Technical Data Sheet

POLYMAN® (PC) XP 41 R 10 GF

Polycarbonate
Engineering Plastics

Product Description	
10% glass fibre reinforced PC grade	

General	
Filler / Reinforcement	• Glass Fiber, 10% Filler by Weight
Processing Method	• Injection Molding
Resin ID (ISO 1043)	• PC-GF

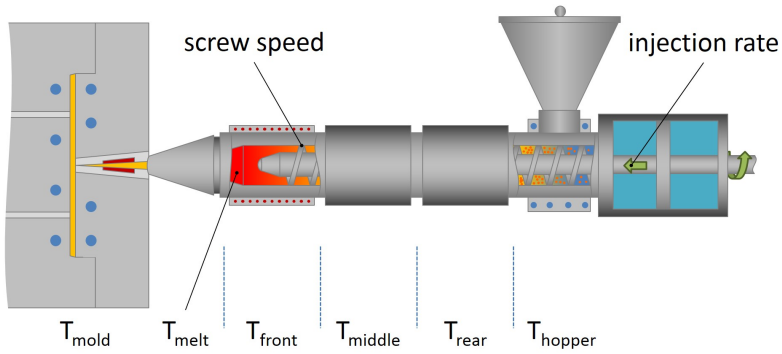
Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.26 g/cm³	1.26 g/cm³	ISO 1183/A
Melt Volume-Flow Rate (MVR) (300°C/1.2 kg)	5.00 cm³/10min	5.00 cm³/10min	ISO 1133
Molding Shrinkage			ISO 294-4
Across Flow	5.0 %	5.0 %	
Flow	0.20 %	0.20 %	
Mechanical	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Tensile Modulus	551000 psi	3800 MPa	ISO 527-2/1A/1
Tensile Stress (Break)	12300 psi	85.0 MPa	ISO 527-2/1A/5
Tensile Strain (Break)	4.0 %	4.0 %	ISO 527-2/1A/5
Impact	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Charpy Notched Impact Strength (73°F (23°C))	5.7 ft·lb/in²	12 kJ/m²	ISO 179/1eA
Hardness	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Ball Indentation Hardness (H 358/30)	18900 psi	130 MPa	ISO 2039-1
Thermal	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Heat Deflection Temperature			
66 psi (0.45 MPa), Unannealed	291 °F	144 °C	ISO 75-2/Bf
264 psi (1.8 MPa), Unannealed	280 °F	138 °C	ISO 75-2/Af
Vicat Softening Temperature	302 °F	150 °C	ISO 306/B50
Electrical	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Surface Resistivity	> 1.0E+15 ohms	> 1.0E+15 ohms	IEC 60093
Volume Resistivity	> 1.0E+13 ohms·m	> 1.0E+13 ohms·m	IEC 62631-3-1
Comparative Tracking Index	175 V	175 V	IEC 60112
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
Flammability Classification			IEC 60695-11-10, -20
0.06 in (1.5 mm)	HB	HB	
0.12 in (3.0 mm)	HB	HB	

Additional Information
1.) Not for use in food contact applications
2.) Not for use in medical or pharmaceutical applications

Technical Data Sheet

POLYMAN® (PC) XP 41 R 10 GF

Polycarbonate
Engineering Plastics



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.