

Product Texts

ULTEM™ AM9085F filament is a high performance polyetherimide blend product manufactured from ULTEM™ 9085 resin. It is available in black and natural (unpigmented) colors. It provides high heat resistance and mechanical strength, is UL94 V-0 compliant at 1.5 and 3.0 mm (Blue Cards are available on UL IQ Database), and meets FAR 25.853 and OSU 55/55 with low toxicity, smoke, and flame evolution.

3D Data	Value	Unit	Test Standard
Other Standards^[S]			
Tensile modulus, flat	2180	MPa	ASTM D 638
Tensile modulus, on-edge	2560	MPa	ASTM D 638
Tensile modulus, upright	2440	MPa	ASTM D 638
Stress at break, flat	62	MPa	ASTM D 638
Stress at break, on-edge	80	MPa	ASTM D 638
Stress at break, upright	45	MPa	ASTM D 638
Strain at break, flat	5.1	%	ASTM D 638
Strain at break, on-edge	5.8	%	ASTM D 638
Strain at break, upright	2.3	%	ASTM D 638
Flexural modulus, flat	2130	MPa	ASTM D 790
Flexural modulus, on-edge	2550	MPa	ASTM D 790
Flexural modulus, upright	2070	MPa	ASTM D 790
Temp. of deflection under load, 1.80 MPa, flat	175	°C	ASTM D 6484
Temp. of deflection under load, 1.80 MPa, on-edge	175	°C	ASTM D 6484
Temp. of deflection under load, 1.80 MPa, upright	165	°C	ASTM D 6484
Coeff. of linear therm. expansion, parallel, flat	57.1	E-6/K	ASTM E 831
Coeff. of linear therm. expansion, parallel, on-edge	60.6	E-6/K	ASTM E 831
Coeff. of linear therm. expansion, parallel, upright	62.1	E-6/K	ASTM E 831
Coeff. of linear therm. expansion, normal, flat	58.3	E-6/K	ASTM E 831
Coeff. of linear therm. expansion, normal, on-edge	61.1	E-6/K	ASTM E 831
Coeff. of linear therm. expansion, normal, upright	62.9	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	1.07E13	Ohm*m	ASTM D 257
Volume resistivity, on-edge	1.1E13	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

Features

Low Smoke

Delivery form

Monofilament, Black, Natural Color

Regional Availability

North America, Europe, South and Central America

Special Characteristics

Heat stabilized or stable to heat