

Technical Data Sheet

SCHULADUR[®] A3 GF 30

Polybutylene Terephthalate + ASA
Engineering Plastics

Product Description

30% glass fibre reinforced, warpage optimized PBT/ASA compound providing high surface quality

General

Filler / Reinforcement	• Glass Fiber, 30% Filler by Weight
Features	• Good Surface Finish • Low Warpage
Processing Method	• Injection Molding

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.42 g/cm ³	1.42 g/cm ³	ISO 1183/A
Melt Volume-Flow Rate (MVR) (250°C/5.0 kg)	25 cm ³ /10min	25 cm ³ /10min	ISO 1133
Molding Shrinkage			ISO 294-4
Across Flow	0.80 %	0.80 %	
Flow	0.30 %	0.30 %	

Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus	1.35E+6 psi	9300 MPa	ISO 527-2/1A/1
Tensile Stress (Break)	17100 psi	118 MPa	ISO 527-2/1A/5
Tensile Strain (Break)	2.5 %	2.5 %	ISO 527-2/1A/5

Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-22°F (-30°C)	3.8 ft·lb/in ²	8.0 kJ/m ²	
73°F (23°C)	4.3 ft·lb/in ²	9.0 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	

Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Ball Indentation Hardness (H 961/30)	26700 psi	184 MPa	ISO 2039-1

Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Heat Deflection Temperature			
66 psi (0.45 MPa), Unannealed	417 °F	214 °C	ISO 75-2/Bf
264 psi (1.8 MPa), Unannealed	356 °F	180 °C	ISO 75-2/Af
Vicat Softening Temperature			
--	410 °F	210 °C	ISO 306/A50
--	293 °F	145 °C	ISO 306/B50
Ball Pressure Test (392°F (200°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	400 V	400 V	IEC 60112

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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
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)	1380 °F	750 °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)	1430 °F	775 °C	
Oxygen Index	20 %	20 %	ISO 4589-2

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 %
Processing (Melt) Temp	482 to 500 °F	250 to 260 °C
Mold Temperature	140 to 194 °F	60 to 90 °C

Notes

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