

HiFill® PA6 GF50 IM

Techmer Polymer Modifiers - *Polyamide 6*

General Information

General

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

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.57		ASTM D792
Molding Shrinkage - Flow (0.125 in)	2.2E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.70	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength	30000	psi	ASTM D638
Tensile Elongation (Yield)	2.8	%	ASTM D638
Flexural Modulus	1.85E+6	psi	ASTM D790
Flexural Strength (Yield)	45000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (0.125 in)	6.0	ft-lb/in	ASTM D256
Unnotched Izod Impact (0.125 in)	No Break		ASTM D4812
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	121		ASTM D785
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	425	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	415	°F	ASTM D648
CLTE - Flow	8.0E-6	in/in/°F	ASTM D696
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	1.0E+15	ohms·cm	ASTM D257
Dielectric Strength (Method A (Short-Time))	450	V/mil	ASTM D149

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	180	°F
Drying Time	4.0	hr
Rear Temperature	500 to 580	°F
Middle Temperature	500 to 580	°F
Front Temperature	500 to 580	°F
Processing (Melt) Temp	470 to 520	°F
Mold Temperature	150 to 200	°F
Back Pressure	0.00 to 50.0	psi
Screw Speed	30 to 60	rpm

