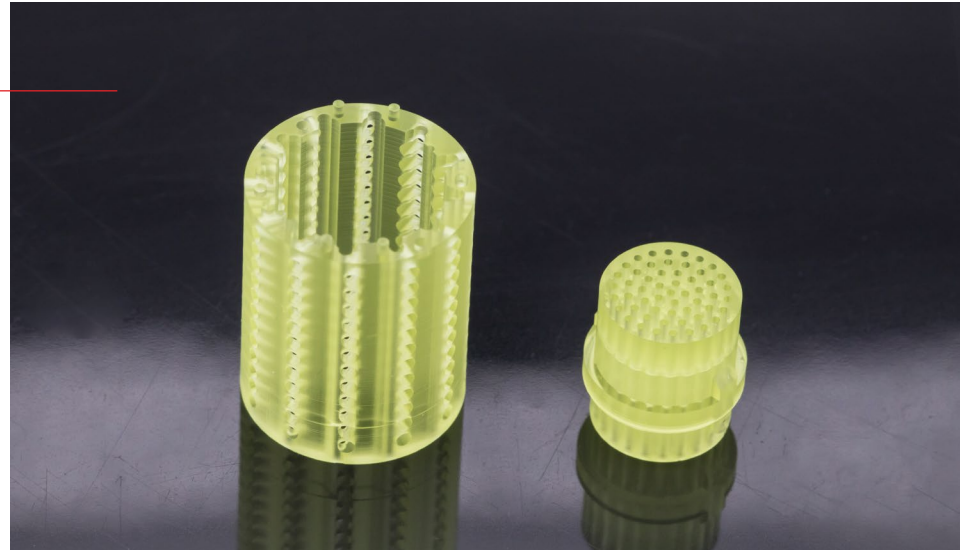


# RG Resin

RG from the Forward AM Ultracur3D<sup>®</sup> photopolymer resin line is a durable engineering material which can be used to print functional end-use parts. Its key feature is that it doesn't uptake any water and is suitable for a wide range of applications such as electrical cases, snappers and functional prototyping.

RG has passed the requirements associated with the following ISO 10993 biocompatibility tests.

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



	Cured Parts	Standard	
<b>Tensile Properties</b>	TENSILE STRENGTH	60.4 MPa	ASTM D638
	ELASTIC MODULUS	1765 MPa	ASTM D638
	ELONGATION AT BREAK	11.7%	ASTM D638
<b>Flexural Properties</b>	FLEXURAL STRENGTH	77.7 MPa	ASTM D790
	FLEXURAL MODULUS	2.1 GPa	ASTM D790
<b>Thermal Properties</b>	CTE @ 60C	157 $\mu\text{m}/\text{m}/^\circ\text{C}$	-
	HDT @ 0.45 MPa	56.5 $^\circ\text{C}$	ASTM D648 - 07
<b>General Properties</b>	CONTACT ANGLE	45-60 $^\circ$	ASTM D7334
	WATER ABSORPTION (24h)	0.77%	ASTM D570
	DIALECTIC CONSTANT (10 GHz)	2.94	-
	DF	0.0197	-
	HARDNESS	77 Shore D	ASTM D785
	VISCOSITY	1100 cP	-
	STANDARD COLOR	Yellow trans	-
	CELL CULTURE SURVIVAL RATE IN VITRO	91.7%	-
COMPATIBLE BMF SYSTEMS	S230, S240	-	

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

<sup>2</sup> Test samples were UV cured and heat cured.