Electrafil® PA6 GF20

Techmer Polymer Modifiers - *Polyamide 6*

General Information

General		
Material Status	• Commercial: Active	
Availability	• North America	
Filler / Reinforcement	• Filler	• Glass Fiber, 20% Filler by Weight
Additive	• Lubricant	
Features	• Conductive	• Lubricated
Appearance	• Black	
Forms	• Pellets	
Processing Method	• Injection Molding	

Properties [1]

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.39		ASTM D792
Molding Shrinkage - Flow (0.125 in)	7.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.80	%	ASTM D570
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Strength (Break)	17000	psi	ASTM D638
Tensile Elongation (Break)	3.5	%	ASTM D638
Flexural Modulus	1.20E+6	psi	ASTM D790
Flexural Strength	27500	psi	ASTM D790
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact (73°F, 0.125 in)	1.0	ft·lb/in	ASTM D256
Hardness	**Nominal Value**	**Unit**	**Test Method**
Rockwell Hardness (R-Scale)	117		ASTM D785
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load (264 psi, Unannealed)	410	°F	ASTM D648
CLTE - Flow	3.2E-5	in/in/°F	ASTM D696
Electrical	**Nominal Value**	**Unit**	**Test Method**
Surface Resistivity	1.0E+2 to 1.0E+5	ohms	ASTM D257
Volume Resistivity	1.0E+4 to 1.0E+7	ohms·cm	ASTM D257
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	0.10	%
Rear Temperature	510 to 530	°F
Middle Temperature	530 to 550	°F
Front Temperature	520 to 540	°F
Nozzle Temperature	520 to 540	°F
Processing (Melt) Temp	530 to 550	°F
Mold Temperature	175 to 220	°F
Injection Rate	Slow-Moderate	
Back Pressure	0.00 to 50.0	psi

Injection Notes