



**Product Data Sheet &  
General Processing Conditions**

**EMI 2562 FR  
Polycarbonate/ABS Alloy (PC/ABS)  
Flame Retardant  
Stainless Steel Fiber  
Electrically Conductive  
EMI/RFI Shielding**

**PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS**

<b>PERMANENCE</b>	<b>English</b>	<b>SI Metric</b>	<b>ASTM TEST</b>
Primary Additive	15 %	15 %	
Specific Gravity	1.40	1.40	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	1.0 ft-lbs/in	53 J/m	D 256
unnotched 1/8 in (3.2 mm) section	6.0 ft-lbs/in	320 J/m	D 4812
Tensile Strength	9200 psi	63 MPa	D 638
Tensile Elongation	2.0 - 4.0 %	2.0 - 4.0 %	D 638
Tensile Modulus	0.50 x 10 <sup>6</sup> psi	3448 MPa	D 638
Flexural Strength	17500 psi	121 MPa	D 790
Flexural Modulus	0.50 x 10 <sup>6</sup> psi	3448 MPa	D 790

**ELECTRICAL**

Volume Resistivity	< 1E1 ohm.cm	< 1E1 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	< 0.50 s	< 0.50 s	FTMS101C 4046.1

**THERMAL**

Ignition Resistance* Flammability**	V-0 @ 1/16 in	V-0 @ 1.5 mm	D 3801
Flammability**	5VA @ 1/8 in	5VA @ 3.0 mm	D 5048

**EMI**

Shielding Effectiveness @ 2 mm thickness	68 dB @ 300 MHz	68 dB @ 300 MHz	D 4935
Shielding Effectiveness @ 2 mm thickness	72 dB @ 500 MHz	72 dB @ 500 MHz	D 4935
Shielding Effectiveness @ 2 mm thickness	76 dB @ 700 MHz	76 dB @ 700 MHz	D 4935
Shielding Effectiveness @ 2 mm thickness	80 dB @ 1000 MHz	80 dB @ 1000 MHz	D 4935
Shielding Effectiveness @ 2 mm thickness	85 dB @ 1300 MHz	85 dB @ 1300 MHz	D 4935
Shielding Effectiveness @ 2 mm thickness	88 dB @ 1500 MHz	88 dB @ 1500 MHz	D 4935
Shielding Effectiveness @ 3 mm thickness	92 dB @ 300 MHz	92 dB @ 300 MHz	D 4935
Shielding Effectiveness @ 3 mm thickness	98 dB @ 500 MHz	98 dB @ 500 MHz	D 4935
Shielding Effectiveness @ 3 mm thickness	103 dB @ 700 MHz	103 dB @ 700 MHz	D 4935
Shielding Effectiveness @ 3 mm thickness	106 dB @ 1000 MHz	106 dB @ 1000 MHz	D 4935
Shielding Effectiveness @ 3 mm thickness	106 dB @ 1300 MHz	106 dB @ 1300 MHz	D 4935
Shielding Effectiveness @ 3 mm thickness	105 dB @ 1500 MHz	105 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.

Use a reverse barrel profile. To maximize fiber length, the following injection barrel, screw, and tip designs should be followed. L/D ratio 16/1 - 22/1, Compression ratio 2:1, Flight depth 0.200 in (5 mm) minimum, in feed section, Screw diameter 0.65 - 0.80 in (16.5 - 20 mm) minimum, Compression section length 12 - 13 diameters, Check ring valve assembly - free flow type no restrictions, Nozzle orifice 0.250 in (6 mm) diameter. Feed throat from hopper to machine must have sufficient opening to prevent bridging of long pellet composition.

Remove hopper magnets.

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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