

**For personalized, high resolution
bioresorbable 3D printed implants**

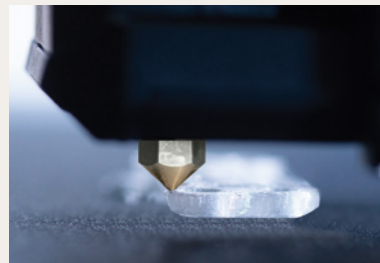
Flexible properties and degradation times for FFF

Resomer[®]
Filament



A line of high-quality filaments with tight specifications

RESOMER® Filaments are ideal for high-resolution printing with Fused Filament Fabrication (FFF)/Fused Deposition Modeling (FDM) systems. PLLA, PLGA, PCL, and PDO-based grades are available with tight specifications including a 1.75 mm diameter size and precise processing temperatures for the nozzle, bed and chamber. All filament grades are provided coiled in a spool package size of 50 grams.



Filament Grade Characteristics	RESOMER® Filament L D1.75	RESOMER® Filament LG D1.75	RESOMER® Filament C D1.75	RESOMER® Filament X D1.75
Composition	Poly (L-lactide)	Poly (L-lactide-co-glycolide) 85:15	Poly (caprolactone)	Polydioxanone
Degradation time*	> 3 years	1 – 2 years	> 2 years	< 6 months

*Degradation time estimated based upon raw material data

The versatility and reliability to meet your specific needs

Mechanical properties such as strength and elongation can be tailored to the target application, with degradation times ranging from less than six months to more than three years. Multiple customization options are available upon request.

Leveraging more than 30 years of safety, biocompatibility and supply security, RESOMER® Filaments are ideal to create high-quality, 3D printed devices for use in application areas including cranial reconstruction, orthopaedics and dentistry.

Application technology services create additional value

Evonik's Medical Device Competence Center in the U.S., and application labs in Germany and China, provide a wide range of services for 3D printing with multiple technologies including Selective Laser Sintering (SLS) and FFF. Areas of customer support include material selection and customization, feasibility samples, process development, analytical characterization, mechanical testing and degradation studies.



Color of implant prototype used for illustrative purposes only



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