Technical Data Sheet

SCHULAMID® PPA GF 45

Polyphthalamide
Engineering Plastics

Product Description
Polyphthalamid with 45% GF, high stiffness and strength at high temperatures, heatstabilzed, high chemical resistence

General	
Filler / Reinforcement	• Glass Fiber, 45% Filler by Weight
Processing Method	• Injection Molding

Physical	Dry	Conditioned	Unit	Test Method
Density	1.57	--	g/cm³	ISO 1183/A
Mechanical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Tensile Modulus	2.25E+6 (15500)	2.32E+6 (16000)	psi (MPa)	ISO 527-2/1A/1
Tensile Stress (Break)	34100 (235)	33400 (230)	psi (MPa)	ISO 527-2/1A/5
Tensile Strain (Break)	2.2	2.2	%	ISO 527-2/1A/5
Impact	**Dry**	**Conditioned**	**Unit**	**Test Method**
Charpy Notched Impact Strength				ISO 179/1eA
-22°F (-30°C)	5.2 (11)	--	ft·lb/in² (kJ/m²)	
73°F (23°C)	5.2 (11)	4.8 (10)	ft·lb/in² (kJ/m²)	
Charpy Unnotched Impact Strength				ISO 179/1eU
-22°F (-30°C)	26 (55)	--	ft·lb/in² (kJ/m²)	
73°F (23°C)	33 (70)	30 (62)	ft·lb/in² (kJ/m²)	
Thermal	**Dry**	**Conditioned**	**Unit**	**Test Method**
Heat Deflection Temperature				
66 psi (0.45 MPa), Unannealed	> 482 (> 250)	--	°F (°C)	ISO 75-2/Bf
264 psi (1.8 MPa), Unannealed	> 482 (> 250)	--	°F (°C)	ISO 75-2/Af
Vicat Softening Temperature	> 482 (> 250)	--	°F (°C)	ISO 306/A50 ISO 306/B50
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
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
Flammability Classification				IEC 60695-11-10, -20
0.06 in (1.5 mm)	HB	--		
0.12 in (3.0 mm)	HB	--		

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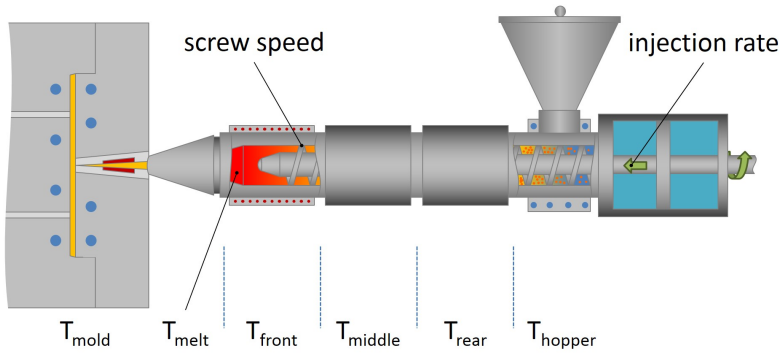

Injection	Dry (English)	Dry (SI)
Drying Temperature	248 °F	120 °C
Drying Time	3.0 to 4.0 hr	3.0 to 4.0 hr
Suggested Max Moisture	0.04 to 0.10 %	0.04 to 0.10 %
Suggested Max Regrind	20 %	20 %
Processing (Melt) Temp	590 to 653 °F	310 to 345 °C
Mold Temperature	248 to 356 °F	120 to 180 °C

Notes

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