

Technical Data Sheet

SCHULAMID® 612 GF 30 HI H2

Polyamide 612
Engineering Plastics

Product Description

30% glass fiber reinforced and impact modified Polyamide 612, with electrical neutral heat stabilization and high strength after conditioning

General

Filler / Reinforcement	• Glass Fiber, 30% Filler by Weight		
Features	• Chemical Resistant • Corrosion Resistant • Fuel Resistant	• Good Dimensional Stability • High Impact Resistance • Low Temperature Toughness	• Low to No Water Absorption • Oil Resistant
Processing Method	• Injection Molding		

Physical	Dry	Conditioned	Unit	Test Method
Density	1.25	--	g/cm ³	ISO 1183/A

Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	1.09E+6 (7500)	870000 (6000)	psi (MPa)	ISO 527-2/1A/1
Tensile Stress (Break)	18100 (125)	14500 (100)	psi (MPa)	ISO 527-2/1A/5
Tensile Strain (Break)	3.6	5.0	%	ISO 527-2/1A/5
Flexural Modulus ¹ (73°F (23°C))	1.04E+6 (7200)	--	psi (MPa)	ISO 178
Flexural Stress ¹ (73°F (23°C))	26800 (185)	--	psi (MPa)	ISO 178
Flexural Strain at Flexural Strength 73°F (23°C)	4.00	--		ISO 178

Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179/1eA
-22°F (-30°C)	5.7 (12)	--	ft·lb/in ² (kJ/m ²)	
73°F (23°C)	10 (22)	9.5 (20)	ft·lb/in ² (kJ/m ²)	
Charpy Unnotched Impact Strength				ISO 179/1eU
-22°F (-30°C)	43 (90)	--	ft·lb/in ² (kJ/m ²)	
73°F (23°C)	40 (85)	33 (70)	ft·lb/in ² (kJ/m ²)	

Thermal	Dry	Conditioned	Unit	Test Method
Heat Deflection Temperature				
66 psi (0.45 MPa), Unannealed	410 (210)	--	°F (°C)	ISO 75-2/Bf
264 psi (1.8 MPa), Unannealed	383 (195)	--	°F (°C)	ISO 75-2/Af
Vicat Softening Temperature				
--	410 (210)	--	°F (°C)	ISO 306/A50
--	329 (165)	--	°F (°C)	ISO 306/B50

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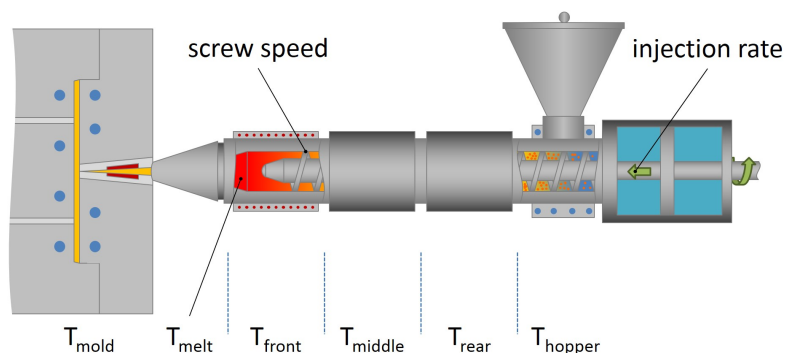
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Electrical	Dry	Conditioned	Unit	Test Method
Surface Resistivity	> 1.0E+15	> 1.0E+12	ohms	IEC 60093
Volume Resistivity	> 1.0E+13	> 1.0E+10	ohms·m	IEC 62631-3-1
Flammability	Dry	Conditioned	Unit	Test Method
Burning Rate				
0.0787 in (2.00 mm)	< 3.9 (< 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	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	464 to 536 °F	240 to 280 °C
Mold Temperature	122 to 194 °F	50 to 90 °C

Notes

¹ 0.079 in/min (2.0 mm/min)

Notes

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