

HiFill® PA6/6 G/CF20 IM HS BK

Techmer Polymer Modifiers - Polyamide 66

General Information

General

Material Status	• Commercial: Active
Availability	• North America
Filler / Reinforcement	• Glass Fiber\Carbon Fiber, 20% Filler by Weight
Additive	• Heat Stabilizer • Lubricant
Features	• Heat Stabilized • Lubricated
Appearance	• Black
Forms	• Pellets
Processing Method	• Injection Molding

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.21		ASTM D792
Molding Shrinkage - Flow (0.125 in)	5.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	1.0	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Break)	19000	psi	ASTM D638
Tensile Elongation (Break)	2.5	%	ASTM D638
Flexural Modulus	1.20E+6	psi	ASTM D790
Flexural Strength	26000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F, 0.125 in)	2.1	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)	490	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	470	°F	ASTM D648
CLTE - Flow	1.1E-5	in/in/°F	ASTM D696
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	1.0E+4 to 1.0E+7	ohms	ASTM D257
Volume Resistivity	1.0E+4 to 1.0E+7	ohms·cm	ASTM D257

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	180	°F
Drying Time	2.0 to 4.0	hr
Suggested Max Moisture	0.12	%
Rear Temperature	540 to 560	°F
Middle Temperature	550 to 570	°F
Front Temperature	530 to 550	°F
Nozzle Temperature	540 to 560	°F
Processing (Melt) Temp	540 to 580	°F
Mold Temperature	130 to 200	°F
Injection Rate	Moderate-Fast	
Back Pressure	50.0 to 100	psi

Injection Notes

Screw Speed: Medium
 Recommendations for Molding and Tool Conditions: Well vented
 Moisture Content, as received: Product is packaged at 0.2% or less.
 Recommended Max Moisture: 0.12% down to 0.08%

