

Technical Data Sheet

# SCHULAMID® 6 GF 40

Polyamide 6  
Engineering Plastics

**Product Description**

40% glass fiber reinforced polyamid 6 compound

**General**

Filler / Reinforcement	• Glass Fiber, 40% Filler by Weight
Processing Method	• Injection Molding
Resin ID (ISO 1043)	• PA6-GF

**Physical**

	Dry	Conditioned	Unit	Test Method
Density	1.45	--	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	2.03E+6 (14000)	1.23E+6 (8500)	psi (MPa)	ISO 527-2/1A/1
Tensile Stress (Break)	29000 (200)	18600 (128)	psi (MPa)	ISO 527-2/1A/5
Tensile Strain (Break)	2.8	6.3	%	ISO 527-2/1A/5
Flexural Modulus <sup>1</sup>	1.74E+6 (12000)	--	psi (MPa)	ISO 178
Flexural Stress <sup>1</sup>	43500 (300)	--	psi (MPa)	ISO 178
Flexural Strain at Flexural Strength	3.5	--	%	ISO 178

**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)	6.7 (14)	10 (22)	ft·lb/in <sup>2</sup> (kJ/m <sup>2</sup> )	
Charpy Unnotched Impact Strength				ISO 179/1eU
-22°F (-30°C)	41 (86)	--	ft·lb/in <sup>2</sup> (kJ/m <sup>2</sup> )	
73°F (23°C)	45 ft·lb/in <sup>2</sup> (94 kJ/m <sup>2</sup> )	No Break	(kJ/m <sup>2</sup> )	

**Thermal**

	Dry	Conditioned	Unit	Test Method
Heat Deflection Temperature				
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				
--	421 (216)	--	°F (°C)	ISO 306/A50
--	414 (212)	--	°F (°C)	ISO 306/B50

Technical Data Sheet

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Flammability	Dry	Conditioned	Unit	Test Method
Burning Rate				
0.0787 in (2.00 mm)	< 3.9 (< 100)	--	in/min (mm/min)	ISO 3795
0.0787 in (2.00 mm)	< 3.9 (< 100)	--	in/min (mm/min)	FMVSS 302

Technical Data Sheet

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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 %
Suggested Max Regrind	20 %	20 %
Processing (Melt) Temp	482 to 536 °F	250 to 280 °C
Mold Temperature	140 to 212 °F	60 to 100 °C

**Notes**

<sup>1</sup> 0.079 in/min (2.0 mm/min)

**Notes**

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