Technical Data Sheet

SCHULAMID® 6 GF 50 TSU

Polyamide 6
Engineering Plastics

Product Description
50% glass fiber reinforced, surface improved Polyamide 6

General	
Filler / Reinforcement	• Glass Fiber, 50% Filler by Weight
Processing Method	• Injection Molding
Resin ID (ISO 1043)	• PA6 GF50

Physical	Dry	Conditioned	Unit	Test Method
Density	1.62	--	g/cm³	ISO 1183/A
Melt Volume-Flow Rate (MVR) (260°C/5.0 kg)	24	--	cm³/10min	ISO 1133
Mechanical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Tensile Modulus	2.61E+6 (18000)	1.45E+6 (10000)	psi (MPa)	ISO 527-2/1A/1
Tensile Stress (Break)	24700 (170)	13800 (95.0)	psi (MPa)	ISO 527-2/1A/5
Tensile Strain (Break)	1.4	3.2	%	ISO 527-2/1A/5
Flexural Modulus	2.15E+6 (14800)	--	psi (MPa)	ISO 178
Flexural Stress	34100 (235)	--	psi (MPa)	ISO 178
Flexural Strain at Flexural Strength	1.9	--	%	ISO 178
Impact	**Dry**	**Conditioned**	**Unit**	**Test Method**
Charpy Notched Impact Strength				ISO 179/1eA
-22°F (-30°C)	2.5 (5.2)	--	ft·lb/in² (kJ/m²)	
73°F (23°C)	2.9 (6.0)	4.5 (9.5)	ft·lb/in² (kJ/m²)	
Charpy Unnotched Impact Strength				ISO 179/1eU
-22°F (-30°C)	17 (35)	--	ft·lb/in² (kJ/m²)	
73°F (23°C)	19 (40)	23 (48)	ft·lb/in² (kJ/m²)	
Thermal	**Dry**	**Conditioned**	**Unit**	**Test Method**
Heat Deflection Temperature				
66 psi (0.45 MPa), Unannealed	423 (217)	--	°F (°C)	ISO 75-2/Bf
264 psi (1.8 MPa), Unannealed	396 (202)	--	°F (°C)	ISO 75-2/Af
Vicat Softening Temperature				
--	396 (202)	--	°F (°C)	ISO 306/A50
--	405 (207)	--	°F (°C)	ISO 306/B50
Electrical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Comparative Tracking Index	275	--	V	IEC 60112

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Flammability	Dry	Conditioned	Unit	Test Method
Burning Rate				
0.0787 in (2.00 mm)	1.2 (31)	--	in/min (mm/min)	ISO 3795
0.0787 in (2.00 mm)	1.2 (31)	--	in/min (mm/min)	FMVSS 302
Flame Rating				UL 94 IEC 60695-11-10, -20
0.06 in (1.6 mm)	HB	--		
0.13 in (3.2 mm)	HB	--		
Glow Wire Flammability Index				IEC 60695-2-12
0.06 in (1.5 mm)	1340 (725)	--	°F (°C)	
0.12 in (3.0 mm)	1340 (725)	--	°F (°C)	
Glow Wire Ignition Temperature				IEC 60695-2-13
0.06 in (1.5 mm)	1380 (750)	--	°F (°C)	
0.12 in (3.0 mm)	1380 (750)	--	°F (°C)	

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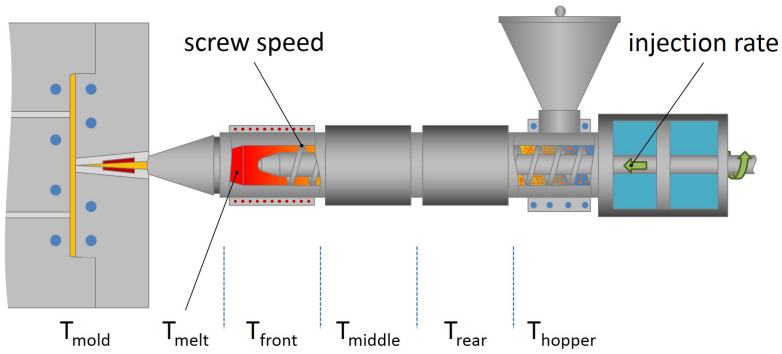

Injection	Dry (English)	Dry (SI)
Drying Temperature	176 °F	80 °C
Drying Time	3.0 to 4.0 hr	3.0 to 4.0 hr
Suggested Max Moisture	0.04 to 0.10 %	0.04 to 0.10 %
Suggested Max Regrind	20 %	20 %
Processing (Melt) Temp	482 to 536 °F	250 to 280 °C
Mold Temperature	140 to 212 °F	60 to 100 °C

Notes

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