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	
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/cm³	1.72 g/cm³	ISO 1183/A
Melt Volume-Flow Rate (MVR) (300°c/2.16 Kg)	25 cm³/10min	25 cm³/10min	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/in²	5.0 kJ/m²	ISO 179/1eA
Charpy Unnotched Impact Strength			ISO 179/1eU
73°f (23°c)	9.5 ft·lb/in²	20 kJ/m²	
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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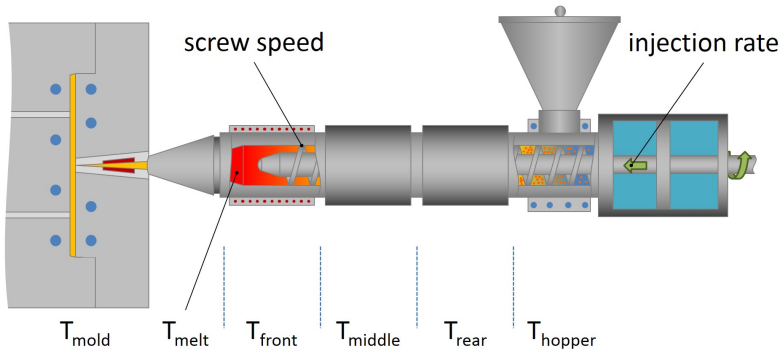

Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	212 °F	100 °C
Drying Time	4.0 to 6.0 hr	4.0 to 6.0 hr
Suggested Max Moisture	0.03 %	0.03 %
Processing (Melt) Temp	554 to 590 °F	290 to 310 °C
Mold Temperature	194 to 248 °F	90 to 120 °C
Injection Rate	Slow-Moderate	Slow-Moderate
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%)		

Notes

[1] 0.079 in/min (2.0 mm/min)

[2] at Break

Notes

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