



**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

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.