

SUMMARY

This work deals with interaction of hydrophylic medium with four aliphatic oligoesters and polyesters synthesized from lactic acid and glycolic acid, which were branched either with dipentaerythritol or tripentaerythritol in 1% to 5% concentration. There was observed a process of erosion kinetics and swelling of defined matrices from mentioned oligoesters in water medium in 37 °C in period of time 1 day, 3 days, 7 days, 14 days and 21 days. Next step was determining the concentration of carboxylic groups generated via hydrolysis of degraded matrices by using alkalimetric methods in the water soluble fraction. The fraction soluble in water was taken by solubilizing of swelling matrices in a chloroform and its shaking in water. Characteristic was named as carboxylic number. It was demonstrated that swelling kinetics cohere nearly with the process of concentration changes in water soluble monomers and oligomers. In some matrices there was also demonstrated the process of syneresis between their carboxylic number and the swelling level.