



**Product Data Sheet &
General Processing Conditions**

**EMI 361
Polycarbonate (PC)
Stainless Steel Fiber
Electrically Conductive
EMI/RFI Shielding**

PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS

PERMANENCE	English	SI Metric	ASTM TEST
Primary Additive	10 %	10 %	
Specific Gravity	1.30	1.30	D 792
Molding Shrinkage 1/8 in (3.2 mm) section	0.0060 - 0.0070 in/in	0.60 - 0.70 %	D 955

MECHANICAL

Impact Strength, Izod notched 1/8 in (3.2 mm) section	1.7 ft-lbs/in	91 J/m	D 256
unnotched 1/8 in (3.2 mm) section	No Break	No Break	D 4812
Tensile Strength	9300 psi	64 MPa	D 638
Tensile Elongation	7.0 - 10.0 %	7.0 - 10.0 %	D 638
Tensile Modulus	0.36 x 10 ⁶ psi	2482 MPa	D 638
Flexural Strength	15300 psi	105 MPa	D 790
Flexural Modulus	0.40 x 10 ⁶ psi	2758 MPa	D 790

ELECTRICAL

Volume Resistivity	< 1E0 ohm.cm	< 1E0 ohm.cm	D 257
Surface Resistivity	< 1E4 ohm/sq	< 1E4 ohm/sq	D 257
Surface Resistance	< 1E3 ohm	< 1E3 ohm	ESD STM11.11
Static Decay MIL-PRF-81705D, 5kV to 50 V, 12% RH	< 0.50 s	< 0.50 s	FTMS101C 4046.1

THERMAL

Deflection Temperature @ 264 psi (1820 kPa)	255 °F	124 °C	D 648
Ignition Resistance* Flammability**	HB @ 1/16 in	HB @ 1.5 mm	D 635

EMI

Shielding Effectiveness @ 2 mm thickness	38 dB @ 300 MHz	38 dB @ 300 MHz	D 4935
Shielding Effectiveness @ 2 mm thickness	37 dB @ 500 MHz	37 dB @ 500 MHz	D 4935
Shielding Effectiveness @ 2 mm thickness	39 dB @ 700 MHz	39 dB @ 700 MHz	D 4935
Shielding Effectiveness @ 2 mm thickness	41 dB @ 1000 MHz	41 dB @ 1000 MHz	D 4935
Shielding Effectiveness @ 2 mm thickness	44 dB @ 1300 MHz	44 dB @ 1300 MHz	D 4935
Shielding Effectiveness @ 2 mm thickness	47 dB @ 1500 MHz	47 dB @ 1500 MHz	D 4935
Shielding Effectiveness @ 3 mm thickness	48 dB @ 300 MHz	48 dB @ 300 MHz	D 4935
Shielding Effectiveness @ 3 mm thickness	47 dB @ 500 MHz	47 dB @ 500 MHz	D 4935
Shielding Effectiveness @ 3 mm thickness	51 dB @ 700 MHz	51 dB @ 700 MHz	D 4935
Shielding Effectiveness @ 3 mm thickness	55 dB @ 1000 MHz	55 dB @ 1000 MHz	D 4935
Shielding Effectiveness @ 3 mm thickness	56 dB @ 1300 MHz	56 dB @ 1300 MHz	D 4935
Shielding Effectiveness @ 3 mm thickness	56 dB @ 1500 MHz	56 dB @ 1500 MHz	D 4935

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 the 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.