

Technical Data Sheet

**Diamond Pc 1229M**

Polycarbonate
LyondellBasell Industries
Engineering Plastics

General

Material Status	• Commercial: Active		
Availability	• North America		
Features	• Biocompatible • Ethylene Oxide Sterilizable	• Good Mold Release • Low Viscosity	• Steam Sterilizable
Uses	• Medical/Healthcare Applications		
Appearance	• Clear/Transparent	• Colors Available	• Opaque
Processing Method	• Injection Molding		

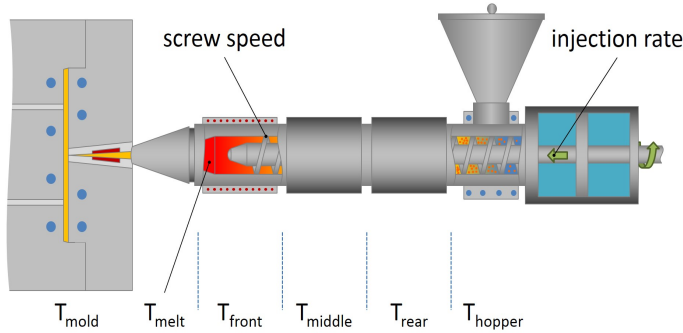
Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.19 g/cm ³	1.19 g/cm ³	ASTM D792
Melt Mass-Flow Rate (MFR) ¹ (300°C/1.2 kg)	23 g/10 min	23 g/10 min	ASTM D1238
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus ²			ASTM D638
73°F (23°C), Injection 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

Technical Data Sheet



Diamond Pc 1229M

Polycarbonate
LyondellBasell Industries
Engineering Plastics



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

Technical Data Sheet

**Diamond Pc 1229M**

Polycarbonate
LyondellBasell Industries
Engineering Plastics

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.

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/>.

© LyondellBasell Industries Holdings, B.V. 2024

Disclaimer

Information in this document is accurate to the best of our knowledge at the date of publication. The document is designed to provide users general information for safe handling, use, processing, storage, transportation, disposal and release and does not constitute any warranty or quality specification, either express or implied, including any warranty of merchantability or fitness for any particular purpose. Users shall determine whether the product is suitable for their use and can be used safely and legally.

In addition to any prohibitions of use specifically noted in this document, LyondellBasell may further prohibit or restrict the sale of its products into certain applications. For further information, please contact a LyondellBasell representative.

Trademarks

The Trademark referenced within the product name is owned or used by the LyondellBasell family of companies.