

Technical Data Sheet

SCHULADUR[®] A3 GF 30 LM

Polybutylene Terephthalate + ASA
Engineering Plastics

Product Description

30% glass fibre reinforced lasermarkable PBT/ASA-blend with high surface quality and reduced warpage

General

Filler / Reinforcement	• Glass Fiber, 30% Filler by Weight
Features	• Good Surface Finish • Low Warpage
Processing Method	• Injection Molding
Resin ID (ISO 1043)	• PBT+ASA GF30

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.43 g/cm ³	1.43 g/cm ³	ISO 1183/A
Melt Volume-Flow Rate (MVR) (250°C/5.0 kg)	20 cm ³ /10min	20 cm ³ /10min	ISO 1133

Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus	1.38E+6 psi	9500 MPa	ISO 527-2/1A/1
Tensile Stress (Break)	16700 psi	115 MPa	ISO 527-2/1A/5
Tensile Strain (Break)	2.0 %	2.0 %	ISO 527-2/1A/5
Flexural Modulus ¹	1.52E+6 psi	10500 MPa	ISO 178
Flexural Stress ¹ (2.5% Strain)	29700 psi	205 MPa	ISO 178

Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-22°F (-30°C)	3.3 ft·lb/in ²	7.0 kJ/m ²	
73°F (23°C)	3.3 ft·lb/in ²	7.0 kJ/m ²	
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F (-30°C)	23 ft·lb/in ²	48 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
Heat Deflection Temperature			
66 psi (0.45 MPa), Unannealed	419 °F	215 °C	ISO 75-2/Bf
264 psi (1.8 MPa), Unannealed	347 °F	175 °C	ISO 75-2/Af
Vicat Softening Temperature			
--	410 °F	210 °C	ISO 306/A50
--	284 °F	140 °C	ISO 306/B50

Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Burning Rate			
0.0787 in (2.00 mm)	1.2 in/min	30 mm/min	ISO 3795
0.0787 in (2.00 mm)	1.2 in/min	30 mm/min	FMVSS 302

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	212 °F	100 °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 %
Hopper Temperature	158 °F	70 °C
Rear Temperature	446 °F	230 °C
Middle Temperature	473 °F	245 °C
Front Temperature	500 °F	260 °C
Nozzle Temperature	500 °F	260 °C
Processing (Melt) Temp	482 to 500 °F	250 to 260 °C
Mold Temperature	140 to 194 °F	60 to 90 °C
Injection Pressure	11600 to 17400 psi	80.0 to 120 MPa
Injection Rate	Moderate-Fast	Moderate-Fast
Holding Pressure	5800 to 10200 psi	40.0 to 70.0 MPa
Back Pressure	725 to 1450 psi	5.00 to 10.0 MPa
Cushion	0.0787 to 0.197 in	2.00 to 5.00 mm
Vent Depth	7.9E-4 in	0.020 mm

Notes

¹ 0.079 in/min (2.0 mm/min)

Notes

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