

Schuladur E GF 50

Polyethylene Terephthalate

LyondellBasell Industries

Engineering Plastics

Product Description

50% glass fibre reinforced PET compound providing high stiffness

General

Filler / Reinforcement	• Glass Fiber, 50% Filler by Weight
Processing Method	• Injection Molding

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.79 g/cm ³	1.79 g/cm ³	ISO 1183/A
Melt Volume-Flow Rate (MVR) (280°C/5.0 Kg)	15 cm ³ /10min	15 cm ³ /10min	ISO 1133
Water Absorption			ISO 62
Equilibrium, 73°F (23°C), 50% Rh	0.20 %	0.20 %	
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus	2.90E+6 psi	20000 MPa	ISO 527-1/1A/1
Tensile Stress (Break)	28300 psi	195 MPa	ISO 527-2/1A/5
Tensile Strain (Break)	1.5 %	1.5 %	ISO 527-2/1A/5
Flexural Modulus ¹	2.47E+6 psi	17000 MPa	ISO 178
Flexural Stress ¹	42100 psi	290 MPa	ISO 178
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-22°F (-30°C)	4.8 ft·lb/in ²	10 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)	21 ft·lb/in ²	45 kJ/m ²	
73°F (23°C)	24 ft·lb/in ²	50 kJ/m ²	
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Ball Indentation Hardness (H 961/30)	46400 psi	320 MPa	ISO 2039-1
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	451 °F	233 °C	ISO 75-2/Af
Vicat Softening Temperature			
--	455 °F	235 °C	ISO 306/B50
--	482 °F	250 °C	ISO 306/A50
Ball Pressure Test (428°F (220°C))	Pass	Pass	IEC 60695-10-2
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





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Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Burning Rate			
0.0787 In (2.00 Mm)	0.79 in/min	20 mm/min	ISO 3795
0.0787 In (2.00 Mm)	0.79 in/min	20 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	
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)	1340 °F	725 °C	
0.12 In (3.0 Mm)	1520 °F	825 °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	536 to 554 °F	280 to 290 °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.

