

Technical Data Sheet

Diamond PC 1029 CLEAR



Polycarbonate

Product Description

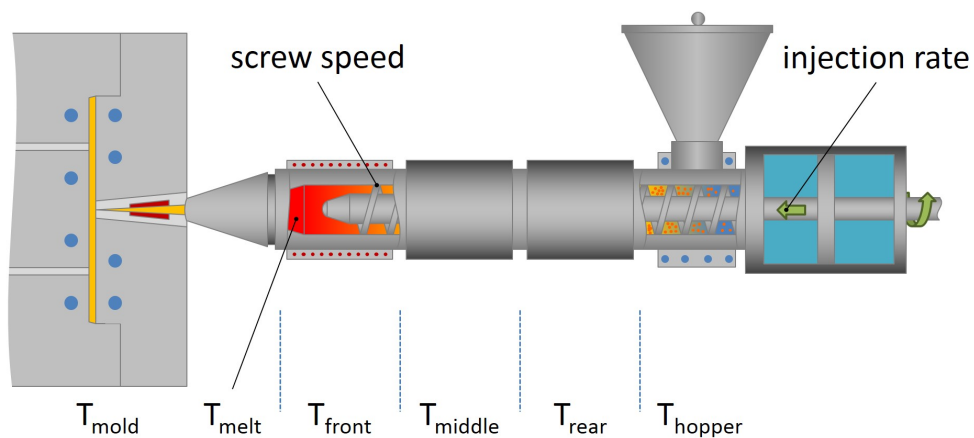
Diamond PC 1029 CLEAR is a Polycarbonate material. Features include: Food Contact Acceptable.

Regulatory Status

For regulatory compliance information, see PC 1029 CLEAR [Product Stewardship Bulletin \(PSB\)](#) and [Safety Data Sheet \(SDS\)](#).

Status	Commercial: Active
Availability	North America
Attribute	Food Contact Acceptable
Appearance	Natural Color

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Flow Rate, (300 °C/1.2 kg, Procedure A)	20	g/10 min	ASTM D1238
Density - Specific Gravity	1.2	g/cm ³	ASTM D792
Mechanical			
Tensile Strength at Yield, (51 mm/min)	62.1	MPa	ASTM D638
Flexural Modulus, (1.3 mm/min, Procedure B, Method I (3 point load))	2380	MPa	ASTM D790
Flexural Strength, (1.3 mm/min, Method I (3 point load), Procedure B)	89.6	MPa	ASTM D790
Impact			
Notched Izod Impact, (3.18 mm, Method A)	640	J/m	ASTM D256
Hardness			
Rockwell Hardness, (R-Scale)	120		ASTM D785
Thermal			
Deflection Temperature Under Load Unannealed (264 psi), (3.18 mm)	127	°C	ASTM D648
Additional Information			
Water Absorption at 24 hrs, (23 °C)	0.15	%	ASTM D570
UL Information			
Flame Rating, (1.5 mm)	V-2		UL 94
UL File Number	E150937		



Injection Parameters	Nominal Value	Units
Drying Time, (Desiccant Dryer)	3.0 to 4.0	hr
Drying Temperature	120	°C
Suggested Max Moisture	0.02	%
Nozzle Temperature	270 to 300	°C
Screw Speed	40 to 70	rpm
Processing (Melt) Temp	280 to 305	°C
Front Temperature	280 to 305	°C
Suggested Shot Size	40 to 60	%
Middle Temperature	270 to 295	°C
Vent Depth	0.025 to 0.076	mm
Rear Temperature	260 to 280	°C
Back Pressure	0.300 to 0.700	MPa
Mold Temperature	80 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.

Company Information

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

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