

Schuladur PCR GF 20 HI

Polybutylene Terephthalate + PET

LyondellBasell Industries

Engineering Plastics

Product Description

20% glass fibre reinforced PBT/PET compound based on post consumer PET, providing high impact strength.

According to ISO 14021:2016 Schuladur PCR GF20 HI is a compound containing at least 10% (R10) of recycled material that is fully based on Post-Consumer Waste (PCW).

General

Filler / Reinforcement	• Glass Fiber, 20% Filler by Weight
Recycled Content	• Yes
Features	• Impact Modified
Processing Method	• Injection Molding
Resin ID (ISO 1043)	• PBT+PET-GF

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.39 g/cm ³	1.39 g/cm ³	ISO 1183/A
Melt Volume-Flow Rate (MVR) (260°C/5.0 Kg)	26 cm ³ /10min	26 cm ³ /10min	ISO 1133
Water Absorption			ISO 62
Equilibrium, 73°F (23°C), 50% Rh	0.30 %	0.30 %	

Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus	899000 psi	6200 MPa	ISO 527-1/1A/1
Tensile Stress (Break)	13800 psi	95.0 MPa	ISO 527-2/1A/5
Tensile Strain (Break)	3.1 %	3.1 %	ISO 527-2/1A/5

Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-22°F (-30°C)	3.3 ft·lb/in ²	7.0 kJ/m ²	
73°F (23°C)	4.8 ft·lb/in ²	10 kJ/m ²	
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F (-30°C)	26 ft·lb/in ²	54 kJ/m ²	
73°F (23°C)	27 ft·lb/in ²	56 kJ/m ²	

Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			
66 Psi (0.45 Mpa), Unannealed	414 °F	212 °C	ISO 75-2/Bf
264 Psi (1.8 Mpa), Unannealed	369 °F	187 °C	ISO 75-2/Af

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	475 V	475 V	IEC 60112

Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Burning Rate			
0.0787 In (2.00 Mm)	< 3.9 in/min	< 100 mm/min	ISO 3795
0.0787 In (2.00 Mm)	< 3.9 in/min	< 100 mm/min	FMVSS 302
Flammability Classification			IEC 60695-11-10, -20
0.06 In (1.5 Mm)	HB	HB	
0.12 In (3.0 Mm)	HB	HB	

Additional Information

- 1.) Not for use in food contact applications
- 2.) Not for use in medical or pharmaceutical applications



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Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	248 °F	120 °C
Drying Time	4.0 to 6.0 hr	4.0 to 6.0 hr
Suggested Max Moisture	0.02 %	0.02 %
Processing (Melt) Temp	500 to 536 °F	260 to 280 °C
Mold Temperature	176 to 230 °F	80 to 110 °C

Notes

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

