

HiFill FR® PA6/6 GF25 FR-NR IM BK

Techmer Polymer Modifiers - Polyamide 66

General

Material Status	• Commercial: Active
Availability	• North America
Filler / Reinforcement	• Glass Fiber, 25% Filler by Weight
Additive	• Flame Retardant • Impact Modifier
Features	• Flame Retardant • Impact Modified
Appearance	• Black
Processing Method	• Injection Molding

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.38		ASTM D792
Melt Mass-Flow Rate (MFR) (280°C/5.0 kg)	30 to 40	g/10 min	ASTM D1238
Molding Shrinkage - Flow (0.125 in)	3.0E-3 to 4.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.60	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	1.20E+6	psi	ASTM D638
Tensile Strength (Yield)	14500	psi	ASTM D638
Tensile Strength (Break)	14000	psi	ASTM D638
Tensile Elongation (Break)	3.5	%	ASTM D638
Flexural Modulus	800000	psi	ASTM D790
Flexural Strength	19000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (0.125 in)	> 1.5	ft-lb/in	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	405	°F	ASTM D648
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.12 in)	V-0		UL 94

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	180	°F
Drying Time	2.0 to 3.0	hr
Rear Temperature	500 to 530	°F
Middle Temperature	510 to 540	°F
Front Temperature	520 to 550	°F
Nozzle Temperature	530 to 560	°F
Processing (Melt) Temp	510 to 560	°F
Mold Temperature	125 to 200	°F
Injection Rate	Slow-Moderate	
Back Pressure	50.0 to 100	psi
Screw Speed	Slow	

