

HiFill® PA4/6 CF40 IM HS

Techmer Polymer Modifiers - *Polyamide 46*

General Information

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

Physical	Nominal Value	Unit	Test Method
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	Nominal Value	Unit	Test Method
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	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F, 0.125 in)	1.8	ft·lb/in	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	540	°F	ASTM D648
CLTE - Flow	1.0E-5	in/in/°F	ASTM D696
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	10	ohms·cm	ASTM D257
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.06 in)	HB		UL 94

Processing Information

Injection	Nominal Value	Unit
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

