

Technical Data Sheet

Ultracur3D[®] RG 50

Reactive Urethane Photopolymer

General Properties	Norm	Typical Values
Viscosity at 30°C	Cone/Plate Rheometer ¹	65.3 mPas
Viscosity at 50°C	Cone/Plate Rheometer ¹	26.5 mPas
Density	ASTM D792	1.23 g/cm ³
Density (liquid resin)	ASTM D4052-18a	1.11 g/cm ³

Tensile Properties	Norm	Typical Values
E Modulus	ASTM D638	2290 MPa
Tensile Strength	ASTM D638	62.6 MPa
Elongation at Break	ASTM D638	4.4%

Flexural Properties	Norm	Typical Values
Flexural Modulus	ASTM D790	2120 MPa
Flexural Strength at 5% Strain	ASTM D790	86.8 MPa

Impact Properties	Norm	Typical Values
Notched Izod (Machined), 23°C	ASTM D256	11.79 J/m
Charpy (Notched), 23°C	ISO 179-1	1.12 kJ/m ²

Thermal Properties	Norm	Typical Values
HDT at 0.45 MPa	ASTM D648	66.2°C
HDT at 1.82 MPa	ASTM D648	55.9°C

Hardness	Norm	Typical Values
Shore D	ASTM D2240	83

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

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