

HiFill® PA6 G/C50 A240 BK

Techmer Polymer Modifiers - Polyamide 6

General

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

ASTM & ISO Properties ¹

	Nominal Value	Unit	Test Method
Physical			
Density / Specific Gravity	1.59		ASTM D792
Molding Shrinkage - Flow (0.125 in)	1.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.50	%	ASTM D570
Mechanical			
Tensile Strength (Break)	26000	psi	ASTM D638
Tensile Elongation (Break)	3.0	%	ASTM D638
Flexural Modulus	1.83E+6	psi	ASTM D790
Flexural Strength	40000	psi	ASTM D790
Impact			
Notched Izod Impact (73°F, 0.125 in)	1.7	ft-lb/in	ASTM D256
Unnotched Izod Impact (0.125 in)	22	ft-lb/in	ASTM D256
Hardness			
Rockwell Hardness (R-Scale)	121		ASTM D785
Thermal			
Deflection Temperature Under Load (66 psi, Unannealed)	425	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	420	°F	ASTM D648
CLTE - Flow	8.0E-6	in/in/°F	ASTM D696
Electrical			
Volume Resistivity	1.0E+15	ohms·cm	ASTM D257
Dielectric Strength (Method A (Short-Time))	430	V/mil	ASTM D149
Flammability			
Flame Rating	HB		UL 94
Additional Information			
TPCI #	9809102		

Processing Information

	Nominal Value	Unit
Injection		
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

