

HiFill FR® PA6/6 GF20 FR BK001

Techmer Polymer Modifiers - Polyamide 66

General

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

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.48		ASTM D792
Molding Shrinkage - Flow (0.125 in)	6.0E-3 to 9.0E-3	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	1.10E+6	psi	ASTM D638
Tensile Strength (Yield)	19000	psi	ASTM D638
Tensile Strength (Break)	18500	psi	ASTM D638
Tensile Elongation (Break)	2.0	%	ASTM D638
Flexural Modulus	1.20E+6	psi	ASTM D790
Flexural Strength	27000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (0.125 in)	0.80	ft·lb/in	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	230	°F	ASTM D648
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	490 to 530	°F
Middle Temperature	500 to 540	°F
Front Temperature	510 to 550	°F
Nozzle Temperature	520 to 560	°F
Processing (Melt) Temp	500 to 565	°F
Mold Temperature	100 to 200	°F
Injection Rate	Moderate	
Back Pressure	25.0 to 75.0	psi
Screw Speed	Slow-Moderate	

