

Technical Data Sheet

Diamond Pc 1229M

Polycarbonate
LyondellBasell Industries
Engineering Plastics

General			
Features	• Biocompatible • Ethylene Oxide Sterilizable	• Good Mold Release • Low Viscosity	• Steam Sterilizable
Uses	• Medical/Healthcare Applications		
Agency Ratings	• EU 2000/53/EC • EU 2002/96/EC (WEEE)	• EU 2003/11/EC • ISO 10993-Part 1	
RoHS Compliance	• RoHS Compliant		
Appearance	• Clear/Transparent	• Colors Available	• Opaque
Processing Method	• Injection Molding		

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.19 g/cm ³	1.19 g/cm ³	ASTM D792
Melt Mass-Flow Rate (MFR) ¹ (300°C/1.2 Kg)	23 g/10 min	23 g/10 min	ASTM D1238
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus ²			ASTM D638
73°F (23°C), Injection Molded	326000 psi	2240 MPa	
Tensile Strength ²			ASTM D638
Yield, 73°F (23°C), Injection Molded	9250 psi	63.8 MPa	
Tensile Elongation ²			ASTM D638
Yield, 73°F (23°C), Injection Molded	6.1 %	6.1 %	
Break, 73°F (23°C), Injection Molded	190 %	190 %	
Flexural Modulus			ASTM D790A
73°F (23°C), Injection Molded	317000 psi	2190 MPa	
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact			ASTM D256A
73°F (23°C), Injection Molded	14 ft·lb/in	750 J/m	
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
264 Psi (1.8 Mpa), Unannealed	257 °F	125 °C	
Vicat Softening Temperature	289 °F	143 °C	ASTM D1525
Optical	Nominal Value (English)	Nominal Value (SI)	Test Method
Light Transmittance	89.0 %	89.0 %	ASTM D1003
Haze	< 0.800 %	< 0.800 %	ASTM D1003

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Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	250 °F	121 °C
Drying Time	4.0 hr	4.0 hr
Drying Time, Maximum	6.0 hr	6.0 hr
Suggested Max Moisture	0.02 %	0.02 %
Rear Temperature	445 to 495 °F	229 to 257 °C
Middle Temperature	510 to 550 °F	266 to 288 °C
Front Temperature	530 to 570 °F	277 to 299 °C
Nozzle Temperature	510 to 530 °F	266 to 277 °C
Processing (Melt) Temp	536 to 608 °F	280 to 320 °C
Mold Temperature	150 to 220 °F	66 to 104 °C
Injection Pressure	10000 to 20000 psi	68.9 to 138 MPa
Injection Rate	Moderate-Fast	Moderate-Fast

Notes

¹ Procedure A

² 2.0 in/min (51 mm/min)

Notes

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