

Technical Data Sheet

# Schulamid 6 GF 50

Polyamide 6  
LyondellBasell Industries  
Engineering Plastics

**Product Description**

50% glass fiber reinforced Polyamide 6 with high tensile strength and stiffness

**General**

Filler / Reinforcement	• Glass Fiber, 50% Filler by Weight
Features	• High Temperature Strength • High Tensile Strength • Medium Flow • Oil Resistant • Ultra High Stiffness
UL File Number	• E86615
Processing Method	• Injection Molding
Resin ID (ISO 1043)	• PA6-GF50

**Physical**

	Dry	Conditioned	Unit	Test Method
Density	1.55	--	g/cm <sup>3</sup>	ISO 1183/A
Viscosity Number	145	--	cm <sup>3</sup> /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

**Impact**

	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179/1eA
-22°F (-30°C)	4.8 (10)	--	ft·lb/in <sup>2</sup> (kJ/m <sup>2</sup> )	
73°F (23°C)	7.1 (15)	11 (24)	ft·lb/in <sup>2</sup> (kJ/m <sup>2</sup> )	
Charpy Unnotched Impact Strength				ISO 179/1eU
-22°F (-30°C)	43 (90)	--	ft·lb/in <sup>2</sup> (kJ/m <sup>2</sup> )	
73°F (23°C)	45 ft·lb/in <sup>2</sup> (95 kJ/m <sup>2</sup> )	No Break	(kJ/m <sup>2</sup> )	

**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
Vicat Softening Temperature				
--	414 (212)	--	°F (°C)	ISO 306/B50
--	421 (216)	--	°F (°C)	ISO 306/A50

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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				
0.06 In (1.5 Mm)	HB	--		IEC 60695-11-10, -20
0.12 In (3.0 Mm)	HB	--		
Glow Wire Flammability Index				
0.06 In (1.5 Mm)	--	1200 (650)	°F (°C)	IEC 60695-2-12
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.