

عنوان مقاله:

Mechanical properties of plasticized poly (lactic acid) containing nucleating agent

محل انتشار:

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خلاصه مقاله:

The research studies the role of a plasticizer (206 3NL), an oligomeric polyadipate and of a nucleating agent, an aromatic sulfonate derivative (LAK301) on the mechanical behavior of poly-lactic acid (PLA) through Tensile tests, Charpy Impact tests. The results show that LAK301 acted as a nucleating agent and 206 3NL was a compatible plasticizer for PLA. In fact, in the binary include 1 wt% of nucleating agent (LAK301) the Young's modulus increased to 5.2 GPa in respect to pure PLA (3.2 GPa), beside in the presence of 15wt% of plasticizer (206 3NL) the elongation at break of PLA reached 285%. Furthermore, the impact strength was also slightly improved when the plasticizer was added

کلمات کلیدی:

Composites, Poly (lactic acid), Plasticizer, Nucleating agent, Mechanical properties

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