

عنوان مقاله:

Preparation and rheological peroperties of poly(lactic acid) modified by free radicals reaction

محل انتشار:

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

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خلاصه مقاله:

In this work modified PLAs were prepared via free radical reaction method in presence of dicumyl peroxide (DCP) as initiator and Triallyl isocyanurate (TAIC) as a co-agent using internal mixer and long chain branched (LCB) PLA with various characteristics were obtained. Molecular structure of the PLA samples was investigated by gel permeation chromatography (GPC) and shear and extensional rheometry. Formation of Long chain branched PLA was confirmed by appeared shoulder at high molecular weights and increase in the zero shear viscosity, complex viscosity and strain hardening under elongational flow. Also to determine the gel content of the samples, it can be said that the .crosslinking not happened in any of the modified samples

کلمات کلیدی: Rheology, Long chain branching, Crosslinking, DCP, TAIC

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