

Technical Data Sheet

# Polyman (PC) XP 21 RN / RS

Polycarbonate  
LyondellBasell Industries  
Engineering Plastics

**Product Description**

Good flow PC standard grade,  
RN: food contact grade - RS: UV-stabilized

**General**

Automotive Specifications	• GM QK 005941 U Color: 80940 White
Processing Method	• Injection Molding
Resin ID (ISO 1043)	• PC

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.20 g/cm <sup>3</sup>	1.20 g/cm <sup>3</sup>	ISO 1183/A
Melt Volume-Flow Rate (MVR) (300°C/1.2 Kg)	14 cm <sup>3</sup> /10min	14 cm <sup>3</sup> /10min	ISO 1133

Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus	334000 psi	2300 MPa	ISO 527-1/1A/1
Tensile Stress (Yield)	8850 psi	61.0 MPa	ISO 527-2/1A/50
Tensile Strain (Yield)	6.0 %	6.0 %	ISO 527-2/1A/50

Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-22°F (-30°C)	16 ft·lb/in <sup>2</sup>	34 kJ/m <sup>2</sup>	
73°F (23°C)	33 ft·lb/in <sup>2</sup>	70 kJ/m <sup>2</sup>	
Charpy Unnotched Impact Strength			ISO 179/1eU
73°F (23°C)	No Break	No Break	

Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Ball Indentation Hardness (H 358/30)	16000 psi	110 MPa	ISO 2039-1

Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			
66 Psi (0.45 Mpa), Unannealed	280 °F	138 °C	ISO 75-2/Bf
264 Psi (1.8 Mpa), Unannealed	259 °F	126 °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	275 V	275 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)	V-2	V-2	
0.12 In (3.0 Mm)	V-2	V-2	
Glow Wire Flammability Index			IEC 60695-2-12
0.08 In (2.0 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.