Technical Data Sheet

Schuladur A1 GF 30 HF FR 1

Polybutylene Terephthalate + PET
LyondellBasell Industries
Engineering Plastics

Product Description
High flow flame retardant halogenated PBT/PET compound reinforced with 30% glass fiber; without PBDE

General			
Filler / Reinforcement	• Glass Fiber, 30% Filler by Weight		
Features	• Filled • Flame Retardant	• Good Surface Finish • Halogenated	• High Flow
Processing Method	• Injection Molding		

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.68 g/cm³	1.68 g/cm³	ISO 1183/A
Melt Volume-Flow Rate (MVR) (260°c/5.0 Kg)	54 cm³/10min	54 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)	21500 psi	148 MPa	ISO 527-2/1A/5
Tensile Strain (Break)	2.0 %	2.0 %	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)	3.3 ft·lb/in²	7.0 kJ/m²	
73°f (23°c)	3.3 ft·lb/in²	7.0 kJ/m²	
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°f (-30°c)	19 ft·lb/in²	40 kJ/m²	
73°f (23°c)	22 ft·lb/in²	46 kJ/m²	
Thermal	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Deflection Temperature Under Load			
66 Psi (0.45 Mpa), Unannealed	426 °F	219 °C	ISO 75-2/Bf
264 Psi (1.8 Mpa), Unannealed	388 °F	198 °C	ISO 75-2/Af
Vicat Softening Temperature			
--	374 °F	190 °C	ISO 306/B50
--	424 °F	218 °C	ISO 306/A50
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	225 V	225 V	IEC 60112
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	FMVSS 302
0.0787 In (2.00 Mm), Self-extinguishing	0.0 in/min	0.0 mm/min	ISO 3795
Flame Rating			UL 94 IEC 60695-11-10, -20
0.030 In (0.75 Mm)	V-0	V-0	
0.06 In (1.5 Mm)	V-0	V-0	
0.12 In (3.0 Mm)	• V-0 • 5VA	• V-0 • 5VA	

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Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
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)	1250 °F	675 °C	
0.06 In (1.5 Mm)	1250 °F	675 °C	
0.12 In (3.0 Mm)	1250 °F	675 °C	
Oxygen Index	34 %	34 %	ISO 4589-2

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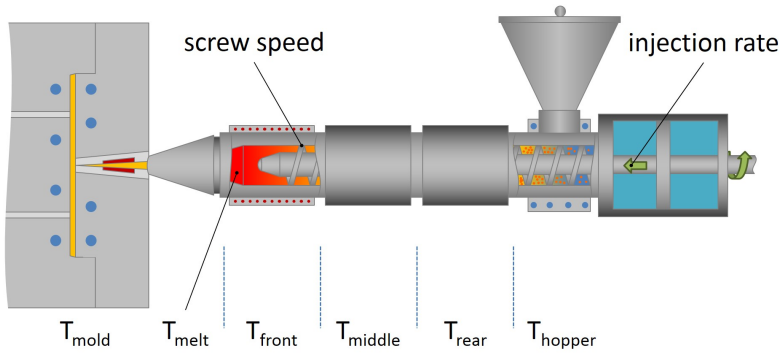

Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	248 °F	120 °C
Drying Time	2.0 to 4.0 hr	2.0 to 4.0 hr
Suggested Max Moisture	0.02 %	0.02 %
Processing (Melt) Temp	464 to 518 °F	240 to 270 °C
Mold Temperature	176 to 230 °F	80 to 110 °C
Injection Rate	Slow-Moderate	Slow-Moderate
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.