

Technical Data Sheet



Schuladur E GF 50

Polyethylene Terephthalate
LyondellBasell Industries
Engineering Plastics

Product Description

50% glass fibre reinforced PET compound providing high stiffness

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
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 Equilibrium, 73°F (23°C), 50% RH	0.20 %	0.20 %	ISO 62
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 -22°F (-30°C) 73°F (23°C)	4.8 ft·lb/in ² 4.8 ft·lb/in ²	10 kJ/m ² 10 kJ/m ²	ISO 179/1eA
Charpy Unnotched Impact Strength -22°F (-30°C) 73°F (23°C)	21 ft·lb/in ² 24 ft·lb/in ²	45 kJ/m ² 50 kJ/m ²	ISO 179/1eU
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 264 psi (1.8 MPa), Unannealed	482 °F 451 °F	250 °C 233 °C	ISO 75-2/Bf ISO 75-2/Af
Vicat Softening Temperature -- --	455 °F 482 °F	235 °C 250 °C	ISO 306/B50 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

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Notes

¹ 0.079 in/min (2.0 mm/min)

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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