

Generic Nylon 612 - Glass Fiber

Polyamide 612

Generic

Message:

This data represents typical values that have been calculated from all products classified as: Generic Nylon 612 - Glass Fiber
This information is provided for comparative purposes only.

General Information			
Filler / Reinforcement	Glass fiber reinforced material		
Physical	Nominal Value	Unit	Test Method
Specific Gravity			
--	1.13 - 1.46	g/cm ³	ASTM D792
23°C	1.17 - 1.43	g/cm ³	ISO 1183
Molding Shrinkage			
Flow: 23°C	0.19 - 0.52	%	ASTM D955
Transverse flow: 23°C	0.90 - 2.0	%	ASTM D955
23°C	0.22 - 1.1	%	ISO 294-4
Water Absorption			
23°C, 24 hr	0.089 - 0.25	%	ASTM D570
Saturated, 23°C	1.8 - 2.0	%	ISO 62
Equilibrium, 23°C, 50% RH	0.12 - 0.81	%	ISO 62
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (23°C)	116 - 122		ASTM D785
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus			
23°C	3900 - 9740	MPa	ASTM D638
23°C	3000 - 12800	MPa	ISO 527-2
Tensile Strength			
Yield, 23°C	63.0 - 190	MPa	ASTM D638
Yield, 23°C	63.0 - 121	MPa	ISO 527-2
Fracture, 23°C	113 - 196	MPa	ASTM D638
Fracture, 23°C	116 - 202	MPa	ISO 527-2
23°C	72.7 - 203	MPa	ASTM D638
Tensile Elongation			
Yield, 23°C	2.5 - 3.5	%	ASTM D638
Fracture, 23°C	2.1 - 5.2	%	ASTM D638
Fracture, 23°C	1.9 - 3.5	%	ISO 527-2
Flexural Modulus			
23°C	3550 - 11400	MPa	ASTM D790
23°C	5690 - 11000	MPa	ISO 178

Flexural Strength			
23°C	120 - 272	MPa	ASTM D790
23°C	173 - 201	MPa	ISO 178
Compressive Strength (23°C)	100 - 165	MPa	ASTM D695
Coefficient of Friction	0.45 - 0.62		ASTM D1894
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (23°C)	9.9 - 22	kJ/m ²	ISO 179
Charpy Unnotched Impact Strength (23°C)	60 - 100	kJ/m ²	ISO 179
Notched Izod Impact			
23°C	38 - 180	J/m	ASTM D256
23°C	6.4 - 17	kJ/m ²	ISO 180
Unnotched Izod Impact			
23°C	240 - 1400	J/m	ASTM D256
23°C	17 - 79	kJ/m ²	ISO 180
Instrumented Dart Impact			
23°C	5.97 - 10.5	J	ASTM D3763
23°C	1.81 - 3.08	J	ISO 6603-2
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			
0.45 MPa, not annealed	199 - 221	°C	ASTM D648
0.45 MPa, not annealed	208 - 217	°C	ISO 75-2/B
1.8 MPa, not annealed	194 - 217	°C	ASTM D648
1.8 MPa, not annealed	188 - 205	°C	ISO 75-2/A
Vicat Softening Temperature	208 - 215	°C	ISO 306
Melting Temperature			
--	209 - 213	°C	
--	217 - 218	°C	DSC
--	215 - 218	°C	ISO 11357-3
Linear thermal expansion coefficient			
Flow	2.5E-5 - 4.0E-5	cm/cm/°C	ASTM D696
Flow	1.0E-5 - 9.9E-5	cm/cm/°C	ASTM E831, ISO 11359-2
Lateral	4.0E-5 - 1.6E-4	cm/cm/°C	ASTM E831
Lateral	3.9E-5 - 1.6E-4	cm/cm/°C	ISO 11359-2
Thermal Conductivity (23°C)	0.30 - 1.1	W/m/K	ASTM C177
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity (23°C)	1.0E+13 - 2.6E+14	ohms · cm	ASTM D257
Dielectric Strength (23°C)	16 - 20	kV/mm	ASTM D149
Dielectric Constant			
23°C	3.40 - 4.02		ASTM D150
23°C	3.95		IEC 60250
Dissipation Factor			
23°C	0.013 - 0.020		ASTM D150

23°C	0.014 - 0.065		IEC 60250
Comparative Tracking Index	598 - 600	V	IEC 60112
Flammability	Nominal Value	Unit	Test Method
Glow Wire Flammability Index	675 - 700	°C	IEC 60695-2-12
Glow Wire Ignition Temperature	700 - 725	°C	IEC 60695-2-13
Injection	Nominal Value	Unit	
Drying Temperature	76.5 - 82.7	°C	
Drying Time	3.0 - 4.1	hr	
Suggested Max Moisture	0.15 - 0.25	%	
Rear Temperature	259 - 270	°C	
Middle Temperature	265 - 269	°C	
Front Temperature	265 - 277	°C	
Processing (Melt) Temp	266 - 283	°C	
Mold Temperature	76.3 - 82.3	°C	
Injection Pressure	96.4 - 104	MPa	
Back Pressure	0.258 - 0.398	MPa	
Screw Speed	45 - 75	rpm	
Cushion	4.66 - 7.94	mm	
Injection instructions			

This data represents typical values that have been calculated from all products classified as: Generic Nylon 612 - Glass Fiber. This information is provided for comparative purposes only.

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

