RG Resin

RG from the Forward AM Ultracur3D® 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.

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**Tensile Properties**
- **TENSILE STRENGTH**: 60.4 MPa ASTM D638
- **ELASTIC MODULUS**: 1765 MPa ASTM D638
- **ELONGATION AT BREAK**: 11.7% ASTM D638

**Flexural Properties**
- **FLEXURAL STRENGTH**: 77.7 MPa ASTM D790
- **FLEXURAL MODULUS**: 2.1 GPa ASTM D790

**Thermal Properties**
- **CTE @ 60°C**: 157 µm/m/°C
- **HDT @ 0.45 MPa**: 56.5 °C ASTM D648 - 07

**General Properties**
- **CONTACT ANGLE**: 45-60° ASTM D7334
- **WATER ABSORPTION (24h)**: 0.77% ASTM D570
- **DIELECTRIC 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, S350

¹ Final properties are dependent on print conditions, post-processing operations, and part geometry.
² Test samples were UV cured and heat cured.