

## Techmer ES HiFill® PA6 G/C50 A240 BK 50% Glass/Ceramic Filled

Category : Polymer , Thermoplastic , Nylon , Nylon 6 , Nylon 6, 50% Glass Fiber Filled

### Material Notes:

Availability: North America Forms: Pellets Filler/Reinforcement: Glass/Ceramic, 50% Filler by Weight Appearance: Black TPC I# 9809102 Information provided by TP Composites, Inc.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Techmer-ES-HiFill-PA6-GC50-A240-BK-50-GlassCeramic-Filled.php](http://www.lookpolymers.com/polymer_Techmer-ES-HiFill-PA6-GC50-A240-BK-50-GlassCeramic-Filled.php)

| Physical Properties         | Metric                             | English                             | Comments  |
|-----------------------------|------------------------------------|-------------------------------------|-----------|
| Density                     | 1.59 g/cc                          | 0.0574 lb/in <sup>3</sup>           | ASTM D792 |
| Water Absorption            | 0.50 %<br>@Time 86400 sec          | 0.50 %<br>@Time 24.0 hour           | ASTM D570 |
| Linear Mold Shrinkage, Flow | 0.0010 cm/cm<br>@Thickness 3.17 mm | 0.0010 in/in<br>@Thickness 0.125 in | ASTM D955 |

| Mechanical Properties   | Metric                           | English                              | Comments  |
|-------------------------|----------------------------------|--------------------------------------|-----------|
| Hardness, Rockwell R    | 121                              | 121                                  | ASTM D785 |
| Tensile Strength, Yield | 179 MPa                          | 26000 psi                            | ASTM D638 |
| Elongation at Break     | 3.0 %                            | 3.0 %                                | ASTM D638 |
| Flexural Strength       | 276 MPa                          | 40000 psi                            | ASTM D790 |
| Flexural Modulus        | 12.6 GPa                         | 1830 ksi                             | ASTM D790 |
| Izod Impact, Notched    | 0.908 J/cm<br>@Thickness 3.17 mm | 1.70 ft-lb/in<br>@Thickness 0.125 in | ASTM D256 |
| Izod Impact, Unnotched  | 11.7 J/cm<br>@Thickness 3.17 mm  | 22.0 ft-lb/in<br>@Thickness 0.125 in | ASTM D256 |

| Thermal Properties                          | Metric         | English          | Comments              |
|---------------------------------------------|----------------|------------------|-----------------------|
| CTE, linear, Parallel to Flow               | 14.4 Åµm/m-Å°C | 8.00 Åµin/in-Å°F | ASTM D696             |
| Deflection Temperature at 0.46 MPa (66 psi) | 218 Å°C        | 425 Å°F          | Unannealed; ASTM D648 |
| Deflection Temperature at 1.8 MPa (264 psi) | 216 Å°C        | 420 Å°F          | Unannealed; ASTM D648 |
| Flammability, UL94                          | HB             | HB               |                       |

| Electrical Properties | Metric          | English         | Comments                         |
|-----------------------|-----------------|-----------------|----------------------------------|
| Volume Resistivity    | 1.00e+15 ohm-cm | 1.00e+15 ohm-cm | ASTM D257                        |
| Dielectric Strength   | 16.9 kV/mm      | 430 kV/in       | Method A (Short-Time); ASTM D149 |

## Contact Songhan Plastic Technology Co.,Ltd.

Website : [www.lookpolymers.com](http://www.lookpolymers.com)

Email : [sales@lookpolymers.com](mailto:sales@lookpolymers.com)

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

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