

Technical Data Sheet

Ultracur3D® ST 80 W

Multi-purpose resin targeting the lowest
cost per part.

| General Properties | Norm | Typical Values |
|------------------------|-----------------------------------|-----------------------|
| Appearance | - | White |
| Viscosity, 30 °C | Cone/Plate Rheometer ¹ | 410 mPas |
| Viscosity, 50 °C | Cone/Plate Rheometer ¹ | 120 mPas |
| Density (printed part) | ASTM D792 | 1.2 g/cm ³ |
| Density (liquid resin) | ASTM D4052-18a | 1.1 g/cm ³ |

| Tensile Properties | Norm (5 mm/min) | Typical Values |
|---------------------------|-----------------|----------------|
| E Modulus | ASTM D638 | 1800 MPa |
| Ultimate Tensile Strength | ASTM D638 | 37 MPa |
| Elongation at Break | ASTM D638 | 20 % |

| Flexural Properties | Norm | Typical Values |
|---------------------|-----------|----------------|
| Flexural Modulus | ASTM D790 | 1270 MPa |
| Flexural Strength | ASTM D790 | 60 MPa |

| Impact Properties | Norm | Typical Values |
|--------------------------------|-----------|---------------------|
| Notched Izod (Machined), 23 °C | ASTM D256 | 29 J/m |
| Unnotched Izod, 23 °C | ASTM D256 | 860 J/m |
| Charpy notched, 23 °C | ISO 179-1 | 2 kJ/m ² |

| Thermal Properties | Norm | Typical Values |
|--------------------|-----------|----------------|
| HDT at 0.45 MPa | ASTM D648 | 49 °C |
| HDT at 1.82 MPa | ASTM D648 | 44 °C |

| Hardness | Norm | Typical Values |
|----------|------------|----------------|
| Shore D | ASTM D2240 | 74 |

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

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