Product Data Sheet &
General Processing Conditions

EMI 2861-60A
Thermoplastic Vulcanizate (TPV)
Stainless Steel Fiber
Electrically Conductive
EMI/RFI Shielding

PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS

PERMANENCE	English	SI Metric	ASTM TEST
Primary Additive	10 %	10 %	
Specific Gravity	1.02	1.02	D 792
MECHANICAL			
Tensile Strength	235 psi	2 MPa	D 412
Tensile Elongation	140.0 %	140.0 %	D 412
Tear Strength, Die C	75.0 pli	13.1 N/mm	D 624
Hardness			
Shore A, 10 s delay	60	60	D 2240
ELECTRICAL			
Volume Resistivity	< 1E2 ohm.cm	< 1E2 ohm.cm	D 257
Surface Resistivity	< 1E4 ohm/sq	< 1E4 ohm/sq	D 257
Surface Resistance	< 1E3 ohm	< 1E3 ohm	ESD STM11.11
Static Decay	< 0.50 s	< 0.50 s	FTMS101C 4046.1
EMI			
Shielding Effectiveness @ 3 mm thickness	48 dB @ 300 MHz	48 dB @ 300 MHz	D 4935
Shielding Effectiveness @ 3 mm thickness	45 dB @ 500 MHz	45 dB @ 500 MHz	D 4935
Shielding Effectiveness @ 3 mm thickness	47 dB @ 700 MHz	47 dB @ 700 MHz	D 4935
Shielding Effectiveness @ 3 mm thickness	50 dB @ 1000 MHz	50 dB @ 1000 MHz	D 4935
Shielding Effectiveness @ 3 mm thickness	51 dB @ 1300 MHz	51 dB @ 1300 MHz	D 4935
Shielding Effectiveness @ 3 mm thickness	53 dB @ 1500 MHz	53 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.

GENERAL PROCESSING FOR INJECTION MOLDING

	English	SI Metric
Injection Pressure	12000 - 18000 psi	83 - 124 MPa
Melt Temperature	360 - 410 °F	182 - 210 °C
Mold Temperature	60 - 150 °F	16 - 66 °C
Drying	2 hrs @ 175 °F	2 hrs @ 79 °C
Moisture Content	0.03 %	0.03 %
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.
Remove hopper magnets.

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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