



**Product Data Sheet &
General Processing Conditions**

**EMI 661 FR A
Acrylonitrile Butadiene Styrene
(ABS)
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	10 %	10 %	
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	0.5 ft-lbs/in	27 J/m	D 256
unnotched 1/8 in (3.2 mm) section	3.0 ft-lbs/in	160 J/m	D 4812
Tensile Strength	4500 psi	31 MPa	D 638
Tensile Elongation	3.0 - 6.0 %	3.0 - 6.0 %	D 638
Tensile Modulus	0.35 x 10 ⁶ psi	2413 MPa	D 638
Flexural Strength	8500 psi	59 MPa	D 790
Flexural Modulus	0.40 x 10 ⁶ psi	2758 MPa	D 790

ELECTRICAL

Volume Resistivity	< 10 ohm.cm	< 10 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	D 3801
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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.

** Values per RTP Company testing.

GENERAL PROCESSING FOR INJECTION MOLDING

	English	SI Metric
Injection Pressure	10000 - 15000 psi	69 - 103 MPa
Melt Temperature	400 - 475 °F	204 - 246 °C
Mold Temperature	150 - 180 °F	66 - 82 °C
Drying	2 hrs @ 180 °F	2 hrs @ 82 °C
Moisture Content	0.10 %	0.10 %
Dew Point	0 °F	-18 °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.