

Technical Data Sheet

SCHULAMID® 612 GF 30

Polyamide 612
Engineering Plastics

Product Description

30% glass fiber reinforced, Polyamide 612 compound (available with different kinds of heat stabilization systems)

General

Filler / Reinforcement	• Glass Fiber, 30% Filler by Weight
Features	• Chemical Resistant • Heat Aging Resistant
Processing Method	• Injection Molding

Physical

	Dry	Conditioned	Unit	Test Method
Density	1.30	--	g/cm ³	ISO 1183/A
Water Absorption				ISO 62
Equilibrium, 73°F (23°C), 50% RH	1.1	--	%	
Viscosity Number (H2SO4 (Sulphuric Acid))	110	--	cm ³ /g	ISO 307

Mechanical

	Dry	Conditioned	Unit	Test Method
Tensile Modulus	1.38E+6 (9500)	1.09E+6 (7500)	psi (MPa)	ISO 527-2/1A/1
Tensile Stress (Break)	24700 (170)	18900 (130)	psi (MPa)	ISO 527-2/1A/5
Tensile Strain (Break)	3.2	5.0	%	ISO 527-2/1A/5
Flexural Modulus ¹ (73°F (23°C))	1.16E+6 (8000)	--	psi (MPa)	ISO 178
Flexural Stress ¹ (4.0% Strain, 73°F (23°C))	31900 (220)	--	psi (MPa)	ISO 178

Impact

	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179/1eA
-40°F (-40°C)	4.3 (9.0)	--	ft-lb/in ² (kJ/m ²)	
73°F (23°C)	5.2 (11)	4.8 (10)	ft-lb/in ² (kJ/m ²)	
Charpy Unnotched Impact Strength				ISO 179/1eU
-40°F (-40°C)	29 (60)	--	ft-lb/in ² (kJ/m ²)	
73°F (23°C)	36 (75)	31 (65)	ft-lb/in ² (kJ/m ²)	

Thermal

	Dry	Conditioned	Unit	Test Method
Heat Deflection Temperature				
66 psi (0.45 MPa), Unannealed	412 (211)	--	°F (°C)	ISO 75-2/Bf
264 psi (1.8 MPa), Unannealed	376 (191)	--	°F (°C)	ISO 75-2/Af
Vicat Softening Temperature				
--	417 (214)	--	°F (°C)	ISO 306/A50
--	399 (204)	--	°F (°C)	ISO 306/B50

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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 (1.6 mm)	HB	--		
0.13 in (3.2 mm)	HB	--		
Glow Wire Flammability Index				IEC 60695-2-12
0.06 in (1.5 mm)	1200 (650)	--	°F (°C)	
0.12 in (3.0 mm)	1200 (650)	--	°F (°C)	
Glow Wire Ignition Temperature				IEC 60695-2-13
0.06 in (1.5 mm)	1290 (700)	--	°F (°C)	
0.12 in (3.0 mm)	1290 (700)	--	°F (°C)	

Additional Information

- 1.) Not for use in food contact applications
- 2.) Not for use in medical or pharmaceutical applications

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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.