Study of the effect of copolymer composition with glycolic and lactic acids on their solubility

© Olga K. Kuchina, Olga V. Babkina,* Kira V. Alekseenko,‡ and Anna L. Nemoykina
Tomsk Regional Common use center. Tomsk State University. Lenin Pr., 36. Tomsk, 634050. Russia.
Phone: +7 (3822) 53-48-45. E-mail: ckp@mail.tsu.ru

*Supervising author; ‡Corresponding author

Keywords: Biopolymer, Glycolid, Lactid, polyglicolidlactide.

Abstract

In this paper, the effect of structure and molecular weight on solubility of polymers based on glycolic and lactic acids in organic solvents such as dimethylsulfoxide, tetrahydrofuran, methylene chloride, chloroform and hexafluoroisopropanol has been studied. The solubility data are used for setting the method of molecular weight studying by the gel permeation chromatography techniques and for testing the method of antimicrobial coating on the surface of the biodegradable filaments made of glycolic and lactic acids copolymers.