

HiFill® HIPS GF50

Techmer Polymer Modifiers - *High Impact Polystyrene*

General Information

General

Material Status	• Commercial: Active
Availability	• North America
Filler / Reinforcement	• Glass Fiber, 50% Filler by Weight
Appearance	• Colors Available
Forms	• Pellets
Processing Method	• Injection Molding

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.48		ASTM D792
Molding Shrinkage - Flow (0.125 in)	1.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.070	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Break)	13000	psi	ASTM D638
Tensile Elongation (Break)	1.0	%	ASTM D638
Flexural Modulus	1.60E+6	psi	ASTM D790
Flexural Strength	18000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F, 0.125 in)	1.2	ft-lb/in	ASTM D256
Unnotched Izod Impact (0.125 in)	4.0	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)	220	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	200	°F	ASTM D648
CLTE - Flow	1.7E-5	in/in/°F	ASTM D696
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	1.0E+16	ohms·cm	ASTM D257
Dielectric Strength (Method A (Short-Time))	450	V/mil	ASTM D149
Flammability	Nominal Value	Unit	Test Method
Flame Rating	HB		UL 94

Notes

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

