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Technical Data Sheet

Ultracur3D® ST 80 B

Multi-purpose resin targeting the lowest cost per part.

General Properties	Norm	Typical Values
Appearance	-	Black
Viscosity, 30 °C	Cone/Plate Rheometer[1]	440 mPas
Viscosity, 50 °C	Cone/Plate Rheometer[1]	120 mPas
Density (printed part)	ASTM D792	1.2 g/cm³
Density (liquid resin)	ASTM D4052-18a	1.1 g/cm³

Tensile Properties	Norm (5 mm/min)	Typical Values
E Modulus	ASTM D638	1650 MPa
Ultimate Tensile Strength	ASTM D638	35 MPa
Elongation at Break	ASTM D638	25 %

Flexural Properties	Norm	Typical Values
Flexural Modulus	ASTM D790	1550 MPa
Flexural Strength	ASTM D790	66 MPa

Impact Properties	Norm	Typical Values
Notched Izod (Machined), 23 °C	ASTM D256	22 J/m
Unnotched Izod, 23 °C	ASTM D256	727 J/m
Charpy notched, 23 °C	ISO 179-1	2.3 kJ/m²

Thermal Properties	Norm	Typical Values
HDT at 0.45 MPa	ASTM D648	52 °C
HDT at 1.82 MPa	ASTM D648	44 °C

Hardness	Norm	Typical Values
Shore D	ASTM D2240	77

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

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