

Technical Data Sheet

SCHULADUR[®] A GB 20

Polybutylene Terephthalate
Engineering Plastics

Product Description

20% glass bead reinforced PBT-grade

General

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|------------------------|------------------------------------|
| Filler / Reinforcement | • Glass Bead, 20% Filler by Weight |
| Processing Method | • Injection Molding |

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
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Density	1.44 g/cm ³	1.44 g/cm ³	ISO 1183/A
Melt Volume-Flow Rate (MVR) (250°C/2.16 kg)	15 cm ³ /10min	15 cm ³ /10min	ISO 1133

Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
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Tensile Modulus	493000 psi	3400 MPa	ISO 527-2/1A/1
Tensile Stress (Break)	7250 psi	50.0 MPa	ISO 527-2/1A/5
Tensile Strain (Break)	6.0 %	6.0 %	ISO 527-2/1A/5
Flexural Modulus ¹	479000 psi	3300 MPa	ISO 178
Flexural Stress ¹	12000 psi	83.0 MPa	ISO 178
Flexural Strain at Break	8.0 %	8.0 %	ISO 178

Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
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Charpy Notched Impact Strength			ISO 179/1eA
-22°F (-30°C)	1.7 ft·lb/in ²	3.5 kJ/m ²	
73°F (23°C)	2.4 ft·lb/in ²	5.0 kJ/m ²	
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F (-30°C)	14 ft·lb/in ²	30 kJ/m ²	
73°F (23°C)	24 ft·lb/in ²	50 kJ/m ²	

Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
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Heat Deflection Temperature			
66 psi (0.45 MPa), Unannealed	347 °F	175 °C	ISO 75-2/Bf
264 psi (1.8 MPa), Unannealed	201 °F	94.0 °C	ISO 75-2/af
Vicat Softening Temperature			
--	424 °F	218 °C	ISO 306/A50
--	363 °F	184 °C	ISO 306/B50

Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
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Burning Rate			
0.0787 in (2.00 mm)	0.91 in/min	23 mm/min	ISO 3795
0.0787 in (2.00 mm)	0.91 in/min	23 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)	1340 °F	725 °C	
0.12 in (3.0 mm)	1340 °F	725 °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)	1380 °F	750 °C	

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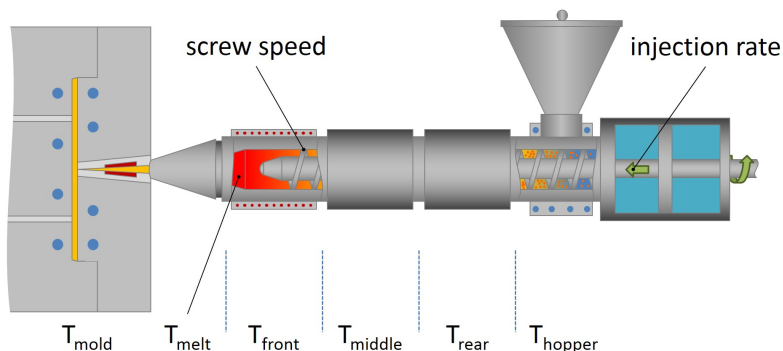
Additional Information

- 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	2.0 to 4.0 hr	2.0 to 4.0 hr
Suggested Max Moisture	0.05 %	0.05 %
Suggested Max Regrind	20 %	20 %
Processing (Melt) Temp	482 to 500 °F	250 to 260 °C
Mold Temperature	158 to 194 °F	70 to 90 °C
Screw Speed	< 709 in/min	< 18 m/min

Notes

¹ 0.079 in/min (2.0 mm/min)

Notes

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