HiFill FR® PA6 FR 544

Techmer Polymer Modifiers - *Polyamide 6*

General Information

General			
Material Status	• Commercial: Active		
Availability	• North America		
Additive	• Heat Stabilizer	• Lubricant	
Features	• Flame Retardant	• Heat Stabilized	• Lubricated
RoHS Compliance	• RoHS Compliant		
Appearance	• Colors Available		
Forms	• Pellets		
Processing Method	• Injection Molding		

Properties [1]

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.34		ASTM D792
Molding Shrinkage - Flow (0.125 in)	0.019	in/in	ASTM D955
Water Absorption (24 hr)	0.90	%	ASTM D570
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Strength (Yield)	10100	psi	ASTM D638
Tensile Elongation (Break)	7.0	%	ASTM D638
Flexural Modulus	480000	psi	ASTM D790
Flexural Strength	16900	psi	ASTM D790
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact	0.80	ft·lb/in	ASTM D256
Hardness	**Nominal Value**	**Unit**	**Test Method**
Rockwell Hardness (R-Scale)	115		ASTM D785
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load (66 psi, Unannealed)	410	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	180	°F	ASTM D648
CLTE - Flow	3.9E-5	in/in/°F	ASTM D696
Electrical	**Nominal Value**	**Unit**	**Test Method**
Surface Resistivity	1.0E+15	ohms	ASTM D257
Volume Resistivity	1.0E+14	ohms·cm	ASTM D257
Dielectric Strength (Method A (Short-Time))	690	V/mil	ASTM D149
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating			UL 94
0.031 in	V-0		
0.08 in	5VA		

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