

HiFill® PA6 GF33 IM3 BK

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 • Impact Modifier • Lubricant
Features	• Heat Stabilized • High Impact Resistance • Lubricated
Appearance	• Black
Forms	• Pellets
Processing Method	• Injection Molding

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.32		ASTM D792
Molding Shrinkage - Flow (0.125 in)	3.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.97	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Break)	19100	psi	ASTM D638
Tensile Elongation (Break)	4.0	%	ASTM D638
Flexural Modulus	1.08E+6	psi	ASTM D790
Flexural Strength	27000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact			ASTM D256
-40°F, 0.125 in	1.9	ft-lb/in	
73°F, 0.125 in	4.6	ft-lb/in	
Unnotched Izod Impact (0.125 in)	26	ft-lb/in	ASTM D4812
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	120		ASTM D785
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	410	°F	ASTM D648
CLTE - Flow	2.0E-5	in/in/°F	ASTM D696
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	2.0E+13	ohms·cm	ASTM D257
Dielectric Strength (Method A (Short-Time))	390	V/mil	ASTM D149
Flammability	Nominal Value	Unit	Test Method
Flame Rating	HB		UL 94

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	180	°F
Drying Time	2.0 to 4.0	hr
Suggested Max Moisture	0.10	%
Rear Temperature	510 to 530	°F
Middle Temperature	530 to 550	°F
Front Temperature	520 to 540	°F
Nozzle Temperature	520 to 540	°F
Processing (Melt) Temp	530 to 550	°F
Mold Temperature	175 to 220	°F
Injection Rate	Slow-Moderate	



Back Pressure	0.00 to 50.0 psi
Injection Notes	
Screw Speed: Medium	
Recommendations for Molding and Tool Conditions: Well vented mold	
Moisture Content, as received: Product is packaged at 0.2% or less.	
Notes	
¹ Typical properties: these are not to be construed as specifications.	

