

Technical Data Sheet

SCHULADUR® E GF 20

Polyethylene Terephthalate
Engineering Plastics

Product Description

20% glass fibre reinforced PET compound

General

Filler / Reinforcement	• Glass Fiber, 20% Filler by Weight
Processing Method	• Injection Molding

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.52 g/cm³	1.52 g/cm³	ISO 1183/A
Melt Volume-Flow Rate (MVR) (260°C/2.16 kg)	10 cm³/10min	10 cm³/10min	ISO 1133
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus	1.31E+6 psi	9000 MPa	ISO 527-2/1A/1
Tensile Stress (Break)	18900 psi	130 MPa	ISO 527-2/1A/5
Tensile Strain (Break)	2.0 %	2.0 %	ISO 527-2/1A/5
Flexural Modulus ¹	1.18E+6 psi	8150 MPa	ISO 178
Flexural Stress ^{1, 2} (2.5% Strain)	26800 psi	185 MPa	ISO 178
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-22°F (-30°C)	2.9 ft·lb/in²	6.0 kJ/m²	
73°F (23°C)	2.9 ft·lb/in²	6.0 kJ/m²	
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F (-30°C)	14 ft·lb/in²	30 kJ/m²	
73°F (23°C)	14 ft·lb/in²	30 kJ/m²	
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Heat Deflection Temperature			
66 psi (0.45 MPa), Annealed	473 °F	245 °C	ISO 75-2/Bf
264 psi (1.8 MPa), Unannealed	428 °F	220 °C	ISO 75-2/Af
Vicat Softening Temperature			
--	471 °F	244 °C	ISO 306/A50
--	455 °F	235 °C	ISO 306/B50
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	200 V	200 V	IEC 60112

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Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Burning Rate			
0.0787 in (2.00 mm)	0.87 in/min	22 mm/min	ISO 3795
0.0787 in (2.00 mm)	0.87 in/min	22 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)	1340 °F	725 °C	
0.12 in (3.0 mm)	1430 °F	775 °C	
Glow Wire Ignition Temperature			IEC 60695-2-13
0.06 in (1.5 mm)	1380 °F	750 °C	
0.12 in (3.0 mm)	1470 °F	800 °C	

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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
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)

² at break

Notes

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