

HiFill® SPS GF40 BK

 Techmer Polymer Modifiers - *Syndiotactic Polystyrene*
General Information
General

Material Status	• Commercial: Active
Availability	• North America
Filler / Reinforcement	• Glass Fiber, 40% Filler by Weight
Features	• Syndiotactic
Appearance	• Black
Forms	• Pellets
Processing Method	• Injection Molding

Properties ¹

	Nominal Value	Unit	Test Method
Physical			
Density / Specific Gravity	1.36		ASTM D792
Molding Shrinkage - Flow (0.125 in)	3.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	9.0E-3	%	ASTM D570
Mechanical			
Nominal Value Unit Test Method			
Tensile Strength (Break)	17500	psi	ASTM D638
Tensile Elongation (Break)	1.1	%	ASTM D638
Flexural Modulus	1.72E+6	psi	ASTM D790
Flexural Strength	32500	psi	ASTM D790
Impact			
Nominal Value Unit Test Method			
Notched Izod Impact (73°F, 0.125 in)	2.1	ft·lb/in	ASTM D256
Unnotched Izod Impact (0.125 in)	25	ft·lb/in	ASTM D4812
Hardness			
Nominal Value Unit Test Method			
Rockwell Hardness (R-Scale)	120		ASTM D785
Thermal			
Nominal Value Unit Test Method			
Deflection Temperature Under Load (66 psi, Unannealed)	470	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	505	°F	ASTM D648
CLTE - Flow	9.6E-6	in/in/°F	ASTM D696
Electrical			
Nominal Value Unit Test Method			
Volume Resistivity	1.0E+14	ohms·cm	ASTM D257
Dielectric Strength (Method A (Short-Time))	600	V/mil	ASTM D149

Notes
¹ Typical properties: these are not to be construed as specifications.
