

Technical Data Sheet

Schuladur A3 GF 30 FR 1

Polybutylene Terephthalate + ASA
LyondellBasell Industries
Engineering Plastics

Product Description

High flow 30% glass fiber reinforced flame retardant halogenated PBT/ASA compound surface quality and low warpage; halogenated, without PBDE

General

Filler / Reinforcement	• Glass Fiber, 30% Filler by Weight		
Features	• Filled • Flame Retardant	• Good Dimensional Stability • Good Surface Finish	• Halogenated • Low Warpage
UL File Number	• E86615		
Processing Method	• Injection Molding		

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.58 g/cm ³	1.58 g/cm ³	ISO 1183/A
Melt Volume-Flow Rate (MVR) (260°C/5.0 Kg)	27 cm ³ /10min	27 cm ³ /10min	ISO 1133
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus	1.60E+6 psi	11000 MPa	ISO 527-1/1A/1
Tensile Stress (Break)	16700 psi	115 MPa	ISO 527-2/1A/5
Tensile Strain (Break)	1.5 %	1.5 %	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)	2.9 ft·lb/in ²	6.0 kJ/m ²	
73°F (23°C)	3.1 ft·lb/in ²	6.5 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)	19 ft·lb/in ²	40 kJ/m ²	
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			
66 Psi (0.45 Mpa), Unannealed	410 °F	210 °C	ISO 75-2/Bf
264 Psi (1.8 Mpa), Unannealed	358 °F	181 °C	ISO 75-2/Af
Vicat Softening Temperature			
--	306 °F	152 °C	ISO 306/B50
--	415 °F	213 °C	ISO 306/A50
Ball Pressure Test (347°F (175°C))	Pass	Pass	IEC 60695-10-2
RTI Elec			UL 746B
0.030 In (0.75 Mm)	167 °F	75.0 °C	
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
0.030 In (0.75 Mm)	167 °F	75.0 °C	
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
0.030 In (0.75 Mm)	167 °F	75.0 °C	
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
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
0.030 In (0.75 Mm)	V-0	V-0	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)	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	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	0.04 %	0.04 %
Processing (Melt) Temp	482 to 500 °F	250 to 260 °C
Mold Temperature	140 to 194 °F	60 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.