

HiFill® ABS/PBT 1002 GF20

Techmer Polymer Modifiers - *Acrylonitrile Butadiene Styrene*

General

Material Status	• Commercial: Active
Availability	• North America
Filler / Reinforcement	• Glass Fiber, 20% Filler by Weight
Appearance	• Colors Available
Forms	• Pellets
Processing Method	• Injection Molding

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.33		ASTM D792
Molding Shrinkage - Flow (0.125 in)	3.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.12	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength	13900	psi	ASTM D638
Tensile Elongation (Break)	3.3	%	ASTM D638
Flexural Modulus	950000	psi	ASTM D790
Flexural Strength	22500	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F, 0.125 in)	1.3	ft-lb/in	ASTM D256
Unnotched Izod Impact (0.125 in)	7.5	ft-lb/in	ASTM D256
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	107		ASTM D785
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	335	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	225	°F	ASTM D648
CLTE - Flow	1.6E-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))	450	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	170 to 190	°F
Drying Time	2.0 to 16	hr
Rear Temperature	420 to 450	°F
Middle Temperature	430 to 460	°F
Front Temperature	410 to 430	°F
Nozzle Temperature	390 to 430	°F
Processing (Melt) Temp	450 to 500	°F
Mold Temperature	160 to 190	°F

