

## Techmer ES HiFill FR<sup>®</sup> HIPS FR-1

Category : Polymer , Thermoplastic , Polystyrene (PS) , Polystyrene, Impact Modified

### Material Notes:

Availability: North America Forms: Pellets Features: Flame Retardant RoHS Compliance: RoHS Compliant Information provided by TP Composites, Inc.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Techmer-ES-HiFill-FR-HIPS-FR-1.php](http://www.lookpolymers.com/polymer_Techmer-ES-HiFill-FR-HIPS-FR-1.php)

Physical Properties	Metric	English	Comments
Density	1.15 g/cc	0.0415 lb/in <sup>3</sup>	ASTM D792
Water Absorption	0.050 % @Time 86400 sec	0.050 % @Time 24.0 hour	ASTM D570
Linear Mold Shrinkage, Flow	0.045 cm/cm @Thickness 3.17 mm	0.045 in/in @Thickness 0.125 in	ASTM D955

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell L	60	60	ASTM D785
Tensile Strength, Yield	20.0 MPa	2900 psi	ASTM D638
Elongation at Break	30 %	30 %	ASTM D638
Flexural Strength	26.2 MPa	3800 psi	ASTM D790
Flexural Modulus	1.93 GPa	280 ksi	ASTM D790
Izod Impact, Notched	1.07 J/cm @Thickness 3.17 mm	2.00 ft-lb/in @Thickness 0.125 in	ASTM D256
Izod Impact, Unnotched	>= 4.27 J/cm @Thickness 3.17 mm	>= 8.00 ft-lb/in @Thickness 0.125 in	ASTM D256

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	63.0 Åµm/m-Å°C	35.0 Åµin/in-Å°F	ASTM D696
Deflection Temperature at 0.46 MPa (66 psi)	96.1 Å°C	205 Å°F	Unannealed; ASTM D648
Deflection Temperature at 1.8 MPa (264 psi)	87.8 Å°C	190 Å°F	Unannealed; ASTM D648
Flammability, UL94	V-0	V-0	

Electrical Properties	Metric	English	Comments
Volume Resistivity	1.00e+14 ohm-cm	1.00e+14 ohm-cm	ASTM D257
Dielectric Strength	21.7 kV/mm	550 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