

HiFill® PC GF20 X

Techmer Polymer Modifiers - *Polycarbonate*

General Information

General	
Material Status	• Commercial: Active
Availability	• North America
Filler / Reinforcement	• Glass Fiber, 20% Filler by Weight
Additive	• Mold Release
Features	• Good Mold Release • High Flow
Appearance	• Colors Available
Forms	• Pellets
Processing Method	• Injection Molding

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.34		ASTM D792
Molding Shrinkage - Flow (0.125 in)	3.5E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.10	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Break)	15900	psi	ASTM D638
Tensile Elongation (Break)	5.0	%	ASTM D638
Flexural Modulus	850000	psi	ASTM D790
Flexural Strength	24000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F, 0.125 in)	3.4	ft·lb/in	ASTM D256
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	122		ASTM D785
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	306	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	300	°F	ASTM D648
CLTE - Flow	1.3E-5	in/in/°F	ASTM D696
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	1.0E+16	ohms·cm	ASTM D257
Dielectric Strength (Method A (Short-Time))	760	V/mil	ASTM D149
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.12 in)	V-1		UL 94

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	250	°F
Drying Time	2.0 to 4.0	hr
Suggested Max Moisture	0.10	%
Rear Temperature	575 to 600	°F
Middle Temperature	600 to 630	°F
Front Temperature	590 to 620	°F
Nozzle Temperature	590 to 620	°F
Processing (Melt) Temp	580 to 620	°F
Mold Temperature	160 to 190	°F
Injection Rate	Moderate	
Back Pressure	0.00 to 100	psi

Injection Notes



Screw Speed: Medium

Recommendations for Molding and Tool Conditions: Well vented mold

Moisture Content, as received: Product is packaged at 0.2% or less.

Notes

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

