

Technical Data Sheet

Diamond 1011582CT PC E-14961B GF32 BLKBLK



Polycarbonate

Product Description

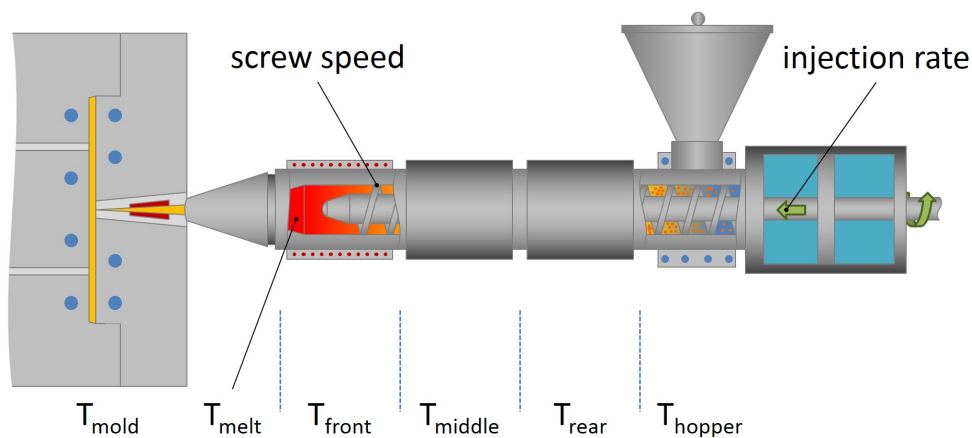
32% Glass Fiber Reinforced Polycarbonate

Regulatory Status

For regulatory compliance information, see 1011582CT PC E-14961B GF32 BLKBLK [Product Stewardship Bulletin \(PSB\)](#) and [Safety Data Sheet \(SDS\)](#).

Status	Commercial: Active
Availability	North America
Processing Method	Extrusion; Injection Molding
Filler/Reinforcement	Glass Fiber, 32%

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Flow Rate			
(300 °C/1.2 kg)	5.4	g/10 min	ASTM D1238
(300 °C/3.8 kg)	27	g/10 min	ASTM D1238
(300 °C/5.0 kg)	30	g/10 min	ASTM D1238
Density - Specific Gravity	1.43	g/cm ³	ASTM D792
Mechanical			
Flexural Strength at Yield, (1.3 mm/min)	118	MPa	ASTM D790
Tensile Strength at Break, (5.0 mm/min, 23 °C, 3.11 mm, Injection Molded)	117	MPa	ASTM D638
Flexural Modulus, (1.3 mm/min, 1% Secant)	7790	MPa	ASTM D790
Tensile Elongation at Break, (5.0 mm/min, 23 °C, 3.11 mm, Injection Molded)	2.7	%	ASTM D638
Tensile Modulus, (5.0 mm/min, 23 °C, 3.11 mm, Injection Molded)	440	MPa	ASTM D638
Impact			
Unnotched Izod Impact, (23 °C, 3.08 mm)	930	J/m	ASTM D4812
Notched Izod Impact, (23 °C, 3.07 mm)	180	J/m	ASTM D256
Thermal			
Deflection Temperature Under Load Unannealed (264 psi), (12.6 mm)	142	°C	ASTM D648
Deflection Temperature Under Load Unannealed (66 psi), (12.6 mm)	146	°C	ASTM D648
Coefficient of Linear Thermal Expansion (CLTE), Flow, (-20 to 130 °C)	1.8E-5	cm/cm/°C	ASTM D696
Coefficient of Linear Thermal Expansion (CLTE), Perpendicular, (-20 to 130 °C)	6.5E-5	cm/cm/°C	ASTM D696
Flammable			
Burning Rate			
(2.00 mm)	<100	mm/min	ISO 3795
(2.00 mm)	<100	mm/min	FMVSS 302



Injection Parameters	Nominal Value	Units
Drying Time	3.0 to 6.0	hr
Drying Temperature	121	°C
Nozzle Temperature	304 to 338	°C
Processing (Melt) Temp	316 to 343	°C
Front Temperature	304 to 338	°C
Middle Temperature	293 to 316	°C
Rear Temperature	282 to 304	°C
Mold Temperature	82 to 116	°C
Drying Time, Maximum	6	hr

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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