



## Product Data Sheet & General Processing Conditions

**EMI 333 D FR**  
**Polycarbonate (PC)**  
**20% Glass Fiber**  
**Stainless Steel Fiber**  
**Electrically Conductive**  
**EMI/RFI/ESD Protection**  
**Flame Retardant**

### PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS

PERMANENCE	English	SI Metric	ASTM TEST
Primary Additive	8 %	8 %	
Specific Gravity	1.50	1.50	D 792
Molding Shrinkage 1/8 in (3.2 mm) section	0.0020 - 0.0030 in/in	0.20 - 0.30 %	D 955

### MECHANICAL

Impact Strength, Izod notched 1/8 in (3.2 mm) section	1.0 ft-lbs/in	53 J/m	D 256
unnotched 1/8 in (3.2 mm) section	10.0 ft-lbs/in	534 J/m	D 4812
Tensile Strength	15000 psi	103 MPa	D 638
Tensile Elongation	1.5 - 3.0 %	1.5 - 3.0 %	D 638
Tensile Modulus	1.00 x 10 <sup>6</sup> psi	6895 MPa	D 638
Flexural Strength	23000 psi	159 MPa	D 790
Flexural Modulus	1.00 x 10 <sup>6</sup> psi	6895 MPa	D 790

### ELECTRICAL

Volume Resistivity	< 100 ohm.cm	< 100 ohm.cm	D 257
Surface Resistivity	< 1E5 ohm/sq	< 1E5 ohm/sq	D 257
Surface Resistance	< 1E4 ohm	< 1E4 ohm	ESD STM11.11
Static Decay MIL-PRF-81705D, 5kV to 50 V, 12% RH	< 2.00 s	< 2.00 s	FTMS101C 4046.1

### THERMAL

Ignition Resistance* Flammability**	V-0 @ 1/16 in	V-0 @ 1.5 mm	D 3801
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### PROPERTY NOTES

Data herein is typical and not to be construed as specifications.

Unless otherwise specified, all data listed is for natural or black colored materials. Pigments can affect properties.

\* This rating is not intended to reflect hazards of this or any other material under actual fire conditions.

\*\* Values per RTP Company testing.

### GENERAL PROCESSING FOR INJECTION MOLDING

	English	SI Metric
Injection Pressure	10000 - 15000 psi	69 - 103 MPa
Melt Temperature	530 - 580 °F	277 - 304 °C
Mold Temperature	160 - 250 °F	71 - 121 °C
Drying	4 hrs @ 250 °F	4 hrs @ 121 °C
Moisture Content	0.02 %	0.02 %
Dew Point	-20 °F	-29 °C

### PROCESSING NOTES

Use a reverse barrel profile. Remove hopper magnets. Allow 4 - 5 shots to properly disperse the conductive fibers. The surface finish should have a silver streaking appearance, not clumps.  
Remove hopper magnets.  
Desiccant Type Dryer Required.

18 Feb 2011 GJF

This information is intended to be used only as a guideline for designers and processors of modified thermoplastics. Because design and processing is complex, a set solution will not solve all problems. Observation on a "trial and error" basis may be required to achieve desired results.

Data are obtained from specimens molded under carefully controlled conditions from representative samples of the compound described herein. Properties may be materially affected by molding techniques applied and by the size and shape of the item molded. No assurance can be implied that all molded articles will have the same properties as those listed.

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