

Product Texts

ULTEM™ AM1010F filament is a polyetherimide product for 3D printing applications manufactured from ULTEM™ 1010 resin. The filament provides high heat resistance and mechanical strength, is UL94 V-0 compliant at 1.5 mm and 5VA compliant at 3.0 mm.

3D Data	Value	Unit	Test Standard
Other Standards^[5]			
Tensile modulus, flat	2750	MPa	ASTM D 638
Tensile modulus, on-edge	2870	MPa	ASTM D 638
Tensile modulus, upright	2840	MPa	ASTM D 638
Stress at break, flat	73	MPa	ASTM D 638
Stress at break, on-edge	80	MPa	ASTM D 638
Stress at break, upright	34	MPa	ASTM D 638
Strain at break, flat	4	%	ASTM D 638
Strain at break, on-edge	3.8	%	ASTM D 638
Strain at break, upright	1.3	%	ASTM D 638
Flexural modulus, flat	2520	MPa	ASTM D 790
Flexural modulus, on-edge	2840	MPa	ASTM D 790
Flexural modulus, upright	2380	MPa	ASTM D 790
Temp. of deflection under load, 1.80 MPa, flat	211	°C	ASTM D 6484
Temp. of deflection under load, 1.80 MPa, on-edge	210	°C	ASTM D 6484
Temp. of deflection under load, 1.80 MPa, upright	208	°C	ASTM D 6484
Vicat softening temperature, B, flat	220	°C	ASTM D 1525
Vicat softening temperature, B, on-edge	220	°C	ASTM D 1525
Vicat softening temperature, B, upright	220	°C	ASTM D 1525
Coeff. of linear therm. expansion, parallel, flat	51	E-6/K	ASTM E 831
Coeff. of linear therm. expansion, parallel, on-edge	53	E-6/K	ASTM E 831
Coeff. of linear therm. expansion, parallel, upright	53	E-6/K	ASTM E 831
Coeff. of linear therm. expansion, normal, flat	53	E-6/K	ASTM E 831
Coeff. of linear therm. expansion, normal, on-edge	52	E-6/K	ASTM E 831
Coeff. of linear therm. expansion, normal, upright	53	E-6/K	ASTM E 831
Burning Behav. at thickness h, flat	V-0	class	UL 94
Burning Behav. at thickness h, on-edge	V-0	class	UL 94
Burning Behav. at thickness h, upright	V-0	class	UL 94
Thickness tested	1.5	mm	UL 94
Volume resistivity, flat	6.24E12	Ohm*m	ASTM D 257
Volume resistivity, on-edge	1.26E13	Ohm*m	ASTM D 257

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

Characteristics

Processing

Additive Manufacturing

Special Characteristics

Heat stabilized or stable to heat

Delivery form

Monofilament

Regional Availability

North America, Europe, South and Central America