

HiFill® PA6/6 GF45 L BK

Techmer Polymer Modifiers - *Polyamide 66*

General Information

General

Material Status	• Commercial: Active
Availability	• North America
Filler / Reinforcement	• Glass Fiber
Additive	• Lubricant
Features	• Lubricated
Appearance	• Black
Forms	• Pellets
Processing Method	• Injection Molding

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.50		ASTM D792
Molding Shrinkage - Flow (0.125 in)	6.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.60	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Break)	30200	psi	ASTM D638
Tensile Elongation (Break)	2.0	%	ASTM D638
Flexural Modulus	1.66E+6	psi	ASTM D790
Flexural Strength	43000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F, 0.125 in)	2.6	ft-lb/in	ASTM D256
Unnotched Izod Impact (0.125 in)	29	ft-lb/in	ASTM D4812
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness (Shore D)	122		ASTM D2240
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	499	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	491	°F	ASTM D648
CLTE - Flow	4.1E-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))	500	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	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.

