

HiFill FR® PA6/6 GF50 FR UV X BK

Techmer Polymer Modifiers - Polyamide 66

General

Material Status	• Commercial: Active
Availability	• North America
Filler / Reinforcement	• Glass Fiber
Additive	• Flame Retardant • UV Stabilizer
Features	• Flame Retardant
Appearance	• Black
Forms	• Pellets
Processing Method	• Injection Molding

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.78		ASTM D792
Molding Shrinkage - Flow (0.125 in)	2.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.35	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength	31500	psi	ASTM D638
Tensile Elongation (Yield)	2.0	%	ASTM D638
Flexural Modulus	2.40E+6	psi	ASTM D790
Flexural Strength (Yield)	46000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (0.125 in)	2.4	ft·lb/in	ASTM D256
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	121		ASTM D785
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	500	°F	ASTM D648
CLTE - Flow	9.0E-6	in/in/°F	ASTM D696
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	1.0E+16	ohms·cm	ASTM D257
Dielectric Strength (Method A (Short-Time))	50	V/mil	ASTM D149
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

