



**Product Data Sheet &
General Processing Conditions**

**EMI 2561
Polycarbonate/ABS Alloy (PC/ABS)
Stainless Steel Fiber
Electrically Conductive
EMI/RFI Shielding**

PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS

PERMANENCE	English	SI Metric	ASTM TEST
Specific Gravity	1.27	1.27	D 792
Molding Shrinkage 1/8 in (3.2 mm) section	0.0040 - 0.0060 in/in	0.40 - 0.60 %	D 955

MECHANICAL

Impact Strength, Izod notched 1/8 in (3.2 mm) section	1.5 ft-lbs/in	80 J/m	D 256
unnotched 1/8 in (3.2 mm) section	18.0 ft-lbs/in	961 J/m	D 4812
Tensile Strength	8750 psi	60 MPa	D 638
Tensile Elongation	5.0 - 7.0 %	5.0 - 7.0 %	D 638
Tensile Modulus	0.40 x 10 ⁶ psi	2758 MPa	D 638
Flexural Strength	15000 psi	103 MPa	D 790
Flexural Modulus	0.45 x 10 ⁶ psi	3103 MPa	D 790

ELECTRICAL

Volume Resistivity	< 1E1 ohm.cm	< 1E1 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

Ignition Resistance* Flammability**	HB @ 1/16 in	HB @ 1.5 mm	D 635
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EMI

Shielding Effectiveness @ 2 mm thickness	68 dB @ 300 MHz	68 dB @ 300 MHz	D 4935
Shielding Effectiveness @ 2 mm thickness	70 dB @ 500 MHz	70 dB @ 500 MHz	D 4935
Shielding Effectiveness @ 2 mm thickness	73 dB @ 700 MHz	73 dB @ 700 MHz	D 4935
Shielding Effectiveness @ 2 mm thickness	76 dB @ 1000 MHz	76 dB @ 1000 MHz	D 4935
Shielding Effectiveness @ 2 mm thickness	79 dB @ 1300 MHz	79 dB @ 1300 MHz	D 4935
Shielding Effectiveness @ 2 mm thickness	81 dB @ 1500 MHz	81 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 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	470 - 525 °F	243 - 274 °C
Mold Temperature	125 - 200 °F	52 - 93 °C

Drying	4 hrs @ 200 °F	4 hrs @ 93 °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.
Desiccant Type Dryer Required.

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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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