

# Electrafil® J-50/CF/30

Polycarbonate

Techmer Engineered Solutions

## Message:

Electrafil® J-50/CF/30 is a polycarbonate (PC) product, which contains a 30% carbon fiber reinforcement. It can be processed by injection molding and is available in North America, Africa and the Middle East, Latin America, Europe or Asia Pacific. Electrafil® The application fields of J-50/CF/30 include packaging, engineering/industrial accessories, automobile industry, commercial/office supplies and conveyor belts.

Features include:

flame retardant/rated flame

ROHS certification

Conductivity

General Information			
Filler / Reinforcement	Carbon fiber reinforced material, 30% filler by weight		
Features	Conductivity		
	Antistatic property		
Uses	Packaging		
	Bushing		
	Conveyor accessories		
	Automotive Electronics		
	Business equipment		
RoHS Compliance	RoHS compliance		
Appearance	Natural color		
Forms	Particle		
Processing Method	Injection molding		
Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.33	g/cm <sup>3</sup>	ASTM D792
Molding Shrinkage - Flow (3.18 mm)	0.050	%	ASTM D955
Water Absorption (24 hr)	0.15	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus (23°C)	12400	MPa	ASTM D638
Tensile Strength (23°C)	152	MPa	ASTM D638
Tensile Elongation (Break, 23°C)	1.8	%	ASTM D638
Flexural Modulus (23°C)	15200	MPa	ASTM D790
Flexural Strength (23°C)	221	MPa	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (23°C, 3.18 mm)	96	J/m	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			ASTM D648
0.45 MPa, not annealed	149	°C	ASTM D648

1.8 MPa, not annealed	143	°C	ASTM D648
CLTE - Flow	1.8E-5	cm/cm/°C	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 (1.59 mm)	V-1		UL 94
Additional Information			
Surface Resistivity, ASTM D257: 1E3-1E4 ohmsVolume Resistivity, ASTM C611: 10-100 ohm-cm			
Injection	Nominal Value	Unit	
Drying Temperature	121	°C	
Drying Time	2.0 - 4.0	hr	
Suggested Max Moisture	0.10	%	
Rear Temperature	302 - 316	°C	
Middle Temperature	316 - 332	°C	
Front Temperature	310 - 327	°C	
Nozzle Temperature	310 - 327	°C	
Processing (Melt) Temp	304 - 327	°C	
Mold Temperature	71.1 - 87.8	°C	
Injection Rate	Moderate		
Back Pressure	0.00 - 0.689	MPa	
Injection instructions			

Screw Speed: MediumRecommendations for Molding and Tool Conditions: Well vented moldMoisture Content, as received: Product is packaged at 0.2% or less.

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection.All rights belong to the original authors. If any infringement occurs, please contact us immediately.

#### Recommended distributors for this material

### Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China



WECHAT