

HiFill® PSU GF20 BK

 Techmer Polymer Modifiers - *Polysulfone*
General Information
General

Material Status	<ul style="list-style-type: none"> Commercial: Active
Availability	<ul style="list-style-type: none"> North America
Filler / Reinforcement	<ul style="list-style-type: none"> Glass Fiber, 20% Filler by Weight
Appearance	<ul style="list-style-type: none"> Black
Processing Method	<ul style="list-style-type: none"> Injection Molding

Properties ¹

	Nominal Value	Unit	Test Method
Physical			
Density / Specific Gravity	1.38		ASTM D792
Molding Shrinkage - Flow (0.125 in)	3.0E-3 to 5.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.20	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	920000	psi	ASTM D638
Tensile Strength (Yield)	13500	psi	ASTM D638
Tensile Strength (Break)	13500	psi	ASTM D638
Tensile Elongation (Break)	2.5	%	ASTM D638
Flexural Modulus	950000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (0.125 in)	1.3	ft·lb/in	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	180	°F	ASTM D648

Processing Information

	Nominal Value	Unit
Injection		
Drying Temperature	300	°F
Drying Time	3.0 to 4.0	hr
Rear Temperature	635 to 685	°F
Middle Temperature	650 to 700	°F
Front Temperature	660 to 710	°F
Nozzle Temperature	670 to 720	°F
Processing (Melt) Temp	640 to 725	°F
Mold Temperature	275 to 350	°F
Injection Rate	Moderate-Fast	
Back Pressure	25.0 to 75.0	psi
Screw Speed	Moderate-Fast	

