FORWARD AM
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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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