

# Ultem™ 1010 Resin

PEI

Stratasys Ltd.

Thermal properties	Value	Unit	Test Standard
<b>ASTM Data</b>			
DTUL @ 66 psi	216	°C	ASTM D 648
DTUL @ 264 psi	213	°C	ASTM D 648
Vicat Temperature	214	°C	ASTM D 1525
<b>Other Standards<sup>[5]</sup></b>			
Coefficient of Thermal Expansion, MD	46.8	E-6/K	ASTM E 831
Coefficient of Thermal Expansion, TD	41.4	E-6/K	ASTM E 831
Glass Transition Temperature	215	°C	

S: These properties are reported by the producer according standards that are different to our defaults.

Electrical properties	Value	Unit	Test Standard
<b>ASTM Data</b>			
Volume Resistivity	8.96E15	Ohm*cm	ASTM D 257

Other properties	Value	Unit	Test Standard
Density	1270	kg/m <sup>3</sup>	ASTM D 792

3D Data	Value	Unit	Test Standard
Tensile modulus, on-edge	2770 <sup>[1]</sup>	MPa	-
Tensile modulus, upright	2200 <sup>[2]</sup>	MPa	-
Stress at break, on-edge	81 <sup>[1]</sup>	MPa	-
Stress at break, upright	48 <sup>[2]</sup>	MPa	-
Strain at break, on-edge	3.3 <sup>[1]</sup>	%	-
Strain at break, upright	2 <sup>[2]</sup>	%	-
Flexural modulus, on-edge	2820 <sup>[3]</sup>	MPa	-
Flexural modulus, upright	2230 <sup>[4]</sup>	MPa	-
Flexural strength, on-edge	144 <sup>[3]</sup>	MPa	-
Flexural strength, upright	77 <sup>[4]</sup>	MPa	-

1: XZ-direction; reference to ASTM D638 2: ZX-direction; reference to ASTM D638 3: XZ-direction; reference to ASTM D790 4: ZX-direction; reference to ASTM D790

## Characteristics

### Processing

Additive Manufacturing

### Delivery form

Monofilament, Natural Color

### Special Characteristics

Heat stabilized or stable to heat

### Features

Thermal Stability

### Chemical Resistance

General Chemical Resistance

### Applications

Aircraft and Aerospace, Automotive

### Regional Availability

North America, Europe, Asia Pacific, South and Central America, Near East/Africa