عنوان مقاله:

A novel self-healable network from a bio-resin Diels-Alder crosslinking

محل انتشار:

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

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خلاصه مقاله:

Poly(furfuryl alcohol) resin (PFA) were prepared by polycondensation of furfuryl alcohol and then crosslinked by bifunctional maleimide via Diels–Alder (DA) reation to obtain the thermally reversible and self-healing furan-based resin. The as-prepared crosslinked PFA resin were characterized by FT-IR. The results indicated that the novel crosslinked PFA resin showed thermally repeatable self-healing properties. The results revealed that the crosslinked polymer system based on DA chemistry can be taken into account as smart material with potential for coating applications

کلمات کلیدی:

self-healing, poly(furfuryl alcohol), Diels-Alder reaction, bismaleimide

لینک ثابت مقاله در پایگاه سیویلیکا: