



**Product Data Sheet &
General Processing Conditions**

**EMI 331 D FR
Polycarbonate (PC)
10% 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	1.46	1.46	D 792
Molding Shrinkage 1/8 in (3.2 mm) section	0.0030 - 0.0040 in/in	0.30 - 0.40 %	D 955

MECHANICAL

Impact Strength, Izod notched 1/8 in (3.2 mm) section	0.8 ft-lbs/in	43 J/m	D 256
unnotched 1/8 in (3.2 mm) section	8.0 ft-lbs/in	427 J/m	D 4812
Tensile Strength	11000 psi	76 MPa	D 638
Tensile Elongation	3.0 - 5.0 %	3.0 - 5.0 %	D 638
Tensile Modulus	0.66 x 10 ⁶ psi	4551 MPa	D 638
Flexural Strength	20000 psi	138 MPa	D 790
Flexural Modulus	0.66 x 10 ⁶ psi	4551 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	UL94
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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.

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.