

HiFill® PA4/6 GF45 HS BK

Techmer Polymer Modifiers - *Polyamide 46*

General Information

General

Material Status	• Commercial: Active
Availability	• North America
Filler / Reinforcement	• Glass Fiber, 45% Filler by Weight
Additive	• Heat Stabilizer
Features	• Heat Stabilized
Appearance	• Black
Forms	• Pellets
Processing Method	• Injection Molding

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.57		ASTM D792
Molding Shrinkage - Flow (0.125 in)	5.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	1.5	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Break)	33500	psi	ASTM D638
Tensile Elongation (Break)	2.8	%	ASTM D638
Flexural Modulus	1.60E+6	psi	ASTM D790
Flexural Strength	46000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F, 0.125 in)	2.3	ft-lb/in	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	550	°F	ASTM D648
CLTE - Flow	1.9E-5	in/in/°F	ASTM D696
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	8.0E+15	ohms·cm	ASTM D257
Dielectric Strength (Method A (Short-Time))	550	V/mil	ASTM D149
Flammability	Nominal Value	Unit	Test Method
Flame Rating	HB		UL 94
Additional Information	Nominal Value	Unit	Test Method
TPCI #	9627150		

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	185	°F
Drying Time	4.0 to 8.0	hr
Rear Temperature	540 to 600	°F
Middle Temperature	540 to 600	°F
Front Temperature	540 to 600	°F
Processing (Melt) Temp	475 to 600	°F
Mold Temperature	190 to 260	°F
Back Pressure	0.00 to 50.0	psi
Screw Speed	40 to 80	rpm

