



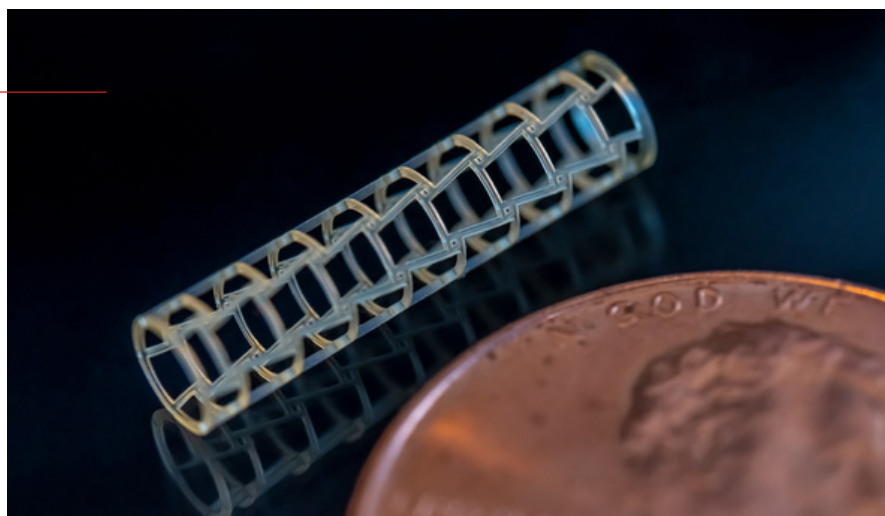
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BIO Resin

BIO is a biocompatible resin suitable for non-implantable medical applications. Bio can undergo sterilization and has passed numerous ISO 10993 biocompatibility tests for skin irritation and sensitization, toxicity, cytotoxicity, pyrogenicity, and in vitro hemolysis.

RESOLUTION × ACCURACY × PRECISION



ISO Standard	Test Description
ISO 10993-10: 2010; ISO 10993-12: 2012; ISO 10993-2: 2006	Skin Irritation Test
ISO 10993-10: 2010; ISO 10993-12: 2012; ISO 10993-12: 2006	Skin Sensitization Test
ISO 10993-4: 2017	In Vitro Hemolytic Test
ISO 10993-11: 2017; ISO 10993-12: 2012; ISO 10993-2: 2006	Pyrogen Test
ISO 10993-5: 2009; ISO 10993-12: 2012	In Vitro Cytotoxicity Test
ISO 10993-11: 2017; ISO 10993-12: 2012; ISO 10993-2: 2006	Acute Systemic Toxicity Test

¹ Final properties are dependent on print conditions, post-processing operations, and part geometry.

² Test samples were UV cured and heat cured.

		Cured Parts	Standard
Tensile Properties	TENSILE STRENGTH	56.0 MPa	ASTM D638
	ELASTIC MODULUS	1614 MPa	ASTM D638
	ELONGATION AT BREAK	6.2%	ASTM D638
Flexural Properties	FLEXURAL STRENGTH	106.6 MPa	ASTM D790
	FLEXURAL MODULUS	3.5 GPa	ASTM D790
Thermal Properties	CTE @ 60C	170.3 $\mu\text{m}/\text{m}/^{\circ}\text{C}$	
	HDT @ 0.45 MPA	85.7 $^{\circ}\text{C}$	ASTM D648 - 07
Electrical Properties	DIELECTRIC CONSTANT (10 GHz)	2.75	ASTM D2520
	DIELECTRIC LOSS (10 GHz)	0.0458	ASTM D2520
General Properties	WATER ABSORPTION (24h)	0.69%	ASTM D570
	CONTACT ANGLE	50-70 $^{\circ}$	ASTM D7334
	HARDNESS	84 Shore D	ASTM D785
	VISCOSITY	300 cP	-
	STANDARD COLOR CELL	Yellow trans	-
	CULTURE SURVIVAL RATE INVITRO	93.3%	-
	COMPATIBLE BMF SYSTEMS	S130, S140, S230, S240, S350, D1025, S150 Series	-