

HiFill® PEEK GF40 A HF

Techmer Polymer Modifiers - *Polyetheretherketone*

General Information

General

Material Status	• Commercial: Active
Availability	• North America
Filler / Reinforcement	• Glass Fiber
Features	• High Flow
Appearance	• Colors Available
Processing Method	• Injection Molding

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.61		ASTM D792
Molding Shrinkage - Flow (0.125 in)	2.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.12	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Break)	30000	psi	ASTM D638
Tensile Elongation (Break)	2.0	%	ASTM D638
Flexural Modulus	2.00E+6	psi	ASTM D790
Flexural Strength	44000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F, 0.125 in)	2.1	ft-lb/in	ASTM D256
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	115		ASTM D785
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	617	°F	ASTM D648
Melting Temperature	648	°F	
CLTE - Flow	1.2E-5	in/in/°F	ASTM D696
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	1.0E+16	ohms·cm	ASTM D257
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.03 in)	V-0		UL 94

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	300	°F
Drying Time	2.0 to 4.0	hr
Rear Temperature	680 to 730	°F
Middle Temperature	680 to 730	°F
Front Temperature	680 to 730	°F
Processing (Melt) Temp	680 to 720	°F
Mold Temperature	350 to 425	°F
Back Pressure	50.0 to 100	psi
Screw Speed	50 to 100	rpm

