

HiFill® PA4/6 CF40 IM HS

Techmer Polymer Modifiers - Polyamide 46

General

Material Status	• Commercial: Active
Availability	• North America
Filler / Reinforcement	• Carbon Fiber, 40% Filler by Weight
Additive	• Heat Stabilizer
Features	• Heat Stabilized
Appearance	• Black
Forms	• Pellets
Processing Method	• Injection Molding

Properties ¹

	Nominal Value	Unit	Test Method
Physical			
Density / Specific Gravity	1.33		ASTM D792
Molding Shrinkage - Flow (0.125 in)	1.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	1.7	%	ASTM D570
Mechanical			
Tensile Strength (Break)	35000	psi	ASTM D638
Tensile Elongation (Break)	1.7	%	ASTM D638
Flexural Modulus	3.20E+6	psi	ASTM D790
Flexural Strength	57000	psi	ASTM D790
Impact			
Notched Izod Impact (73°F, 0.125 in)	1.8	ft-lb/in	ASTM D256
Thermal			
Deflection Temperature Under Load (264 psi, Unannealed)	540	°F	ASTM D648
CLTE - Flow	1.0E-5	in/in/°F	ASTM D696
Electrical			
Volume Resistivity	10	ohms·cm	ASTM D257
Flammability			
Flame Rating (0.06 in)	HB		UL 94

Processing Information

	Nominal Value	Unit
Injection		
Drying Temperature	185	°F
Drying Time	4.0 to 8.0	hr
Rear Temperature	540 to 600	°F
Middle Temperature	540 to 600	°F
Front Temperature	540 to 600	°F
Processing (Melt) Temp	475 to 600	°F
Mold Temperature	190 to 260	°F
Back Pressure	0.00 to 50.0	psi
Screw Speed	40 to 80	rpm

