



## Preliminary Technical Data Sheet

## Ultracur3D® RG 1100

Rigid resin with superior stiffness and temperature resistance

| General Properties     | Norm                              | Typical Values         |
|------------------------|-----------------------------------|------------------------|
| Apperance              | -                                 | Clear                  |
| Viscosity, 30 °C       | Cone/Plate Rheometer <sup>1</sup> | 201 mPas               |
| Viscosity, 50 °C       | Cone/Plate Rheometer <sup>1</sup> | 65 mPas                |
| Density (printed part) | ASTM D792                         | 1.2 g/cm <sup>3</sup>  |
| Density (liquid resin) | ASTM D4052-18a                    | 1.12 g/cm <sup>3</sup> |

| Tensile Properties        | Norm      | Typical Values |
|---------------------------|-----------|----------------|
| E Modulus                 | ASTM D638 | 3080 MPa       |
| Ultimate Tensile Strength | ASTM D638 | 70 MPa         |
| Elongation at Break       | ASTM D638 | 5 %            |

| Flexural Properties | Norm      | Typical Values |
|---------------------|-----------|----------------|
| Flexural Modulus    | ASTM D790 | 2880 MPa       |
| Flexural Strength   | ASTM D790 | 119 MPa        |

| Impact Properties              | Norm      | Typical Values |
|--------------------------------|-----------|----------------|
| Notched Izod (Machined), 23 °C | ASTM D256 | 16 J/m         |
| Charpy notched, 23 °C          | ISO 179-1 | 0.6 kJ/m²      |

| Thermal Properties | Norm         | Typical Values |
|--------------------|--------------|----------------|
| HDT at 0.45 MPa    | ASTM D648    | 116 °C         |
| HDT at 1.82 MPa    | ASTM D648    | 84 °C          |
| Flammability       | UL 94 1.5 mm | НВ             |

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

| Other                        | Norm      |        |
|------------------------------|-----------|--------|
| Water Absorption, Short Term | ASTM D570 | 0.32 % |
| (24 hours)                   |           |        |

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

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