

Technical Data Sheet

POLYMAN® (PC) XP 11 10GF TF

Polycarbonate
Engineering Plastics

Product Description

Polycarbonate (PC) grade, PTFE modified, filled with 10% glass fiber.

General

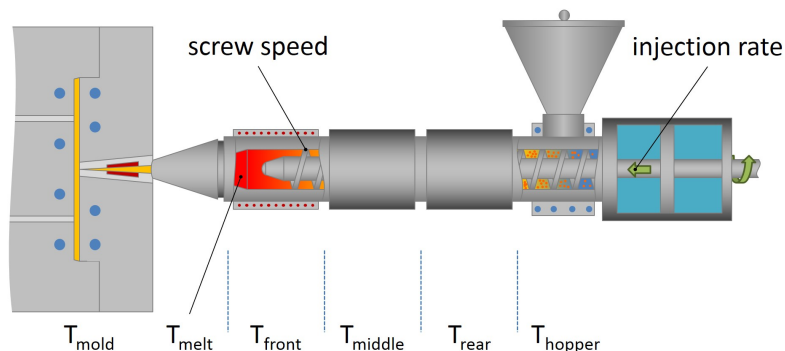
Processing Method	• Injection Molding
Resin ID (ISO 1043)	• PC

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.34 g/cm³	1.34 g/cm³	ISO 1183/A
Melt Volume-Flow Rate (MVR) (300°C/1.2 kg)	11 cm³/10min	11 cm³/10min	ISO 1133
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus	566000 psi	3900 MPa	ISO 527-2/1A/1
Tensile Stress (Break)	10400 psi	72.0 MPa	ISO 527-2
Tensile Strain (Break)	4.5 %	4.5 %	ISO 527-2
Flexural Modulus	609000 psi	4200 MPa	ISO 178
Flexural Stress	18900 psi	130 MPa	ISO 178
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-22°F (-30°C)	3.9 ft·lb/in²	8.3 kJ/m²	
73°F (23°C)	5.2 ft·lb/in²	11 kJ/m²	
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F (-30°C)	30 ft·lb/in²	64 kJ/m²	
73°F (23°C)	26 ft·lb/in²	54 kJ/m²	
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Ball Indentation Hardness (H 358/30)	20600 psi	142 MPa	ISO 2039-1
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Heat Deflection Temperature			
66 psi (0.45 MPa), Unannealed	275 °F	135 °C	ISO 75-2/Bf
264 psi (1.8 MPa), Unannealed	268 °F	131 °C	ISO 75-2/Af
Vicat Softening Temperature			
--	302 °F	150 °C	ISO 306/A50
--	446 °F	230 °C	ISO 306/B50
Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Burning Rate			
0.0787 in (2.00 mm)	< 3.9 in/min	< 100 mm/min	ISO 3795
0.0787 in (2.00 mm)	< 3.9 in/min	< 100 mm/min	FMVSS 302
Glow Wire Ignition Temperature			IEC 60695-2-13
0.06 in (1.5 mm)	1560 °F	850 °C	
0.12 in (3.0 mm)	1560 °F	850 °C	

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Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	248 °F	120 °C
Drying Time	4.0 to 12 hr	4.0 to 12 hr
Processing (Melt) Temp	536 to 590 °F	280 to 310 °C
Mold Temperature	185 to 239 °F	85 to 115 °C

Notes

These are typical property values not to be construed as specification limits.