

## Technical Data Sheet

# Ultracur3D<sup>®</sup> RG 35

Rigid | HDT 80 | Clear

General Properties	Norm	Typical Values
Appearance	-	Clear
Viscosity, 30 °C	Cone/Plate Rheometer <sup>1</sup>	600 mPas
Viscosity, 50 °C	Cone/Plate Rheometer <sup>1</sup>	150 mPas
Density (printed part)	ASTM D792	1.2 g/cm <sup>3</sup>
Density (liquid resin)	ASTM D4052-18a	1.12 g/cm <sup>3</sup>

Tensile Properties	Norm (50 mm/min)	Typical Values
E Modulus	ASTM D638	2600 MPa
Ultimate Tensile Strength	ASTM D638	80 MPa
Elongation at Break	ASTM D638	6 %

Flexural Properties	Norm	Typical Values
Flexural Modulus	ASTM D790	2400 MPa
Flexural Strength	ASTM D790	110 MPa

Impact Properties	Norm	Typical Values
Notched Izod (Machined), -30 °C	ASTM D256	11 J/m
Notched Izod (Machined), 23 °C	ASTM D256	23 J/m
Unnotched Izod, 23 °C	ASTM D256	115 J/m
Charpy notched, 23 °C	ISO 179-1	0.6 kJ/m <sup>2</sup>

Thermal Properties	Norm	Typical Values
HDT at 0.45 MPa	ASTM D648	83 °C
HDT at 1.82 MPa	ASTM D648	64 °C
Flammability	UL 94 (1.5 mm)	HB
Glow-wire Test	IEC 60695-2-12/-13 (2 mm)	GWIT: 650°C GWFI: 625°C

Dielectric/Electric Properties	Norm	Typical Values
Electrical strength	DIN EN 60243-1	37 kV / mm

Hardness	Norm	Typical Values
Shore D	ASTM D2240	85

Other	Norm	Typical Values
Biocompatibility	ISO 10993	Information available on request
Water Absorption, Short Term (24 hours)	ASTM D570	0.33 %

 Detailed material data and support for FEA simulations available on request ([sales@basf-3dps.com](mailto:sales@basf-3dps.com))

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

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