

HiFill FR® PA6/6 CF15 FR BK

Techmer Polymer Modifiers - Polyamide 66

General

Material Status	• Commercial: Active
Availability	• North America
Filler / Reinforcement	• Carbon Fiber, 15% Filler by Weight
Additive	• Lubricant
Features	• Flame Retardant • Lubricated
Appearance	• Black
Forms	• Pellets
Processing Method	• Injection Molding

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.47		ASTM D792
Molding Shrinkage - Flow (0.125 in)	2.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.50	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Break)	22000	psi	ASTM D638
Tensile Elongation (Break)	2.0	%	ASTM D638
Flexural Modulus	1.55E+6	psi	ASTM D790
Flexural Strength	38000	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)	118		ASTM D785
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	485	°F	ASTM D648
CLTE - Flow	1.3E-5	in/in/°F	ASTM D696
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	1.0E+2 to 1.0E+4	ohms	ASTM D257
Volume Resistivity	1.0E+2 to 1.0E+4	ohms·cm	ASTM D257
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.06 in)	V-0		UL 94

Processing Information

Injection	Nominal Value	Unit
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

