

Technical Data Sheet

Ultracur3D® RG 50

Water-washable rigid resin for printing parts
with the highest accuracy.

| General Properties | Norm | Typical Values |
|------------------------|-----------------------------------|------------------------|
| Appearance | - | Clear |
| Viscosity, 30 °C | Cone/Plate Rheometer ¹ | 65 mPas |
| Viscosity, 50 °C | Cone/Plate Rheometer ¹ | 26 mPas |
| Density (printed part) | ASTM D792 | 1.23 g/cm ³ |
| Density (liquid resin) | ASTM D4052-18a | 1.11 g/cm ³ |

| Tensile Properties | Norm (50 mm/min) | Typical Values |
|---------------------------|------------------|----------------|
| E Modulus | ASTM D638 | 2300 MPa |
| Ultimate Tensile Strength | ASTM D638 | 63 MPa |
| Elongation at Break | ASTM D638 | 4 % |

| Flexural Properties | Norm | Typical Values |
|---------------------|-----------|----------------|
| Flexural Modulus | ASTM D790 | 2100 MPa |
| Flexural Strength | ASTM D790 | 87 MPa |

| Impact Properties | Norm | Typical Values |
|--------------------------------|-----------|-----------------------|
| Notched Izod (Machined), 23 °C | ASTM D256 | 11 J/m |
| Charpy notched, 23 °C | ISO 179-1 | 1.1 kJ/m ² |

| Thermal Properties | Norm | Typical Values |
|--------------------|-----------|----------------|
| HDT at 0.45 MPa | ASTM D648 | 66 °C |
| HDT at 1.82 MPa | ASTM D648 | 55 °C |

| Hardness | Norm | Typical Values |
|----------|------------|----------------|
| Shore D | ASTM D2240 | 85 |

| Other | Norm | Typical Values |
|-----------------------------------------|-----------|----------------|
| Water Absorption, Short Term (24 hours) | ASTM D570 | 1.12 % |

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

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