

HiFill® PBT GF40

Techmer Polymer Modifiers - *Polybutylene Terephthalate*

General Information

General	
Material Status	Commercial: Active
Availability	North America
Filler / Reinforcement	Glass Fiber, 40% Filler by Weight
Appearance	Colors Available
Forms	Pellets
Processing Method	Injection Molding

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.62		ASTM D792
Molding Shrinkage - Flow (0.125 in)	3.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.040	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Break)	22000	psi	ASTM D638
Tensile Elongation (Break)	4.0	%	ASTM D638
Flexural Modulus	1.40E+6	psi	ASTM D790
Flexural Strength	32000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F, 0.125 in)	2.2	ft-lb/in	ASTM D256
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	120		ASTM D785
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	420	°F	ASTM D648
CLTE - Flow	1.1E-5	in/in/°F	ASTM D696
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	1.0E+16	ohms·cm	ASTM D257
Dielectric Strength (Method A (Short-Time))	510	V/mil	ASTM D149
Flammability	Nominal Value	Unit	Test Method
Flame Rating	HB		UL 94

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	250	°F
Drying Time	4.0	hr
Rear Temperature	450 to 525	°F
Middle Temperature	450 to 525	°F
Front Temperature	450 to 525	°F
Processing (Melt) Temp	450 to 475	°F
Mold Temperature	150 to 180	°F
Back Pressure	50.0 to 100	psi
Screw Speed	30 to 60	rpm

