SLS Powder AMPC 100P

PC — Saudi Basic Industries Corporation (SABIC)

Product Texts

The AMPC100P product is a general purpose polycarbonate powder for additive manufacturing via selective laser sintering process. Made with LEXAN™ resin, it is white in appearance and offers a combination of good mechanical properties and high temperature resistance that make it suitable for a variety of industrial applications. The AMPC100P powder is compatible with most common SLS printers, and can be recycled up to 100%.

Other properties	Value	Unit	Test Standard
Density	**1140**	kg/m³	ASTM D 792
Bulk Density	**580**	kg/m³	-

3D Data	Value	Unit	Test Standard
Other Standards[S]			
Tensile modulus, flat	**1990**	MPa	ASTM D 638
Tensile modulus, on-edge	**1900**	MPa	ASTM D 638
Tensile modulus, upright	**1810**	MPa	ASTM D 638
Stress at break, flat	**52.7**	MPa	ASTM D 638
Stress at break, on-edge	**52.1**	MPa	ASTM D 638
Stress at break, upright	**45.5**	MPa	ASTM D 638
Strain at break, flat	**4.6**	%	ASTM D 638
Strain at break, on-edge	**4.6**	%	ASTM D 638
Strain at break, upright	**3.4**	%	ASTM D 638
Flexural modulus, flat	**2060**	MPa	ASTM D 790
Flexural modulus, on-edge	**1800**	MPa	ASTM D 790
Flexural modulus, upright	**1780**	MPa	ASTM D 790
Flexural strength, flat	**92.7**	MPa	ASTM D 790
Flexural strength, on-edge	**81.3**	MPa	ASTM D 790
Flexural strength, upright	**70.3**	MPa	ASTM D 790
Charpy impact strength, +23°C, flat	**88**	kJ/m²	ISO 179/1eU
Charpy impact strength, +23°C, on-edge	**151**	kJ/m²	ISO 179/1eU
Charpy impact strength, +23°C, upright	**23**	kJ/m²	ISO 179/1eU
Temp. of deflection under load, 1.80 MPa, flat	**138**	°C	ASTM D 6484
Temp. of deflection under load, 1.80 MPa, on-edge	**139**	°C	ASTM D 6484
Temp. of deflection under load, 1.80 MPa, upright	**139**	°C	ASTM D 6484
Vicat softening temperature, B, flat	**144**	°C	ASTM D 1525
Vicat softening temperature, B, on-edge	**144**	°C	ASTM D 1525
Vicat softening temperature, B, upright	**144**	°C	ASTM D 1525
Coeff. of linear therm. expansion, parallel, flat	**74.6**	E-6/K	ASTM E 831
Coeff. of linear therm. expansion, parallel, on-edge	**74.4**	E-6/K	ASTM E 831
Coeff. of linear therm. expansion, parallel, upright	**73.9**	E-6/K	ASTM E 831
Coeff. of linear therm. expansion, normal, flat	**73.9**	E-6/K	ASTM E 831
Coeff. of linear therm. expansion, normal, on-edge	**73.7**	E-6/K	ASTM E 831
Coeff. of linear therm. expansion, normal, upright	**73.5**	E-6/K	ASTM E 831
Burning Behav. at thickness h, flat	**V-2**	class	UL 94
Burning Behav. at thickness h, on-edge	**V-2**	class	UL 94
Burning Behav. at thickness h, upright	**V-2**	class	UL 94
Thickness tested	**3.0**	mm	UL 94
Volume resistivity, flat	**2E15**	Ohm*m	ASTM D 257
Volume resistivity, on-edge	**5E14**	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, Laser Sintering

Applications
General Purpose

Delivery form
Powder, White

Regional Availability
North America, Europe, Asia Pacific, South and Central America

Special Characteristics
Heat stabilized or stable to heat