HiFill® PET GF55 2000

Techmer Polymer Modifiers - *Polyethylene Terephthalate*

General Information

General	
Material Status	• Commercial: Active
Availability	• North America
Filler / Reinforcement	• Glass Fiber, 55% Filler by Weight
Appearance	• Colors Available
Forms	• Pellets
Processing Method	• Injection Molding

Properties [1]

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.80		ASTM D792
Molding Shrinkage - Flow (0.125 in)	2.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.030	%	ASTM D570
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Strength (Break)	28000	psi	ASTM D638
Tensile Elongation (Break)	1.5	%	ASTM D638
Flexural Modulus	2.50E+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)	121		ASTM D785
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load (264 psi, Unannealed)	445	°F	ASTM D648
Melting Temperature	489	°F	
CLTE - Flow	9.0E-6	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))	450	V/mil	ASTM D149

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	250	°F
Drying Time	4.0	hr
Rear Temperature	520 to 550	°F
Middle Temperature	520 to 550	°F
Front Temperature	520 to 550	°F
Processing (Melt) Temp	525	°F
Mold Temperature	200 to 230	°F
Back Pressure	50.0 to 100	psi
Screw Speed	30 to 60	rpm