

HiFill FR® PA6/6 GF25 FR-N IM BK

Techmer Polymer Modifiers - Polyamide 66

General

Material Status	• Commercial: Active
Availability	• North America
Filler / Reinforcement	• Glass Fiber, 25% Filler by Weight
Additive	• Impact Modifier
Features	• Flame Retardant • High Impact Resistance
UL File Number	• E157318
Appearance	• Black
Forms	• Pellets
Processing Method	• Injection Molding

Properties ¹

	Nominal Value	Unit	Test Method
Physical			
Density / Specific Gravity	1.31		ASTM D792
Molding Shrinkage - Flow (0.125 in)	3.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.60	%	ASTM D570
Mechanical			
Tensile Strength (Break)	11500	psi	ASTM D638
Tensile Elongation (Break)	3.4	%	ASTM D638
Flexural Modulus	670000	psi	ASTM D790
Flexural Strength	19000	psi	ASTM D790
Impact			
Notched Izod Impact			ASTM D256
-40°F	1.7	ft-lb/in	
73°F	2.5	ft-lb/in	
Hardness			
Rockwell Hardness (M-Scale)	85		ASTM D785
Thermal			
Deflection Temperature Under Load (264 psi, Unannealed)	389	°F	ASTM D648
CLTE - Flow	2.0E-5	in/in/°F	ASTM D696
RTI Elec	248	°F	UL 746B
RTI Imp	248	°F	UL 746B
RTI Str	248	°F	UL 746B
Electrical			
Surface Resistivity	1.0E+14	ohms	ASTM D257
Volume Resistivity	1.0E+16	ohms·cm	ASTM D257
Dielectric Strength (Method A (Short-Time))	520	V/mil	ASTM D149
Comparative Tracking Index (CTI)	550	V	UL 746A
Flammability			
Flame Rating			UL 94
0.12 in	V-0		
0.08 in	5VB		

Processing Information

	Nominal Value	Unit
Injection		
Drying Temperature	180	°F
Drying Time	> 6.0	hr
Rear Temperature	490 to 530	°F
Middle Temperature	490 to 530	°F



Front Temperature	490 to 530 °F
Processing (Melt) Temp	480 to 520 °F
Mold Temperature	150 to 200 °F
Back Pressure	50.0 to 100 psi
Screw Speed	30 to 60 rpm

