

## Schwartz Technical Plastics LAMIGAMIDÂ® 309 Cast Polyamide 6, Oil Filled, Dry

Category : Polymer , Thermoplastic , Nylon , Nylon 6 , Nylon 6, Cast

### Material Notes:

Application: slippers, inserts for coupling boxes, wear liners  
Information provided by Schwartz Technical Plastics GmbH

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Schwartz-Technical-Plastics-LAMIGAMID-309-Cast-Polyamide-6-Oil-Filled-Dry.php](http://www.lookpolymers.com/polymer_Schwartz-Technical-Plastics-LAMIGAMID-309-Cast-Polyamide-6-Oil-Filled-Dry.php)

Physical Properties	Metric	English	Comments
Density	1.14 g/cc	0.0412 lb/in <sup>3</sup>	ISO R 1183
Moisture Absorption at Equilibrium	1.0 %	1.0 %	DIN 53473
Water Absorption at Saturation	4.0 % @Temperature 20.0 Â°C	4.0 % @Temperature 68.0 Â°F	ISO R 62

Mechanical Properties	Metric	English	Comments
Ball Indentation Hardness	130 MPa	18900 psi	Hc 30; ISO 2039; partially
Tensile Strength, Yield	75.0 MPa	10900 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	2.90 GPa	421 ksi	DIN 53457
Flexural Strength	110 MPa	16000 psi	DIN 54352
Flexural Modulus	2.70 GPa	392 ksi	DIN 53457
Izod Impact, Notched (ISO)	>= 6.00 kJ/m <sup>2</sup>	>= 2.86 ft-lb/in <sup>2</sup>	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	0.14	0.14	no lube; Steel 2162, Rvst=2E-6m, p=0.05 Mpa, v=0.6 m/s, t=40Â°C
Tear Strength Test	>= 0.30	>= 0.30	ISO-DIS 527
K Factor (Wear Factor)	6.00e-11	6.00e-11	

Thermal Properties	Metric	English	Comments
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Thermal Properties <small>CTE, linear</small>	70.0 - 80.0 Åµm/m-Å°C Metric	38.9 - 44.4 Åµin/in-Å°F English	Comments <small>DIN 53752</small>
	@Temperature 20.0 - 100 Å°C	@Temperature 68.0 - 212 Å°F	
Specific Heat Capacity	1.67 J/g-Å°C	0.399 BTU/lb-Å°F	
Thermal Conductivity	0.250 W/m-K	1.74 BTU-in/hr-ftÅ²-Å°F	DIN 52612
Melting Point	200 - 220 Å°C	392 - 428 Å°F	ISO R 1218
Maximum Service Temperature, Air	120 Å°C	248 Å°F	Continuous
	180 Å°C	356 Å°F	Intermittent
Deflection Temperature at 0.46 MPa (66 psi)	200 Å°C	392 Å°F	V-notch; ISO R 75
Deflection Temperature at 1.8 MPa (264 psi)	110 Å°C	230 Å°F	V-notch; ISO R 75
Minimum Service Temperature, Air	-40.0 Å°C	-40.0 Å°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.

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