

Generic Nylon 612

Polyamide 612

Generic

Message:

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

General Information			
Physical	Nominal Value	Unit	Test Method
Specific Gravity			
--	1.03 - 1.35	g/cm ³	ASTM D792
23°C	1.06 - 1.07	g/cm ³	ISO 1183
Molding Shrinkage			
Flow: 23°C	0.23 - 2.0	%	ASTM D955
Transverse flow: 23°C	1.1 - 2.0	%	ASTM D955
23°C	1.1 - 1.8	%	ISO 294-4
Water Absorption			
23°C, 24 hr	0.13 - 0.38	%	ASTM D570
Saturated, 23°C	3.0 - 4.0	%	ASTM D570
Saturated, 23°C	2.1 - 3.0	%	ISO 62
Equilibrium, 23°C, 50% RH	0.88 - 1.3	%	ISO 62
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (23°C)	108 - 115		ASTM D785
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus			
23°C	1650 - 2540	MPa	ASTM D638
23°C	275 - 7950	MPa	ISO 527-2
Tensile Strength			
Yield, 23°C	45.0 - 65.0	MPa	ASTM D638
Yield, 23°C	48.6 - 62.4	MPa	ISO 527-2
Fracture, 23°C	30.0 - 141	MPa	ISO 527-2
23°C	31.4 - 173	MPa	ASTM D638
Tensile Elongation			
Yield, 23°C	3.2 - 40	%	ASTM D638
Yield, 23°C	4.0 - 5.1	%	ISO 527-2
Fracture, 23°C	2.5 - 300	%	ASTM D638
Fracture, 23°C	2.5 - 55	%	ISO 527-2
Nominal Tensile Strain at Break (23°C)	17 - 300	%	ISO 527-2
Flexural Modulus			
23°C	1770 - 8640	MPa	ASTM D790

23°C	1300 - 2110	MPa	ISO 178
Flexural Strength			
23°C	23.0 - 296	MPa	ASTM D790
23°C	28.5 - 71.1	MPa	ISO 178
Coefficient of Friction	0.13 - 1.0		ASTM D1894
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (23°C)	3.5 - 12	kJ/m ²	ISO 179
Charpy Unnotched Impact Strength (23°C)	29 - 96	kJ/m ²	ISO 179
Notched Izod Impact			
23°C	36 - 81	J/m	ASTM D256
23°C	3.7 - 5.3	kJ/m ²	ISO 180
Unnotched Izod Impact (23°C)	560 - 1300	J/m	ASTM D256
Tensile Impact Strength (23°C)	126 - 945	kJ/m ²	ASTM D1822
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			
0.45 MPa, not annealed	132 - 212	°C	ASTM D648
0.45 MPa, not annealed	134 - 172	°C	ISO 75-2/B
1.8 MPa, not annealed	54.1 - 216	°C	ASTM D648
1.8 MPa, not annealed	51.7 - 75.1	°C	ISO 75-2/A
Vicat Softening Temperature	108 - 201	°C	ISO 306
Melting Temperature			
--	208 - 215	°C	
--	215 - 218	°C	ISO 11357-3
--	200 - 211	°C	ISO 3146
Linear thermal expansion coefficient			
Flow	4.9E-5 - 9.0E-5	cm/cm/°C	ASTM D696
Flow	8.6E-5 - 2.0E-4	cm/cm/°C	ISO 11359-2
Lateral	9.0E-5 - 1.8E-4	cm/cm/°C	ISO 11359-2
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity			
23°C	55 - 1.0E+15	ohms · cm	ASTM D257
23°C	1.0E+10 - 2.5E+15	ohms · cm	IEC 60093
Dielectric Strength (23°C)	22 - 37	kV/mm	IEC 60243-1
Dielectric Constant			
23°C	3.48 - 6.00		ASTM D150
23°C	4.14		IEC 60250
Dissipation Factor			
23°C	0.017 - 0.15		ASTM D150
23°C	0.014 - 0.15		IEC 60250
Comparative Tracking Index	598 - 600	V	IEC 60112
Flammability	Nominal Value	Unit	Test Method
Glow Wire Flammability Index	719 - 725	°C	IEC 60695-2-12

Glow Wire Ignition Temperature	700 - 750	°C	IEC 60695-2-13
Injection	Nominal Value	Unit	
Drying Temperature	76.7 - 82.2	°C	
Drying Time	2.9 - 4.1	hr	
Suggested Max Moisture	0.060 - 0.25	%	
Rear Temperature	227 - 269	°C	
Middle Temperature	229 - 268	°C	
Front Temperature	227 - 277	°C	
Nozzle Temperature	232 - 258	°C	
Processing (Melt) Temp	253 - 275	°C	
Mold Temperature	69.4 - 79.8	°C	
Injection Pressure	96.3 - 98.7	MPa	
Back Pressure	0.250 - 0.689	MPa	
Screw Speed	45 - 100	rpm	
Cushion	3.97 - 7.94	mm	

Injection instructions

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

Extrusion	Nominal Value	Unit
Suggested Max Moisture	0.060 - 0.061	%

Extrusion instructions

This data represents typical values that have been calculated from all products classified as: Generic Nylon 612This 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



WECHAT