

HiFill® PA6/6 GF33 HS L RA BK

Techmer Polymer Modifiers - Polyamide 66

General Information
General

Material Status	• Commercial: Active
Availability	• North America
Filler / Reinforcement	• Glass Fiber, 33% Filler by Weight
Additive	• Heat Stabilizer
Features	• Heat Stabilized
Appearance	• Black
Forms	• Pellets
Processing Method	• Injection Molding

Properties ¹

	Nominal Value	Unit	Test Method
Physical			
Density / Specific Gravity	1.41		ASTM D792
Molding Shrinkage - Flow (0.125 in)	4.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.55	%	ASTM D570
Mechanical			
Tensile Strength (Break)	23000	psi	ASTM D638
Tensile Elongation (Break)	2.3	%	ASTM D638
Flexural Modulus	1.50E+6	psi	ASTM D790
Flexural Strength	32000	psi	ASTM D790
Impact			
Notched Izod Impact (73°F, 0.125 in)	1.1	ft·lb/in	ASTM D256
Hardness			
Rockwell Hardness (R-Scale)	121		ASTM D785
Thermal			
Deflection Temperature Under Load (66 psi, Unannealed)	500	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	490	°F	ASTM D648
Melting Temperature	503	°F	
CLTE - Flow	1.8E-5	in/in/°F	ASTM D696
Electrical			
Volume Resistivity	1.0E+14	ohms·cm	ASTM D257
Dielectric Strength (Method A (Short-Time))	450	V/mil	ASTM D149
Flammability			
Flame Rating	HB		UL 94

Processing Information

	Nominal Value	Unit
Injection		
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%

Notes

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

