A STUDY OF THE STRUCTURE-PROPERTY REQUIREMENTS FOR A MONOFILAMENT ABSORBABLE SURGICAL SUTURE

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and chemical processes taking place. Differences between the property-loss profiles of 'Maxon' and 'PDS II' could be interpreted in terms of differences in chemical structure. In the final part of the work, some preliminary studies were carried out into the design and synthesis of new biodegradable copolymers similar to 'Maxon'. Two closely related copolymers were synthesized, namely: poly(glycolic acid-co-ethylene carbonate) and poly(glycolic acid-co-propylene carbonate), via the stannous octoate-initiated anionic ring-opening copolymerisations of glycolide and ethylene carbonate, and glycolide and propylene carbonate, respectively. Although the products obtained had similar infrared spectra and melting ranges to commercial 'Maxon', their exact compositions were unclear. A more detailed study will follow.