

## Product Data Sheet & General Processing Conditions

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

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

			ASTM
PERMANENCE	English	SI Metric	TEST
Specific Gravity	1.25	1.25	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	8.0 ft-lbs/in	427 J/m	D 4812
Tensile Strength	8000 psi	55 MPa	D 638
Tensile Elongation	5.0 - 8.0 %	5.0 - 8.0 %	D 638
Tensile Modulus	0.38 x 10^6 psi	2620 MPa	D 638
Flexural Strength	13500 psi	93 MPa	D 790
Flexural Modulus	0.42 x 10^6 psi	2896 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 Static Decay	< 1E3 ohm	< 1E3 ohm	ESD STM11.11
MIL-PRF-81705D, 5kV to 50 V, 12% RH	< 0.50 s	< 0.50 s	FTMS101C 4046.1
ЕМІ			
Shielding Effectiveness @ 2 mm thickness	60 dB @ 300 MHz	60 dB @ 300 MHz	D 4935
Shielding Effectiveness @ 2 mm thickness	60 dB @ 500 MHz	60 dB @ 500 MHz	D 4935
Shielding Effectiveness @ 2 mm thickness	61 dB @ 700 MHz	61 dB @ 700 MHz	D 4935
Shielding Effectiveness @ 2 mm thickness	62 dB @ 1000 MHz	62 dB @ 1000 MHz	D 4935
Shielding Effectiveness @ 2 mm thickness	63 dB @ 1300 MHz	63 dB @ 1300 MHz	D 4935
Shielding Effectiveness @ 2 mm thickness	65 dB @ 1500 MHz	65 dB @ 1500 MHz	D 4935

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.

## **GENERAL PROCESSING FOR INJECTION MOLDING**

**PROPERTY NOTES** 

	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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