

Technical Data Sheet

Ultracur3D[®] RG 50

Water-washable rigid resin for printing parts
with the highest accuracy.

General Properties	Norm	Typical Values
Appearance	-	Clear
Viscosity, 30 °C	Cone/Plate Rheometer ¹	65 mPas
Viscosity, 50 °C	Cone/Plate Rheometer ¹	26 mPas
Density (printed part)	ASTM D792	1.23 g/cm ³
Density (liquid resin)	ASTM D4052-18a	1.11 g/cm ³

Tensile Properties	Norm (50 mm/min)	Typical Values
E Modulus	ASTM D638	2300 MPa
Ultimate Tensile Strength	ASTM D638	63 MPa
Elongation at Break	ASTM D638	4 %

Flexural Properties	Norm	Typical Values
Flexural Modulus	ASTM D790	2100 MPa
Flexural Strength	ASTM D790	87 MPa

Impact Properties	Norm	Typical Values
Notched Izod (Machined), 23 °C	ASTM D256	11 J/m
Charpy notched, 23 °C	ISO 179-1	1.1 kJ/m ²

Thermal Properties	Norm	Typical Values
HDT at 0.45 MPa	ASTM D648	66 °C
HDT at 1.82 MPa	ASTM D648	55 °C

Hardness	Norm	Typical Values
Shore D	ASTM D2240	85

Other	Norm	Typical Values
Water Absorption, Short Term (24 hours)	ASTM D570	1.12 %

1) Determined with TA-Instrument DHR rheometer, cone/plate, diameter 60 mm, shear rate 100 s⁻¹

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