

Technical Data Sheet

**Schuladur HT GF 30 FR 5 black**

Polycyclohexylenedimethylene Terephthalate
LyondellBasell Industries
Engineering Plastics

Product Description

30% glass fiber reinforced, flame retardant PCT

General

Material Status	• Commercial: Active		
Availability	• Asia Pacific	• Europe	• North America
Filler / Reinforcement	• Glass Fiber, 30% Filler by Weight		
Processing Method	• Injection Molding		
Resin ID (ISO 1043)	• PCT GF30 FR(16)		

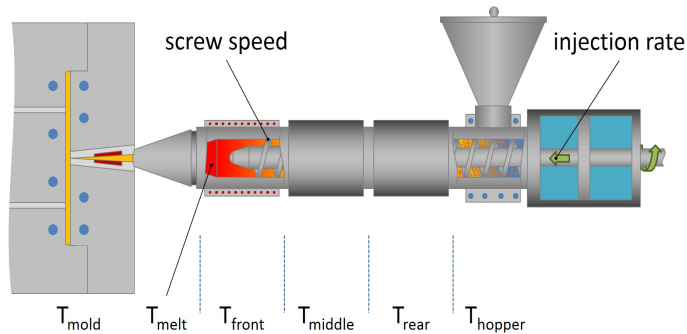
Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.72 g/cm ³	1.72 g/cm ³	ISO 1183/A
Melt Volume-Flow Rate (MVR) (300°C/2.16 kg)	25 cm ³ /10min	25 cm ³ /10min	ISO 1133
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus	1.73E+6 psi	11900 MPa	ISO 527-1/1A/1
Tensile Stress (Break)	14500 psi	100 MPa	ISO 527-2/1A/5
Tensile Strain (Break)	1.2 %	1.2 %	ISO 527-2/1A/5
Flexural Modulus ¹	1.12E+6 psi	7750 MPa	ISO 178
Flexural Stress ^{1, 2} (1.6% Strain)	20500 psi	142 MPa	ISO 178
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Charpy Notched Impact Strength (73°F (23°C))	2.4 ft·lb/in ²	5.0 kJ/m ²	ISO 179/1eA
Charpy Unnotched Impact Strength 73°F (23°C)	9.5 ft·lb/in ²	20 kJ/m ²	ISO 179/1eU
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			
66 psi (0.45 MPa), Unannealed	> 482 °F	> 250 °C	ISO 75-2/Bf
264 psi (1.8 MPa), Unannealed	464 °F	240 °C	ISO 75-2/ Af
Vicat Softening Temperature			
--	419 °F	215 °C	ISO 306/B50
--	> 482 °F	> 250 °C	ISO 306/A50
Electrical	Nominal Value (English)	Nominal Value (SI)	Test Method
Surface Resistivity	> 1.0E+15 ohms	> 1.0E+15 ohms	IEC 60093
Volume Resistivity	> 1.0E+13 ohms·m	> 1.0E+13 ohms·m	IEC 62631-3-1
Comparative Tracking Index	250 V	250 V	IEC 60112
Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Burning Rate			
0.0787 in (2.00 mm), Self-Extinguishing	0.0 in/min	0.0 mm/min	ISO 3795
0.0787 in (2.00 mm), Self-Extinguishing	0.0 in/min	0.0 mm/min	FMVSS 302
Flammability Classification			IEC 60695-11-10, -20
0.03 in (0.8 mm)	V-0	V-0	
0.06 in (1.6 mm)	V-0	V-0	
0.13 in (3.2 mm)	V-0	V-0	
Glow Wire Flammability Index			IEC 60695-2-12
0.030 in (0.75 mm)	1760 °F	960 °C	
0.06 in (1.5 mm)	1760 °F	960 °C	
0.12 in (3.0 mm)	1760 °F	960 °C	
Glow Wire Ignition Temperature			IEC 60695-2-13
0.030 in (0.75 mm)	1610 °F	875 °C	
0.06 in (1.5 mm)	1610 °F	875 °C	
0.12 in (3.0 mm)	1610 °F	875 °C	

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Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	212 °F	100 °C
Drying Time	4.0 to 6.0 hr	4.0 to 6.0 hr
Suggested Max Moisture	0.03 %	0.03 %
Processing (Melt) Temp	554 to 590 °F	290 to 310 °C
Mold Temperature	194 to 248 °F	90 to 120 °C
Injection Rate	Slow-Moderate	Slow-Moderate
Back Pressure	290 to 1160 psi	2.00 to 8.00 MPa
Screw Speed	< 591 in/min	< 15 m/min

Injection Notes

Mould surface contacting melt should
be of non-corrosive steel (content of chrome > 12%)

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Notes¹ 0.079 in/min (2.0 mm/min)² at Break**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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