

Schwartz Technical Plastics LAMIGAMIDÂ® 317 Cast Polyamide 6, Heat Stabilized, Dry

Category : Polymer , Thermoplastic , Nylon , Nylon 6 , Nylon 6, Heat Stabilized

Material Notes:

Application: coupling parts, sealing rings, bearings Information provided by Schwartz Technical Plastics GmbH

Order this product through the following link:

http://www.lookpolymers.com/polymer_Schwartz-Technical-Plastics-LAMIGAMID-317-Cast-Polyamide-6-Heat-Stabilized-Dry.php

Physical Properties	Metric	English	Comments
Density	1.15 g/cc	0.0415 lb/inÂ³	ISO R 1183
Moisture Absorption at Equilibrium	2.2 %	2.2 %	DIN 53473
Water Absorption at Saturation	7.0 % @Temperature 20.0 Â°C	7.0 % @Temperature 68.0 Â°F	ISO R 62

Mechanical Properties	Metric	English	Comments
Ball Indentation Hardness	160 MPa	23200 psi	Hc 30; ISO 2039; partially
Tensile Strength, Yield	80.0 MPa	11600 psi	ISO-DIS 527
Creep Strength	>= 15.0 MPa	>= 2180 psi	1% elongation, 1000 h; DIN 53444
	>= 20.0 MPa	>= 2900 psi	2% elongation, 1000 h; DIN 53444
Tensile Modulus	3.50 GPa	508 ksi	DIN 53457
Flexural Strength	130 MPa	18900 psi	DIN 54352
Flexural Modulus	3.40 GPa	493 ksi	DIN 53457
Compressive Strength	48.0 MPa	6960 psi	5% pressing; EN ISO 604
	68.0 MPa	9860 psi	10% pressing; EN ISO 604
	91.0 MPa	13200 psi	20% pressing; EN ISO 604
Izod Impact, Notched (ISO)	2.70 kJ/mÂ²	1.28 ft-lb/inÂ²	ISO 180-1A
Izod Impact Resistance	NB	NB	swinging hammer 0,1 DIN 51222; DIN 53453
Coefficient of Friction	0.040	0.040	With lubrication
Coefficient of Friction, Dynamic	0.31	0.31	no lube; Steel 2162, Rvst=2E-6m, p=0.05 Mpa, v=0.6 m/s, t=40Â°C
Tear Strength Test	>= 0.20	>= 0.20	ISO-DIS 527

Mechanical Properties	Metric	English	Comments
-----------------------	--------	---------	----------

Thermal Properties	Metric	English	Comments
CTE, linear	70.0 - 80.0 $\mu\text{m}/\text{m}\cdot\text{Å}^\circ\text{C}$ @Temperature 20.0 - 100 $\text{Å}^\circ\text{C}$	38.9 - 44.4 $\mu\text{in}/\text{in}\cdot\text{Å}^\circ\text{F}$ @Temperature 68.0 - 212 $\text{Å}^\circ\text{F}$	DIN 53752
Specific Heat Capacity	1.67 J/g- $\text{Å}^\circ\text{C}$	0.399 BTU/lb- $\text{Å}^\circ\text{F}$	
Thermal Conductivity	0.250 W/m-K	1.74 BTU-in/hr-ft Å^2 - $\text{Å}^\circ\text{F}$	DIN 52612
Melting Point	220 $\text{Å}^\circ\text{C}$	428 $\text{Å}^\circ\text{F}$	ISO R 1218
Maximum Service Temperature, Air	120 $\text{Å}^\circ\text{C}$	248 $\text{Å}^\circ\text{F}$	Continuous
	180 $\text{Å}^\circ\text{C}$	356 $\text{Å}^\circ\text{F}$	Intermittent
Deflection Temperature at 0.46 MPa (66 psi)	210 $\text{Å}^\circ\text{C}$	410 $\text{Å}^\circ\text{F}$	V-notch; ISO R 75
Deflection Temperature at 1.8 MPa (264 psi)	120 $\text{Å}^\circ\text{C}$	248 $\text{Å}^\circ\text{F}$	V-notch; ISO R 75
Minimum Service Temperature, Air	-40.0 $\text{Å}^\circ\text{C}$	-40.0 $\text{Å}^\circ\text{F}$	Continuous

Electrical Properties	Metric	English	Comments
Volume Resistivity	1.00e+15 ohm-cm	1.00e+15 ohm-cm	DIN 53482
Surface Resistance	1.00e+12 ohm	1.00e+12 ohm	DIN 53482
Dielectric Constant	3.7	3.7	DIN 53483
Dielectric Strength	50.0 kV/mm	1270 kV/in	DIN 53481
Dielectric Loss Index	0.030	0.030	DIN 53483

Descriptive Properties	Value	Comments
Creepage/leakage Resistance	KA3c	DIN 53480

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com

Email : sales@lookpolymers.com

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China