

Название публикации:

Controlled-Release Matrixes for Drugs Based on Polyamide-Polyhydroxybutyrate Compositions

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Сведения об издании:

Pharmaceutical Chemistry Journal

Volume 52, Issue 1, 1 April 2018, Pages 77-83

Аннотация:

The transport properties of films based on poly(3-hydroxybutyrate) (PHB) and polyamide were studied. The factor responsible for the rate of controlled release of antiseptic from film compositions was the link between diffusion and PHB destruction. A model of this process and measurements of the coefficients of diffusion of an antiseptic are presented. The fundamental possibility of using these compositions as matrix systems for prolonged (more than one month) controlled delivery of a model pharmaceutical (the antiseptic furacillin) with constant and controllable release rates is discussed. The study matrixes could be used as wound coverings (dressings). © 2018, Springer Science+Business Media, LLC, part of Springer Nature.

Ключевые слова:

controlled release, diffusion, films, furacillin, polyamide, polyhydroxybutyrate, polymer compositions