

**Название публикации:**

Composite Materials Based on Polylactide and Poly-3-hydroxybutyrate “Green” Polymers

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**Аннотация:**

Blends of polylactide with low-density polyethylene and of poly-3-hydroxybutyrate with synthetic ethylene–propylene rubber with the component weight ratios of 30 : 70, 50 : 50, and 70 : 30 were prepared and studied in comparison with the pure components. The thermal characteristics of these blends were determined by differential scanning calorimetry. The melting point of polyhydroxybutyrate and polylactide in the blends changes insignificantly, by 1–2°C. The dependence of the morphology on the composition for both polymer systems was examined by scanning electron microscopy. The physicomechanical properties of the samples are determined by the major phase. The blends undergo biodegradation in soil at  $20 \pm 3^\circ\text{C}$ . The process occurs faster for blends of polyhydroxybutyrate with ethylene–propylene rubber of all the compositions studied.

**Ключевые слова:**

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