



A NEW SYNTHETIC POLYMER

What is Actifit®?

Actifit® is a new biodegradable meniscal scaffold. It is a porous scaffold made of an aliphatic polyurethane providing optimal mechanical strength, biocompatibility and safe degradation. The molecular structure of the polymer contains two components: soft segments that provide flexibility, and urethane segments that provide high strength.

Soft Segment

The soft segments comprise ~80% of the polymer and consist of poly(ϵ -caprolactone), an FDA-approved biodegradable polymer. Polycaprolactones are used in a wide range of medical applications, e.g., sutures (Ethicon's Monocryl® or Covidien's Caprosyn®) and suture coatings (Ethicon's Vicryl® or Panacryl®, or Covidien's Dexon® or Polysorb®). The soft segments degrade through hydrolysis of ester bonds.

Urethane Segment

The urethane segments comprise ~20% of the polymer and consist of urethanes made from 1-4-butanediisocyanate (BDI) and 1-4-butanediol (BDO) moieties. The excellent mechanical properties of Actifit® are due to the very small crystalline urethane units (~2nm). After degradation of the soft segments, the urethane segments (~2-3 nm), representing approximately 4% of the implant volume, are either integrated into the surrounding tissue or eventually degraded.



ORTEQ®
SPORTS MEDICINE

10 GREYCOAT PLACE,
LONDON SW1P 1SB

TELEPHONE: +44 (0)20 7960 6070

FAX: +44 (0)20 7960 6100

E-MAIL: info@orteq.com

Orteq® Ltd.

Registered in England at The Hour House,
32 High Street, Rickmansworth, Herts. WD3 1ER.
Registered number: 05613051.

VAT registered number: 877253881.

© 2010 Orteq® Ltd. All rights reserved.

400173.02/DCR0402

www.orteq.com