HiFill FR® PA6 GF33 FR HS L GY300

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	• UV Stabilizer
Features	• Flame Retardant • Heat Stabilized	• Lubricated • UV Resistant	
Appearance	• Colors Available	• Grey	
Forms	• Pellets		
Processing Method	• Injection Molding		

Properties [1]

Physical	Nominal Value	Unit	Test Method
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	**Nominal Value**	**Unit**	**Test Method**
Tensile Strength (Yield)	21600	psi	ASTM D638
Tensile Elongation (Break)	3.1	%	ASTM D638
Flexural Modulus	1.30E+6	psi	ASTM D790
Flexural Strength	28000	psi	ASTM D790
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact	1.4	ft·lb/in	ASTM D256
Unnotched Izod Impact	16	ft·lb/in	ASTM D4812
Hardness	**Nominal Value**	**Unit**	**Test Method**
Rockwell Hardness (R-Scale)	122		ASTM D785
Thermal	**Nominal Value**	**Unit**	**Test Method**
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	**Nominal Value**	**Unit**	**Test Method**
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	**Nominal Value**	**Unit**	**Test Method**
Flame Rating (0.06 in, all colors)	V-0		UL 94

Processing Information

Injection	Nominal Value	Unit
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.