

## Techmer ES HiFill<sup>®</sup> PA6 LGCF50 HS BK 6mm 50% Glass/Carbon Filled

Category : Polymer , Thermoplastic , Nylon , Nylon 6

### Material Notes:

Availability: North America  
Forms: Pellets  
Filler/Reinforcement: Glass/Carbon Fiber Reinforcement, 50% Filler by Weight  
Additive: Lubricant and Heat Stabilizer  
Features: Lubricated and Heat Stabilized  
Appearance: Black  
Information provided by TP Composites, Inc.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Techmer-ES-HiFill-PA6-LGCF50-HS-BK-6mm-50-GlassCarbon-Filled.php](http://www.lookpolymers.com/polymer_Techmer-ES-HiFill-PA6-LGCF50-HS-BK-6mm-50-GlassCarbon-Filled.php)

Physical Properties	Metric	English	Comments
Density	1.49 g/cc	0.0538 lb/in <sup>3</sup>	ASTM D792
Water Absorption	0.95 % @Time 86400 sec	0.95 % @Time 24.0 hour	ASTM D570
Linear Mold Shrinkage, Flow	0.0030 cm/cm @Thickness 3.17 mm	0.0030 in/in @Thickness 0.125 in	ASTM D955

Mechanical Properties	Metric	English	Comments
Tensile Strength, Yield	193 MPa	28000 psi	ASTM D638
Elongation at Break	2.0 %	2.0 %	ASTM D638
Flexural Strength	276 MPa	40000 psi	ASTM D790
Flexural Modulus	14.1 GPa	2050 ksi	ASTM D790
Izod Impact, Notched	1.87 J/cm @Thickness 3.17 mm	3.50 ft-lb/in @Thickness 0.125 in	ASTM D256
Izod Impact, Unnotched	10.1 J/cm @Thickness 3.17 mm	19.0 ft-lb/in @Thickness 0.125 in	ASTM D256

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	14.4 $\mu\text{m}/\text{m}\cdot\text{Å}^\circ\text{C}$	8.00 $\mu\text{in}/\text{in}\cdot\text{Å}^\circ\text{F}$	ASTM D696
Deflection Temperature at 0.46 MPa (66 psi)	218 $\text{Å}^\circ\text{C}$	425 $\text{Å}^\circ\text{F}$	Unannealed; ASTM D648
Deflection Temperature at 1.8 MPa (264 psi)	210 $\text{Å}^\circ\text{C}$	410 $\text{Å}^\circ\text{F}$	Unannealed; ASTM D648

Electrical Properties	Metric	English	Comments
Volume Resistivity	100 - 1.00e+6 ohm-cm	100 - 1.00e+6 ohm-cm	ASTM D257

Surface Resistance Electrical Properties	100 - 1.00e+6 ohm Metric	100 - 1.00e+6 ohm English	ASTM D257 Comments
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## Contact Songhan Plastic Technology Co.,Ltd.

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