Technical Data Sheet

SCHULADUR® A GF 30 HF2 HI FR1 BLACK

Polybutylene Terephthalate
Engineering Plastics

Product Description			
Flame retardant PBT with 30% glass fiber; high flow, high impact, halogenated			
General			
Filler / Reinforcement	• Glass Fiber, 30% Filler by Weight		
Features	• Filled • Flame Retardant	• Halogenated • High Flow	• Impact Modified
UL File Number	• E86615		
Processing Method	• Injection Molding		
Resin ID (ISO 1043)	• PBT-I GF30 FR(17)		

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.58 g/cm³	1.58 g/cm³	ISO 1183/A
Melt Volume-Flow Rate (MVR) (260°C/5.0 kg)	22 cm³/10min	22 cm³/10min	ISO 1133
Mechanical	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Tensile Modulus	1.33E+6 psi	9200 MPa	ISO 527-2/1A/1
Tensile Stress (Break)	17400 psi	120 MPa	ISO 527-2/1A/5
Tensile Strain (Break)	2.5 %	2.5 %	ISO 527-2/1A/5
Flexural Modulus	1.42E+6 psi	9800 MPa	ISO 178
Flexural Stress (2.8% Strain)	28300 psi	195 MPa	ISO 178
Impact	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Charpy Notched Impact Strength			ISO 179/1eA
-22°F (-30°C)	3.8 ft·lb/in²	8.0 kJ/m²	
73°F (23°C)	4.8 ft·lb/in²	10 kJ/m²	
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F (-30°C)	30 ft·lb/in²	63 kJ/m²	
73°F (23°C)	30 ft·lb/in²	62 kJ/m²	
Thermal	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Heat Deflection Temperature			
66 psi (0.45 MPa), Unannealed	430 °F	221 °C	ISO 75-2/Bf
264 psi (1.8 MPa), Unannealed	399 °F	204 °C	ISO 75-2/Af
Vicat Softening Temperature			
--	> 482 °F	> 250 °C	ISO 306/A50
--	385 °F	196 °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**
Comparative Tracking Index	300 V	300 V	IEC 60112

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Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Flammability Classification			IEC 60695-11-10, -20
0.06 in (1.5 mm)	V-0	V-0	
0.12 in (3.0 mm)	V-0	V-0	
Glow Wire Flammability Index			IEC 60695-2-12
0.030 in (0.75 mm)	1760 °F	960 °C	
0.06 in (1.5 mm)	1760 °F	960 °C	
0.12 in (3.0 mm)	1760 °F	960 °C	
Glow Wire Ignition Temperature			IEC 60695-2-13
0.030 in (0.75 mm)	1340 °F	725 °C	
0.06 in (1.5 mm)	1340 °F	725 °C	
0.12 in (3.0 mm)	1340 °F	725 °C	
Oxygen Index	30 %	30 %	ISO 4589-2

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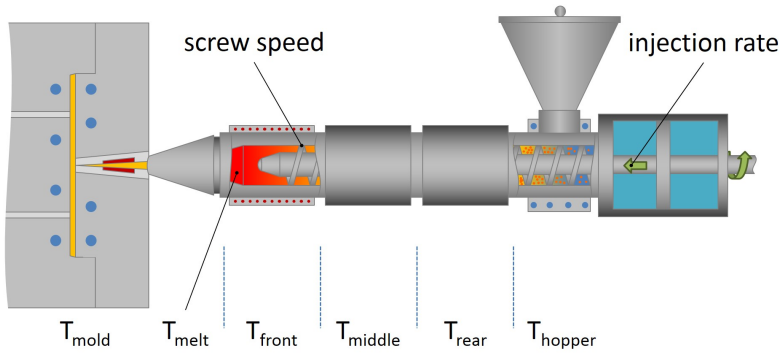

Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	248 °F	120 °C
Drying Time	2.0 to 4.0 hr	2.0 to 4.0 hr
Suggested Max Moisture	0.02 %	0.02 %
Suggested Max Regrind	25 %	25 %
Processing (Melt) Temp	482 to 500 °F	250 to 260 °C
Mold Temperature	158 to 194 °F	70 to 90 °C
Injection Rate	Slow-Moderate	Slow-Moderate
Back Pressure	290 to 1160 psi	2.00 to 8.00 MPa
Screw Speed	< 591 in/min	< 15 m/min
Injection Notes		
Mould surfaces in contact with melt should be of non-corrosive steel, chrome content >12%		

Notes

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