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Technical Data Sheet

Ultracur3D® ST 1400

Tough | High Impact | Clear

General Properties	Norm	Typical Values
Appearance	-	Clear
Viscosity, 30 °C	Cone/Plate Rheometer[1]	280 mPas
Viscosity, 50 °C	Cone/Plate Rheometer[1]	90 mPas
Density (printed part)	ASTM D792	1.2 g/cm³
Density (liquid resin)	ASTM D4052-18a	1.12 g/cm³

Tensile Properties	Norm (5 mm/min)	Typical Values
E Modulus	ASTM D638	1900 MPa
Ultimate Tensile Strength	ASTM D638	45 MPa
Elongation at Break	ASTM D638	43 %

Flexural Properties	Norm	Typical Values
Flexural Modulus	ASTM D790	1540 MPa
Flexural Strength	ASTM D790	80 MPa

Impact Properties	Norm	Typical Values
Notched Izod (Machined), 23 °C	ASTM D256	43 J/m
Unnotched Izod, 23 °C	ASTM D256	930 J/m
Charpy notched, 23 °C	ISO 179-1	4.6 kJ/m²

Thermal Properties	Norm	Typical Values
HDT at 0.45 MPa	ASTM D648	57 °C
HDT at 1.82 MPa	ASTM D648	48.7 °C

Hardness	Norm	Typical Values
Shore D	ASTM D2240	78

Other	Norm	
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)		

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

Version 1.1