

HiFill® PA6/6 GF18 FR BK

 Techmer Polymer Modifiers - *Polyamide 66*
General Information
General

Material Status	• Commercial: Active
Availability	• North America
Filler / Reinforcement	• Glass Fiber, 18% Filler by Weight
Features	• Flame Retardant
Appearance	• Black
Forms	• Pellets
Processing Method	• Injection Molding

Properties ¹

	Nominal Value	Unit	Test Method
Physical			
Density / Specific Gravity	1.50		ASTM D792
Molding Shrinkage - Flow (0.125 in)	4.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.70	%	ASTM D570
Mechanical			
Nominal Value Unit Test Method			
Tensile Strength (Break)	17500	psi	ASTM D638
Tensile Elongation (Break)	3.0	%	ASTM D638
Flexural Modulus	900000	psi	ASTM D790
Flexural Strength	26000	psi	ASTM D790
Impact			
Nominal Value Unit Test Method			
Notched Izod Impact (73°F, 0.125 in)	1.2	ft-lb/in	ASTM D256
Hardness			
Nominal Value Unit Test Method			
Rockwell Hardness (R-Scale)	111		ASTM D785
Thermal			
Nominal Value Unit Test Method			
Deflection Temperature Under Load (264 psi, Unannealed)	460	°F	ASTM D648
CLTE - Flow	4.4E-5	in/in/°F	ASTM D696
Electrical			
Nominal Value Unit Test Method			
Surface Resistivity	1.0E+11	ohms	ASTM D257
Volume Resistivity	1.0E+9	ohms·cm	ASTM D257
Dielectric Strength (Method A (Short-Time))	440	V/mil	ASTM D149
Flammability			
Nominal Value Unit Test Method			
Flame Rating (0.06 in)	V-0		UL 94

Processing Information

	Nominal Value	Unit
Injection		
Drying Temperature	180	°F
Drying Time	2.0 to 4.0	hr
Suggested Max Moisture	0.12	%
Rear Temperature	540 to 560	°F
Middle Temperature	550 to 570	°F
Front Temperature	530 to 550	°F
Nozzle Temperature	540 to 560	°F
Processing (Melt) Temp	540 to 580	°F
Mold Temperature	130 to 200	°F
Injection Rate	Moderate-Fast	
Back Pressure	50.0 to 100	psi

Injection Notes


Screw Speed: Medium

Recommendations for Molding and Tool Conditions: Well vented

Moisture Content, as received: Product is packaged at 0.2% or less.

Recommended Max Moisture: 0.12% down to 0.08%

Notes

¹ Typical properties: these are not to be construed as specifications.

