

Product Texts

LEXAN™ EXL AMHI240F filament is a high impact polycarbonate product available in black and white colors. It provides high impact strength and improved ductility over standard polycarbonate at room temperature and extreme low temperatures.

Other properties	Value	Unit	Test Standard
Density	1190	kg/m ³	ASTM D 792

3D Data	Value	Unit	Test Standard
Other Standards^[5]			
Tensile modulus, flat	1730	MPa	ASTM D 638
Tensile modulus, on-edge	1910	MPa	ASTM D 638
Tensile modulus, upright	1800	MPa	ASTM D 638
Stress at break, flat	45	MPa	ASTM D 638
Stress at break, on-edge	55	MPa	ASTM D 638
Stress at break, upright	40	MPa	ASTM D 638
Strain at break, flat	7	%	ASTM D 638
Strain at break, on-edge	5	%	ASTM D 638
Strain at break, upright	3	%	ASTM D 638
Flexural modulus, flat	1530	MPa	ASTM D 790
Flexural modulus, on-edge	1910	MPa	ASTM D 790
Flexural modulus, upright	1500	MPa	ASTM D 790
Charpy impact strength, +23°C, flat	88	kJ/m ²	ISO 179/1eU
Charpy impact strength, +23°C, on-edge	151	kJ/m ²	ISO 179/1eU
Charpy impact strength, +23°C, upright	23	kJ/m ²	ISO 179/1eU
Charpy notched impact strength, +23°C, flat	19	kJ/m ²	ISO 179/1eA
Charpy notched impact strength, +23°C, on-edge	30	kJ/m ²	ISO 179/1eA
Charpy notched impact strength, +23°C, upright	6	kJ/m ²	ISO 179/1eA
Temp. of deflection under load, 1.80 MPa, flat	139	°C	ASTM D 6484
Temp. of deflection under load, 1.80 MPa, on-edge	138	°C	ASTM D 6484
Temp. of deflection under load, 1.80 MPa, upright	138	°C	ASTM D 6484
Vicat softening temperature, A, flat	148	°C	ASTM D 1525
Vicat softening temperature, A, on-edge	149	°C	ASTM D 1525
Vicat softening temperature, A, upright	149	°C	ASTM D 1525
Coeff. of linear therm. expansion, parallel, flat	77	E-6/K	ASTM E 831
Coeff. of linear therm. expansion, parallel, on-edge	80	E-6/K	ASTM E 831
Coeff. of linear therm. expansion, parallel, upright	79	E-6/K	ASTM E 831
Coeff. of linear therm. expansion, normal, flat	77	E-6/K	ASTM E 831
Coeff. of linear therm. expansion, normal, on-edge	81	E-6/K	ASTM E 831
Coeff. of linear therm. expansion, normal, upright	79	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-2	class	UL 94
Thickness tested	3.0	mm	UL 94
Volume resistivity, flat	1.4E13	Ohm*m	ASTM D 257
Volume resistivity, on-edge	1.5E13	Ohm*m	ASTM D 257
Volume resistivity, upright	1.5E13	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

Delivery form

Monofilament, Black

Special Characteristics

High impact or impact modified

Features

Ductile

Regional Availability

North America, Europe, South and Central America