Technical Data Sheet

Schuladur PCR GF 45

Polybutylene Terephthalate + PET
LyondellBasell Industries
Engineering Plastics

Product Description
45% glass fibre reinforced PBT/PET compound based on post consumer PET. According to ISO 14021:2016 Schuladur PCR GF45 is a compound containing at least 15% (R15) of recycled material that is fully based on Post-Consumer Waste (PCW).

General	
Filler / Reinforcement	• Glass Fiber, 45% Filler by Weight
Recycled Content	• Yes
Automotive Specifications	• GM GMW15702-019131 PBT+PET-GF45 Color: 96.8001 Black
Processing Method	• Injection Molding
Resin ID (ISO 1043)	• PBT+PET-GF45

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.68 g/cm³	1.68 g/cm³	ISO 1183/A
Melt Volume-Flow Rate (MVR)			ISO 1133
260°c/2.16 Kg	11 cm³/10min	11 cm³/10min	
260°c/5.0 Kg	19 cm³/10min	19 cm³/10min	
Water Absorption			ISO 62
Equilibrium, 73°f (23°c), 50% Rh	0.25 %	0.25 %	
Mechanical	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Tensile Modulus	2.25E+6 psi	15500 MPa	ISO 527-1/1A/1
Tensile Stress (Break)	23200 psi	160 MPa	ISO 527-2/1A/5
Tensile Strain (Break)	1.7 %	1.7 %	ISO 527-2/1A/5
Flexural Modulus [1]	2.32E+6 psi	16000 MPa	ISO 178
Flexural Stress [1]	36300 psi	250 MPa	ISO 178
Impact	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Charpy Notched Impact Strength			ISO 179/1eA
-22°f (-30°c)	3.8 ft·lb/in²	8.0 kJ/m²	
73°f (23°c)	3.8 ft·lb/in²	8.0 kJ/m²	
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°f (-30°c)	24 ft·lb/in²	50 kJ/m²	
73°f (23°c)	24 ft·lb/in²	50 kJ/m²	
Hardness	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Ball Indentation Hardness (H 961/30)	43500 psi	300 MPa	ISO 2039-1
Thermal	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Deflection Temperature Under Load			
66 Psi (0.45 Mpa), Unannealed	437 °F	225 °C	ISO 75-2/Bf
264 Psi (1.8 Mpa), Unannealed	406 °F	208 °C	ISO 75-2/Af
Vicat Softening Temperature			
--	392 °F	200 °C	ISO 306/B50
--	421 °F	216 °C	ISO 306/A50
Ball Pressure Test (392°f (200°c))	Pass	Pass	IEC 60695-10-2

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Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Burning Rate			
0.0787 In (2.00 Mm)	0.98 in/min	25 mm/min	ISO 3795
0.0787 In (2.00 Mm)	0.98 in/min	25 mm/min	FMVSS 302
Flammability Classification			IEC 60695-11-10, -20
0.06 In (1.6 Mm)	HB	HB	
0.13 In (3.2 Mm)	HB	HB	
Glow Wire Flammability Index			IEC 60695-2-12
0.06 In (1.5 Mm)	1290 °F	700 °C	
0.12 In (3.0 Mm)	1470 °F	800 °C	
Glow Wire Ignition Temperature			IEC 60695-2-13
0.06 In (1.5 Mm), Passes	1520 °F	825 °C	
0.12 In (3.0 Mm), Passes	1470 °F	800 °C	

Additional Information

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

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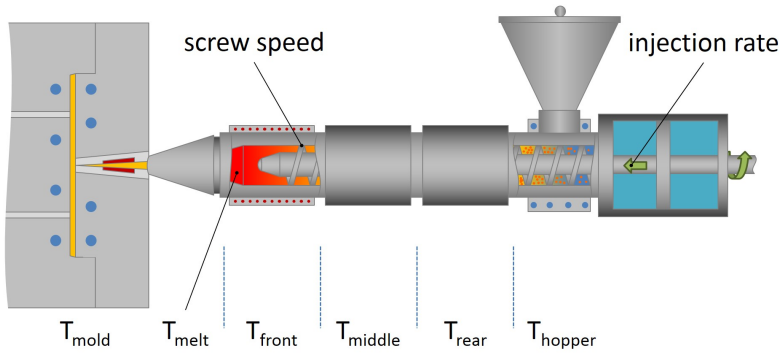

Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	248 °F	120 °C
Drying Time	4.0 to 6.0 hr	4.0 to 6.0 hr
Suggested Max Moisture	< 0.02 %	< 0.02 %
Processing (Melt) Temp	500 to 536 °F	260 to 280 °C
Mold Temperature	176 to 230 °F	80 to 110 °C

Notes

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

Notes

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