institute Tehran Iran*

.Parvin Shokrollahi - *Biomaterials Dept., Iran Polymer and Petrochemical Institute Tehran Iran*

.Mojgan Zandi - *Biomaterials Dept., Iran Polymer and Petrochemical Institute Tehran Iran*

.Fatemeh Shokrollahi - *Biomaterials Dept., Iran Polymer and Petrochemical Institute Tehran Iran*

خلاصه مقاله:

In this work, novel polyurethanes (PUs) based on poly (glycolide-co- ϵ -caprolactone) (PGC) macrodiols with glycolide to ϵ -caprolactone (GA:CL) ratios of (50:50 (PU-50) and 30:70 (PU-30)) were synthesized. Thermal behavior and thermal stability of these polymers were investigated via differential scanning calorimetry (DSC) and thermal gravimetric analysis (TGA). The results of DSC indicated that PU-50 has lower Tg (soft segment glass transition temperature). Both the polymers showed two step degradation mechanisms corresponding to the urethane and the .ester groups. Additionally, the PU-50 showed higher degradation temperature due to higher amount of soft segments

کلمات کلیدی:

Polyurethane, Poly (glycolide-co- ϵ -caprolactone), Thermal Stability

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/578096>

