

HiFill FR® PA6 GF33 FR HS L

 Techmer Polymer Modifiers - *Polyamide 6*
General Information
General

Material Status	• Commercial: Active
Availability	• North America
Filler / Reinforcement	• Glass Fiber, 33% Filler by Weight
Additive	• Heat Stabilizer • Lubricant
Features	• Flame Retardant • Heat Stabilized • Lubricated
Appearance	• Colors Available
Forms	• Pellets
Processing Method	• Injection Molding

Properties ¹

	Nominal Value	Unit	Test Method
Physical			
Density / Specific Gravity	1.63		ASTM D792
Molding Shrinkage - Flow (0.125 in)	3.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.75	%	ASTM D570
Mechanical			
Tensile Strength (Break)	22100	psi	ASTM D638
Tensile Elongation (Break)	3.5	%	ASTM D638
Flexural Modulus	1.30E+6	psi	ASTM D790
Flexural Strength	29000	psi	ASTM D790
Impact			
Notched Izod Impact (73°F, 0.125 in)	1.6	ft·lb/in	ASTM D256
Unnotched Izod Impact	16	ft·lb/in	ASTM D4812
Hardness			
Rockwell Hardness (R-Scale)	122		ASTM D785
Thermal			
Deflection Temperature Under Load (66 psi, Unannealed)	425	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	420	°F	ASTM D648
CLTE - Flow	1.2E-5	in/in/°F	ASTM D696
RTI Elec	248	°F	UL 746B
RTI Imp	248	°F	UL 746B
RTI Str	239	°F	UL 746B
Electrical			
Surface Resistivity	1.0E+13	ohms	ASTM D257
Volume Resistivity	1.0E+14	ohms·cm	ASTM D257
Dielectric Strength (Method A (Short-Time))	410	V/mil	ASTM D149
Flammability			
Flame Rating (0.06 in, ALL)	V-0		UL 94
Additional Information			
TPCI #	6536102		

Processing Information

	Nominal Value	Unit
Injection		
Drying Temperature	180	°F
Drying Time	2.0 to 4.0	hr
Rear Temperature	450 to 495	°F
Middle Temperature	450 to 495	°F
Front Temperature	450 to 495	°F



Processing (Melt) Temp	460 to 510 °F
Mold Temperature	150 to 200 °F
Back Pressure	50.0 to 100 psi
Screw Speed	30 to 60 rpm

Notes

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

