

HiFill® PA6/12 CF30 BK

Techmer Polymer Modifiers - Polyamide 612

General

Material Status	• Commercial: Active
Availability	• North America
Filler / Reinforcement	• Carbon Fiber, 30% Filler by Weight
Appearance	• Black • Natural Color
Forms	• Pellets
Processing Method	• Injection Molding

Properties ¹

	Nominal Value	Unit	Test Method
Physical			
Density / Specific Gravity	1.22		ASTM D792
Molding Shrinkage - Flow (0.125 in)	3.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.16	%	ASTM D570
Mechanical			
Tensile Strength (Break)	29000	psi	ASTM D638
Tensile Elongation (Break)	2.2	%	ASTM D638
Flexural Modulus	2.30E+6	psi	ASTM D790
Flexural Strength	44000	psi	ASTM D790
Impact			
Notched Izod Impact (73°F, 0.125 in)	2.0	ft-lb/in	ASTM D256
Hardness			
Rockwell Hardness (R-Scale)	118		ASTM D785
Thermal			
Deflection Temperature Under Load (66 psi, Unannealed)	430	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	420	°F	ASTM D648
CLTE - Flow	1.1E-5	in/in/°F	ASTM D696
Additional Information			
TPCI #	9814104		

Processing Information

	Nominal Value	Unit
Injection		
Drying Temperature	165 to 220	°F
Drying Time	2.0 to 16	hr
Rear Temperature	520 to 540	°F
Middle Temperature	530 to 550	°F
Front Temperature	510 to 530	°F
Nozzle Temperature	500 to 520	°F
Processing (Melt) Temp	520 to 540	°F
Mold Temperature	130 to 180	°F

