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Technical Data Sheet

Ultracur3D® EL 150

Flexible resin with optimum strength, rebound and medium hardness.

General Properties	Norm	Typical Values
Apperance	-	Clear
Viscosity, 30 °C	Cone/Plate Rheometer[1]	90 mPas
Viscosity, 50 °C	Cone/Plate Rheometer[1]	45 mPas
Density (printed part)	ASTM D792	1.10 g/cm³
Density (liquid resin)	ASTM D4052-18a	1.04 g/cm³

Tensile Properties	Norm (500 mm/min)	Typical Values
E Modulus	ASTM D412 C	16 MPa
Ultimate Tensile Strength	ASTM D412 C	7 MPa
Elongation at Break	ASTM D412 C	182 %

Impact Properties	Norm	Typical Values
Unnotched Izod, 23 °C	ASTM D256	No break

Mechanical Properties	Norm	Typical Values
Tear Strength (Graves)	ASTM D624 type C	14 N/mm
Rebound Resilience	ASTM D7121	28 %
Relative Abrasion Loss	ISO 4649	Information available on request
Compression set at 23°C, 72h	ASTM D395-A	11 %
Compression set at 23°C, 72h	ASTM D395-B	55 %
Rossflex, 23°C, 60° angle	ASTM D1052	> 100.000 Cycles (no crack propagation)
Rossflex, -10°C, 60° angle	ASTM D1052	> 100.000 Cycles (no crack propagation)

Thermal Properties	Norm	Typical Values
Glass transition temperature (DMA, tan(d))	ASTM D4065	-32 °C
Vicat temperature	ASTM D1525	80 °C

Hardness	Norm	Typical Values
Shore A	ASTM D2240	75

Other	Norm	Typical Values
Biocompatibility	ISO 10993	Information available on request
Water Absorption, Short Term (24 hours)	ASTM D570	1.27 %

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

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