Technical Data Sheet

Schuladur A GF 30 HF2 FR1

Polybutylene Terephthalate
LyondellBasell Industries
Engineering Plastics

Product Description
Flame retardant halogenated PBT reinforced with 30% glass fibre; without PBDE; high flow

General		
Filler / Reinforcement	• Glass Fiber, 30% Filler by Weight	
Features	• Filled • Flame Retardant	• Halogenated • High Flow
UL File Number	• E86615	
Processing Method	• Injection Molding	
Resin ID (ISO 1043)	• PBT GF30 FR(17)	

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.62 g/cm³	1.62 g/cm³	ISO 1183/A
Melt Volume-Flow Rate (MVR) (260°c/5.0 Kg)	40 cm³/10min	40 cm³/10min	ISO 1133
Mechanical	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Tensile Modulus	1.74E+6 psi	12000 MPa	ISO 527-1/1A/1
Tensile Stress (Break)	21800 psi	150 MPa	ISO 527-2/1A/5
Tensile Strain (Break)	2.5 %	2.5 %	ISO 527-2/1A/5
Flexural Modulus	1.60E+6 psi	11000 MPa	ISO 178
Flexural Stress	34800 psi	240 MPa	ISO 178
Flexural Strain at Break	2.8 %	2.8 %	ISO 178
Impact	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Charpy Notched Impact Strength			ISO 179/1eA
-22°f (-30°c)	4.3 ft·lb/in²	9.0 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)	26 ft·lb/in²	55 kJ/m²	
73°f (23°c)	29 ft·lb/in²	60 kJ/m²	
Thermal	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Deflection Temperature Under Load			
66 Psi (0.45 Mpa), Unannealed	428 °F	220 °C	ISO 75-2/Bf
264 Psi (1.8 Mpa), Unannealed	401 °F	205 °C	ISO 75-2/Af
Vicat Softening Temperature			
--	401 °F	205 °C	ISO 306/B50
--	428 °F	220 °C	ISO 306/A50
Ball Pressure Test (392°f (200°c))	Pass	Pass	IEC 60695-10-2
RTI Elec			UL 746B
0.06 In (1.5 Mm)	167 °F	75.0 °C	
0.12 In (3.0 Mm)	167 °F	75.0 °C	
RTI Imp			UL 746B
0.06 In (1.5 Mm)	167 °F	75.0 °C	
0.12 In (3.0 Mm)	167 °F	75.0 °C	
RTI Str			UL 746B
0.06 In (1.5 Mm)	167 °F	75.0 °C	
0.12 In (3.0 Mm)	167 °F	75.0 °C	

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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	250 V	250 V	IEC 60112
High Amp Arc Ignition (HAI)			UL 746A
0.06 In (1.5 Mm)	PLC 1	PLC 1	
0.12 In (3.0 Mm)	PLC 1	PLC 1	
Hot-wire Ignition (HWI)			UL 746A
0.06 In (1.5 Mm)	PLC 3	PLC 3	
0.12 In (3.0 Mm)	PLC 2	PLC 2	
Flammability	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Burning Rate			
0.0787 In (2.00 Mm), Self-extinguishing	0.0 in/min	0.0 mm/min	ISO 3795
0.0787 In (2.00 Mm), Self-extinguishing	0.0 in/min	0.0 mm/min	FMVSS 302
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	
0.030 In (0.75 Mm)	V-2	V-2	
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)	1290 °F	700 °C	
0.06 In (1.5 Mm)	1380 °F	750 °C	
0.12 In (3.0 Mm)	1470 °F	800 °C	
Oxygen Index	30 %	30 %	ASTM D2863

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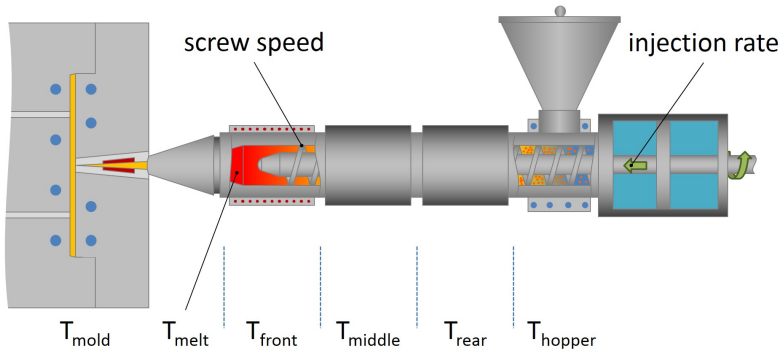

Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	248 °F	120 °C
Drying Time	2.0 to 4.0 hr	2.0 to 4.0 hr
Suggested Max Moisture	0.02 %	0.02 %
Processing (Melt) Temp	464 to 500 °F	240 to 260 °C
Mold Temperature	158 to 194 °F	70 to 90 °C
Injection Rate	Slow-Moderate	Slow-Moderate
Back Pressure	290 to 1160 psi	2.00 to 8.00 MPa
Screw Speed	< 591 in/min	< 15 m/min
Injection Notes		
Mould surface contacting melt should be of non-corrosive steel (content of chrome > 12%)		

Notes

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