

Technical Data Sheet



Polyman PCxxxxi6FRUL

Polycarbonate
LyondellBasell Industries
Engineering Plastics

Product Description

Medium Viscosity, UV Stabilized, PC with Mold Release

General

Material Status	• Commercial: Active
Availability	• North America
Features	• Good Mold Release • UV Stabilized
Processing Method	• Injection Molding

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.20 g/cm ³	1.20 g/cm ³	ISO 1183/A
Water Absorption (Saturation, 73°F (23°C))	0.24 %	0.24 %	ISO 62
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus	348000 psi	2400 MPa	ISO 527-1/1A/1
Tensile Stress (Yield)	8850 psi	61.0 MPa	ISO 527-2/1A/50
Tensile Strain			ISO 527-2/1A/50
Yield	5.6 %	5.6 %	
Break	> 100 %	> 100 %	
Flexural Modulus	334000 psi	2300 MPa	ISO 178
Flexural Stress	13500 psi	93.0 MPa	ISO 178
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Charpy Notched Impact Strength (73°F (23°C))	36 ft·lb/in ²	76 kJ/m ²	ISO 179
Charpy Unnotched Impact Strength 73°F (23°C)	No Break	No Break	ISO 179
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			
66 psi (0.45 MPa), Unannealed	289 °F	143 °C	ISO 75-2/Bf
264 psi (1.8 MPa), Unannealed	264 °F	129 °C	ISO 75-2/ Af
RTI Elec (0.03 to 0.07 in (0.8 to 1.8 mm))	176 °F	80.0 °C	UL 746B
RTI Imp (0.03 to 0.07 in (0.8 to 1.8 mm))	176 °F	80.0 °C	UL 746B
RTI Str (0.03 to 0.07 in (0.8 to 1.8 mm))	176 °F	80.0 °C	UL 746B
Electrical	Nominal Value (English)	Nominal Value (SI)	Test Method
Comparative Tracking Index (CTI)	PLC 0	PLC 0	UL 746A
High Amp Arc Ignition (HAI)			UL 746A
0.03 to 0.07 in (0.8 to 1.8 mm)	PLC 2	PLC 2	
Hot-wire Ignition (HWI)			UL 746A
0.03 to 0.07 in (0.8 to 1.8 mm)	PLC 4	PLC 4	
Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Flammability Classification			IEC 60695-11-10, -20
0.03 to 0.07 in (0.8 to 1.8 mm)	V-2	V-2	

Additional Information

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

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Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature - Desiccant Dryer	248 °F	120 °C
Drying Time	4.0 to 8.0 hr	4.0 to 8.0 hr
Suggested Max Moisture	< 0.02 %	< 0.02 %
Rear Temperature	518 to 572 °F	270 to 300 °C
Middle Temperature	518 to 572 °F	270 to 300 °C
Front Temperature	518 to 572 °F	270 to 300 °C
Nozzle Temperature	518 to 572 °F	270 to 300 °C
Mold Temperature	158 to 212 °F	70 to 100 °C

Notes

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

Processing Techniques

Specific recommendations for resin type and processing conditions can only be made when the end use, required properties and fabrication equipment are known.

Product Storage and Handling

- Product should be stored in dry conditions at temperatures below 50°C and protected from UV-light
- Improper storage may bring damage to the packaging and can negatively affects on the quality of this product
- Keep material completely dry for good processing

Company Information

For further information regarding the LyondellBasell company, please visit <http://www.lyb.com/>.

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