Product Data Sheet &
General Processing Conditions

EMI 960.5
Polysulfone (PSU)
Stainless Steel Fiber
Electrically Conductive
EMI/RFI/ESD Protection

PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS

PERMANENCE	English	SI Metric	ASTM TEST
Primary Additive	5 %	5 %	
Specific Gravity	1.29	1.29	D 792
Molding Shrinkage			
1/8 in (3.2 mm) section	0.0050 - 0.0070 in/in	0.50 - 0.70 %	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	21.0 ft-lbs/in	1121 J/m	D 4812
Tensile Strength	10800 psi	74 MPa	D 638
Tensile Elongation	5.0 %	5.0 %	D 638
Tensile Modulus	0.40 x 10^6 psi	2758 MPa	D 638
Flexural Strength	17800 psi	123 MPa	D 790
Flexural Modulus	0.45 x 10^6 psi	3103 MPa	D 790
ELECTRICAL			
Volume Resistivity	< 1E2 ohm.cm	< 1E2 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			
Deflection Temperature			
@ 264 psi (1820 kPa)	350 °F	177 °C	D 648
Ignition Resistance*			
Flammability**	V-0 @ 1/16 in	V-0 @ 1.5 mm	D 3801
EMI			
Shielding Effectiveness @ 2 mm thickness	49 dB @ 300 MHz	49 dB @ 300 MHz	D 4935
Shielding Effectiveness @ 2 mm thickness	39 dB @ 500 MHz	39 dB @ 500 MHz	D 4935
Shielding Effectiveness @ 2 mm thickness	38 dB @ 700 MHz	38 dB @ 700 MHz	D 4935
Shielding Effectiveness @ 2 mm thickness	37 dB @ 1000 MHz	37 dB @ 1000 MHz	D 4935
Shielding Effectiveness @ 2 mm thickness	38 dB @ 1300 MHz	38 dB @ 1300 MHz	D 4935
Shielding Effectiveness @ 2 mm thickness	40 dB @ 1500 MHz	40 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 - 20000 psi	69 - 138 MPa

Melt Temperature	630 - 675 °F	332 - 357 °C
Mold Temperature	200 - 300 °F	93 - 149 °C
Drying	4 hrs @ 275 °F	4 hrs @ 135 °C
Moisture Content	< 0.15 %	< 0.15 %
Dew Point	-25 °F	-32 °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.

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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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