

Schwartz Technical Plastics LAMIGAMIDÂ® 600 Polyoxymethylene

Category : Polymer , Thermoplastic , Acetal (POM)

Material Notes:

Application: friction bearings, wear and sliding liners
Information provided by Schwartz Technical Plastics GmbH

Order this product through the following link:

http://www.lookpolymers.com/polymer_Schwartz-Technical-Plastics-LAMIGAMID-600-Polyoxymethylene.php

Physical Properties	Metric	English	Comments
Density	1.43 g/cc	0.0517 lb/inÂ³	ISO R 1183
Moisture Absorption at Equilibrium	0.25 %	0.25 %	DIN 53473
Water Absorption at Saturation	0.60 % @Temperature 20.0 Â°C	0.60 % @Temperature 68.0 Â°F	ISO R 62

Mechanical Properties	Metric	English	Comments
Ball Indentation Hardness	135 MPa	19600 psi	Hc 30; ISO 2039; partially
Tensile Strength, Yield	68.0 MPa	9860 psi	ISO-DIS 527
Creep Strength	13.0 MPa	1890 psi	1% elongation, 1000 h; DIN 53444
	22.0 MPa	3190 psi	2% elongation, 1000 h; DIN 53444
Tensile Modulus	3.50 GPa	508 ksi	DIN 53457
Flexural Strength	117 MPa	17000 psi	DIN 54352
Flexural Modulus	3.00 GPa	435 ksi	DIN 53457
Compressive Strength	50.0 MPa	7250 psi	5% pressing; EN ISO 604
	83.0 MPa	12000 psi	10% pressing; EN ISO 604
	103 MPa	14900 psi	20% pressing; EN ISO 604
Izod Impact, Notched (ISO)	9.00 kJ/mÂ²	4.28 ft-lb/inÂ²	DIN 53453
Izod Impact Resistance	>= 9.00 J/cmÂ²	>= 42.8 ft-lb/inÂ²	swinging hammer 0,1 DIN 51222; DIN 53453
Coefficient of Friction	0.020 - 0.080	0.020 - 0.080	With lubrication
Coefficient of Friction, Dynamic	0.32	0.32	no lube; Steel 2162, Rvst=2E-6m, p=0.05 Mpa, v=0.6 m/s, t=40Â°C
Tear Strength Test	0.60	0.60	ISO-DIS 527

K Factor (Wear Factor) Mechanical Properties	9.00e-10 Metric	9.00e-10 English	Comments
---	--------------------	---------------------	----------

Thermal Properties	Metric	English	Comments
CTE, linear	100 $\mu\text{m}/\text{m}\cdot\text{Å}^\circ\text{C}$ @Temperature 20.0 - 100 $\text{Å}^\circ\text{C}$	55.6 $\mu\text{in}/\text{in}\cdot\text{Å}^\circ\text{F}$ @Temperature 68.0 - 212 $\text{Å}^\circ\text{F}$	DIN 53752
Specific Heat Capacity	1.46 J/g- $\text{Å}^\circ\text{C}$	0.349 BTU/lb- $\text{Å}^\circ\text{F}$	
Thermal Conductivity	0.270 W/m-K	1.87 BTU-in/hr-ft Å^2 - $\text{Å}^\circ\text{F}$	DIN 52612
Melting Point	167 $\text{Å}^\circ\text{C}$	333 $\text{Å}^\circ\text{F}$	ISO R 1218
Maximum Service Temperature, Air	100 $\text{Å}^\circ\text{C}$	212 $\text{Å}^\circ\text{F}$	Continuous
	140 $\text{Å}^\circ\text{C}$	284 $\text{Å}^\circ\text{F}$	Intermittent
Deflection Temperature at 0.46 MPa (66 psi)	160 $\text{Å}^\circ\text{C}$	320 $\text{Å}^\circ\text{F}$	V-notch; ISO R 75
Deflection Temperature at 1.8 MPa (264 psi)	115 $\text{Å}^\circ\text{C}$	239 $\text{Å}^\circ\text{F}$	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+13 ohm	1.00e+13 ohm	DIN 53482
Dielectric Constant	3.7	3.7	DIN 53483
Dielectric Strength	70.0 kV/mm	1780 kV/in	DIN 53481
Dielectric Loss Index	0.0035	0.0035	DIN 53483

Descriptive Properties	Value	Comments
Creepage/leakage Resistance	KA3b	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

