

HiFill® PA6 GF33 HS UV BKN

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 • Lubricant • UV Stabilizer
Features	• Heat Stabilized • Lubricated • UV Resistant
Appearance	• Black
Forms	• Pellets
Processing Method	• Injection Molding

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.38		ASTM D792
Molding Shrinkage - Flow (0.125 in)	3.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	1.1	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Yield)	27000	psi	ASTM D638
Tensile Elongation (Break)	3.5	%	ASTM D638
Flexural Modulus	1.30E+6	psi	ASTM D790
Flexural Strength	43100	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (0.125 in)	2.0	ft-lb/in	ASTM D256
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	121		ASTM D785
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	420	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	410	°F	ASTM D648
Melting Temperature	428	°F	
CLTE - Flow	2.1E-5	in/in/°F	ASTM D696
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	1.0E+15	ohms-cm	ASTM D257
Dielectric Strength (Method A (Short-Time))	420	V/mil	ASTM D149
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.06 in)	HB		UL 94

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	180	°F
Drying Time	4.0	hr
Rear Temperature	500 to 580	°F
Middle Temperature	500 to 580	°F
Front Temperature	500 to 580	°F
Processing (Melt) Temp	470 to 520	°F
Mold Temperature	150 to 200	°F
Back Pressure	0.00 to 50.0	psi
Screw Speed	30 to 60	rpm

