

## HiFill FR® PBT GF20 FR GN175

Techmer Polymer Modifiers - *Polybutylene Terephthalate*

### General Information

#### General

Material Status	• Commercial: Active
Availability	• North America
Filler / Reinforcement	• Glass Fiber, 20% Filler by Weight
Additive	• Flame Retardant
Features	• Flame Retardant
Appearance	• Green
Processing Method	• Injection Molding

### Properties <sup>1</sup>

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.61		ASTM D792
Molding Shrinkage - Flow (0.125 in)	7.0E-3 to 0.010	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	1.30E+6	psi	ASTM D638
Tensile Strength (Yield)	16000	psi	ASTM D638
Tensile Strength (Break)	15500	psi	ASTM D638
Tensile Elongation (Break)	2.0	%	ASTM D638
Flexural Modulus	1.20E+6	psi	ASTM D790
Flexural Strength	23000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (0.125 in)	0.80	ft·lb/in	ASTM D256
Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94
0.06 in		V-0	
0.12 in		V-0	

### Processing Information

Injection	Nominal Value	Unit
Drying Temperature	180	°F
Drying Time	2.0 to 3.0	hr
Rear Temperature	450 to 480	°F
Middle Temperature	460 to 490	°F
Front Temperature	470 to 500	°F
Nozzle Temperature	480 to 510	°F
Processing (Melt) Temp	465 to 515	°F
Mold Temperature	125 to 200	°F
Injection Rate	Slow-Moderate	
Back Pressure	25.0 to 75.0	psi
Screw Speed	Slow	

