

HiFill FR® PA6/6 GF20 FR-NR

Techmer Polymer Modifiers - Polyamide 66

General

Material Status	• Commercial: Active
Availability	• North America
Filler / Reinforcement	• Glass Fiber, 23% Filler by Weight
UL File Number	• E157318
Appearance	• Colors Available
Forms	• Pellets
Processing Method	• Injection Molding

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.45		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)	18200	psi	ASTM D638
Tensile Elongation (Break)	3.0	%	ASTM D638
Flexural Modulus	1.01E+6	psi	ASTM D790
Flexural Strength	28000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F, 0.125 in)	1.4	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 (66 psi, Unannealed)	480	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	450	°F	ASTM D648
CLTE - Flow	1.4E-5	in/in/°F	ASTM D696
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	1.0E+14	ohms	ASTM D257
Volume Resistivity	1.0E+15	ohms·cm	ASTM D257
Dielectric Strength (Method A (Short-Time))	440	V/mil	ASTM D149
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.031 in, NC, BK, Colors)	V-0		UL 94
Additional Information	Nominal Value	Unit	Test Method
TPCI #	9085101		

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

