

**Название публикации:**

Effect of the Concentration of the Spinning Solution on the Morphology and Properties of Nonwoven Poly-3-Hydroxybutyrate Fibers

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**Аннотация:**

The nonwoven fibrous materials of poly-3-hydroxybutyrate obtained by electrospinning were studied. The average diameter of the fibers was correlated with the polymer concentration in solution. As the concentration of poly-3-hydroxybutyrate in the spinning solution increased from 5 to 9 wt %, its crystallinity in the fibrous material increased by 4-5%, and the melting temperature changed insignificantly. A paramagnetic resonance study showed that the density of the amorphous phase of the fibers increased with the polymer concentration in solution. The resistance of the fibrous materials to aggressive environmental factors also increased.

**Ключевые слова:**

poly-3-hydroxybutyrate; polymer solution; electrospinning; crystallinity; amorphous phase; UV radiation