Technical Data Sheet

Schulamid 6 GF 50 H

Polyamide 6
LyondellBasell Industries
Engineering Plastics

Product Description
50% glass fiber reinforced PA 6, high strength and stiffness, heat stabilized

General			
Filler / Reinforcement	• Glass Fiber, 50% Filler by Weight		
Additive	• Heat Stabilizer		
Features	• Heat Stabilized	• High Stiffness	• High Strength
Processing Method	• Injection Molding		

Physical	Dry	Conditioned	Unit	Test Method
Density	1.55	--	g/cm³	ISO 1183/A
Viscosity Number	145	--	cm³/g	ISO 307
Mechanical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Tensile Modulus	2.32E+6 (16000)	1.38E+6 (9500)	psi (MPa)	ISO 527-1/1A/1
Tensile Stress (Break)	30500 (210)	18900 (130)	psi (MPa)	ISO 527-2/1A/5
Tensile Strain (Break)	2.2	4.5	%	ISO 527-2/1A/5
Flexural Modulus	2.18E+6 (15000)	--	psi (MPa)	ISO 178
Flexural Stress	45000 (310)	--	psi (MPa)	ISO 178
Flexural Strain at Flexural Strength	3.1	--	%	ISO 178
Impact	**Dry**	**Conditioned**	**Unit**	**Test Method**
Charpy Notched Impact Strength				ISO 179/1eA
-22°f (-30°c)	4.8 (10)	--	ft·lb/in² (kJ/m²)	
73°f (23°c)	7.1 (15)	11 (24)	ft·lb/in² (kJ/m²)	
Charpy Unnotched Impact Strength				ISO 179/1eU
-22°f (-30°c)	43 (90)	43 (90)	ft·lb/in² (kJ/m²)	
73°f (23°c)	45 ft·lb/in² (95 kJ/m²)	No Break	(kJ/m²)	
Hardness	**Dry**	**Conditioned**	**Unit**	**Test Method**
Ball Indentation Hardness (H 358/30)	40600 (280)	--	psi (MPa)	ISO 2039-1
Thermal	**Dry**	**Conditioned**	**Unit**	**Test Method**
Deflection Temperature Under Load				
66 Psi (0.45 Mpa), Unannealed	419 (215)	--	°F (°C)	ISO 75-2/Bf
264 Psi (1.8 Mpa), Unannealed	401 (205)	--	°F (°C)	ISO 75-2/Af

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Thermal	Dry	Conditioned	Unit	Test Method
Vicat Softening Temperature				
--	414 (212)	--	°F (°C)	ISO 306/B50
--	421 (216)	--	°F (°C)	ISO 306/A50
Ball Pressure Test (374°f (190°c))	Pass	--		IEC 60695-10-2
RTI Elec				UL 746B
0.030 In (0.75 Mm)	257 (125)	--	°F (°C)	
0.06 In (1.5 Mm)	257 (125)	--	°F (°C)	
0.12 In (3.0 Mm)	257 (125)	--	°F (°C)	
RTI Imp				UL 746B
0.030 In (0.75 Mm)	239 (115)	--	°F (°C)	
0.06 In (1.5 Mm)	248 (120)	--	°F (°C)	
0.12 In (3.0 Mm)	257 (125)	--	°F (°C)	
RTI Str				UL 746B
0.030 In (0.75 Mm)	266 (130)	--	°F (°C)	
0.06 In (1.5 Mm)	266 (130)	--	°F (°C)	
0.12 In (3.0 Mm)	284 (140)	--	°F (°C)	
Electrical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Surface Resistivity	> 1.0E+15	> 1.0E+12	ohms	IEC 60093
Volume Resistivity	> 1.0E+13	> 1.0E+10	ohms·m	IEC 62631-3-1
Comparative Tracking Index	450	--	V	IEC 60112
Flammability	**Dry**	**Conditioned**	**Unit**	**Test Method**
Burning Rate				
0.0787 In (2.00 Mm)	1.2 (30)	--	in/min (mm/min)	ISO 3795
0.0787 In (2.00 Mm)	1.2 (30)	--	in/min (mm/min)	FMVSS 302
Flammability Classification				IEC 60695-11-10, -20
0.030 In (0.75 Mm)	HB	--		
0.06 In (1.5 Mm)	HB	--		
0.12 In (3.0 Mm)	HB	--		
Glow Wire Flammability Index				IEC 60695-2-12
0.06 In (1.5 Mm)	1200 (650)	--	°F (°C)	
0.12 In (3.0 Mm)	1200 (650)	--	°F (°C)	

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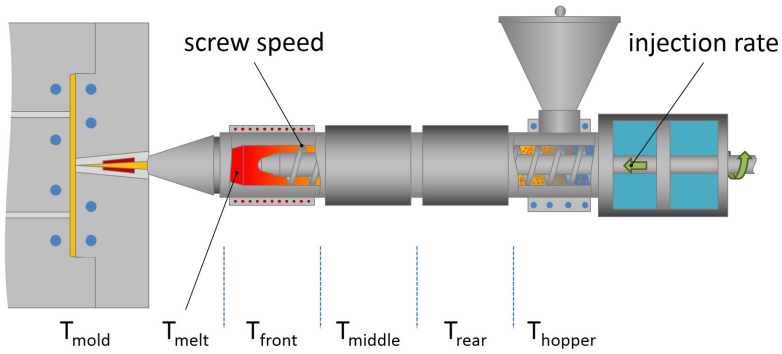

Injection	Dry (English)	Dry (SI)
Drying Temperature	176 °F	80 °C
Drying Time	3.0 to 4.0 hr	3.0 to 4.0 hr
Suggested Max Moisture	0.04 to 0.10 %	0.04 to 0.10 %
Processing (Melt) Temp	482 to 536 °F	250 to 280 °C
Mold Temperature	140 to 212 °F	60 to 100 °C

Notes

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