Electrafil® J-1200/CF/20

Techmer Polymer Modifiers - *Acrylonitrile Butadiene Styrene*

General

Material Status	• Commercial: Active
Availability	• Africa & Middle East • Europe • North America • Asia Pacific • Latin America
Filler / Reinforcement	• Carbon Fiber, 20% Filler by Weight
Features	• Antistatic • Electrically Conductive
Uses	• Automotive Electronics • Business Equipment • Packaging • Bushings • Conveyor Parts
RoHS Compliance	• RoHS Compliant
Appearance	• Natural Color
Forms	• Pellets
Processing Method	• Injection Molding

ASTM & ISO Properties [1]

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.14		ASTM D792
Molding Shrinkage - Flow (0.125 in)	5.0E-4	in/in	ASTM D955
Water Absorption (24 hr)	0.30	%	ASTM D570

Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus (73°F)	2.00E+6	psi	ASTM D638
Tensile Strength (Break, 73°F)	14000	psi	ASTM D638
Tensile Elongation (Break, 73°F)	1.0	%	ASTM D638
Flexural Modulus (73°F)	1.80E+6	psi	ASTM D790
Flexural Strength (Break, 73°F)	20000	psi	ASTM D790

Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F, 0.125 in)	1.2	ft·lb/in	ASTM D256
Unnotched Izod Impact (73°F, 0.125 in)	4.0	ft·lb/in	ASTM D256

Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	220	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	215	°F	ASTM D648
CLTE - Flow	1.2E-5	in/in/°F	ASTM D696

Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	50	ohms	ASTM D257
Volume Resistivity	5.0	ohms·cm	ASTM D257

Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.06 in)	HB		UL 94

Additional Information

Surface Resistivity, ASTM D257: 10-100 ohms/sq
Volume Resistivity, ASTM C611: 1-10 ohm-cm

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