Technical Data Sheet

Schulamid 6 GF 40 FR 2

Polyamide 6
LyondellBasell Industries
Engineering Plastics

Product Description	
40% glass fibre reinforced flame-retardant Polyamide 6 grade; halogen free	

General		
Filler / Reinforcement	• Glass Fiber, 40% Filler by Weight	
Features	• Flame Retardant	• Halogen Free
Processing Method	• Injection Molding	
Resin ID (ISO 1043)	• PA6 GF40 FR(40)	

Physical	Dry	Conditioned	Unit	Test Method
Density	1.54	--	g/cm³	ISO 1183/A
Viscosity Number	146	--	cm³/g	ISO 307
Mechanical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Tensile Modulus	2.32E+6 (16000)	1.60E+6 (11000)	psi (MPa)	ISO 527-1/1A/1
Tensile Stress (Break)	26800 (185)	18100 (125)	psi (MPa)	ISO 527-2/1A/5
Tensile Strain (Break)	2.5	3.5	%	ISO 527-2/1A/5
Impact	**Dry**	**Conditioned**	**Unit**	**Test Method**
Charpy Notched Impact Strength				ISO 179/1eA
-22°f (-30°c)	6.2 (13)	--	ft·lb/in² (kJ/m²)	
73°f (23°c)	5.7 (12)	7.1 (15)	ft·lb/in² (kJ/m²)	
Charpy Unnotched Impact Strength				ISO 179/1eU
-22°f (-30°c)	29 (60)	--	ft·lb/in² (kJ/m²)	
73°f (23°c)	36 (75)	33 (70)	ft·lb/in² (kJ/m²)	
Thermal	**Dry**	**Conditioned**	**Unit**	**Test Method**
Deflection Temperature Under Load				
66 Psi (0.45 Mpa), Unannealed	426 (219)	--	°F (°C)	ISO 75-2/Bf
264 Psi (1.8 Mpa), Unannealed	408 (209)	--	°F (°C)	ISO 75-2/Af
Vicat Softening Temperature				
--	396 (202)	--	°F (°C)	ISO 306/B50
--	410 (210)	--	°F (°C)	ISO 306/A50
Ball Pressure Test (392°f (200°c))	Pass	--		IEC 60695-10-2
Electrical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Comparative Tracking Index	550	--	V	IEC 60112

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Flammability	Dry	Conditioned	Unit	Test Method
Burning Rate				ISO 3795
0.0295 In (0.750 Mm), Self-extinguishing	0.0	--	in/min (mm/min)	
0.0591 In (1.50 Mm), Self-extinguishing	0.0	--	in/min (mm/min)	
0.118 In (3.00 Mm), Self-extinguishing	0.0	--	in/min (mm/min)	
Flammability Classification				IEC 60695-11-10, -20
0.030 In (0.75 Mm)	V-0	--		
0.06 In (1.5 Mm)	V-0	--		
0.12 In (3.0 Mm)	V-0	--		
Glow Wire Flammability Index				IEC 60695-2-12
0.030 In (0.75 Mm)	1760 (960)	--	°F (°C)	
0.06 In (1.5 Mm)	1760 (960)	--	°F (°C)	
0.12 In (3.0 Mm)	1760 (960)	--	°F (°C)	
Glow Wire Ignition Temperature				IEC 60695-2-13
0.030 In (0.75 Mm)	1470 (800)	--	°F (°C)	
0.06 In (1.5 Mm)	1430 (775)	--	°F (°C)	
0.12 In (3.0 Mm)	1430 (775)	--	°F (°C)	
Oxygen Index	34	--	%	ISO 4589-2

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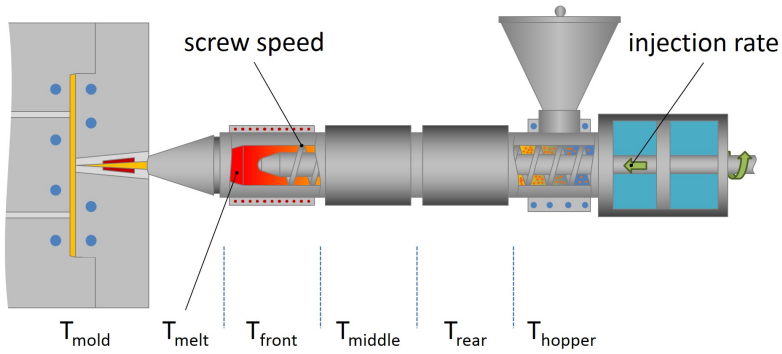

Injection	Dry (English)	Dry (SI)
Drying Temperature	176 °F	80 °C
Drying Time	4.0 to 6.0 hr	4.0 to 6.0 hr
Suggested Max Moisture	0.04 to 0.10 %	0.04 to 0.10 %
Processing (Melt) Temp	518 to 554 °F	270 to 290 °C
Mold Temperature	140 to 194 °F	60 to 90 °C
Injection Rate	Slow-Moderate	Slow-Moderate
Back Pressure	290 to 1160 psi	2.00 to 8.00 MPa
Screw Speed	< 591 in/min	< 15 m/min

Notes

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