HiFill FR® PA6/6 GF25 FR-N IM3 BK
Techmer Polymer Modifiers - *Polyamide 66*

General Information

General

Material Status	• Commercial: Active
Availability	• North America
Filler / Reinforcement	• Glass Fiber, 25% Filler by Weight
Additive	• Impact Modifier
Features	• Flame Retardant • Halogen Free • High Impact Resistance
Appearance	• Black
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)	3.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.95	%	ASTM D570

Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Break)	22000	psi	ASTM D638
Tensile Elongation (Break)	3.0	%	ASTM D638
Flexural Modulus	1.10E+6	psi	ASTM D790
Flexural Strength	29000	psi	ASTM D790

Impact	Nominal Value	Unit	Test Method
Notched Izod Impact			ASTM D256
-40°F	1.3	ft·lb/in	
73°F	2.0	ft·lb/in	
Unnotched Izod Impact	18	ft·lb/in	ASTM D4812

Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (M-Scale)	94		ASTM D785

Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	485	°F	ASTM D648
CLTE - Flow	2.0E-5	in/in/°F	ASTM D696

Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	1.0E+13	ohms	ASTM D257
Volume Resistivity	1.0E+15	ohms·cm	ASTM D257
Dielectric Strength (Method A (Short-Time))	520	V/mil	ASTM D149
Comparative Tracking Index	> 550	V	IEC 60112

Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94
0.06 in	V-0		
0.08 in	5VA		

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

Notes

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