

## Electrafil® J-1/CF/20

Techmer Polymer Modifiers - Polyamide 66

### 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

### Properties <sup>1</sup>

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.23		ASTM D792
Molding Shrinkage - Flow (0.125 in)	2.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	1.0	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus (73°F)	2.00E+6	psi	ASTM D638
Tensile Strength (73°F)	28000	psi	ASTM D638
Tensile Elongation (Break, 73°F)	3.0	%	ASTM D638
Flexural Modulus (73°F)	2.20E+6	psi	ASTM D790
Flexural Strength (73°F)	42000	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 (73°F, 0.125 in)	10	ft·lb/in	ASTM D4812
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	500	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	490	°F	ASTM D648
CLTE - Flow	1.0E-5	in/in/°F	ASTM D696
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	5.5E+3	ohms	ASTM D257
Volume Resistivity	55	ohms·cm	ASTM D257
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.06 in)	HB		UL 94

### Additional Information

Surface Resistivity, ASTM D4496: 1E3-1E4 ohms  
Volume Resistivity, ASTM C611: 10-100 ohm-cm

### 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	530 to 550	°F
Middle Temperature	550 to 570	°F
Front Temperature	540 to 560	°F
Nozzle Temperature	540 to 550	°F



Processing (Melt) Temp	540 to 580 °F
Mold Temperature	175 to 220 °F
Injection Rate	Slow-Moderate
Back Pressure	0.00 to 50.0 psi

**Injection Notes**

Screw Speed: Slow

Recommendations for Molding and Tool Conditions: Well vented mold

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

