



## Product Data Sheet & General Processing Conditions

### EMI 1262 T-80A Ether-based Thermoplastic Polyurethane Elastomer (TPUR/TPU) Stainless Steel Fiber Electrically Conductive EMI/RFI Shielding

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

PERMANENCE	English	SI Metric	ASTM TEST
Primary Additive	15 %	15 %	
Specific Gravity	1.18	1.18	D 792
Molding Shrinkage 1/8 in (3.2 mm) section	0.0100 in/in	1.00 %	D 955

#### MECHANICAL

Impact Strength, Izod notched 1/8 in (3.2 mm) section	2.0 ft-lbs/in	107 J/m	D 256
unnotched 1/8 in (3.2 mm) section	2.0 ft-lbs/in	107 J/m	D 4812
Tensile Strength	900 psi	6 MPa	D 638
Tensile Elongation	500.0 %	500.0 %	D 412
Hardness Shore A, 10 s delay	80	80	D 2240

#### ELECTRICAL

Volume Resistivity	1E1 - 1E2 ohm.cm	1E1 - 1E2 ohm.cm	D 257
Surface Resistivity	1E3 - 1E4 ohm/sq	1E3 - 1E4 ohm/sq	D 257

#### EMI

Shielding Effectiveness @ 3 mm thickness	55 dB @ 300 MHz	55 dB @ 300 MHz	D 4935
Shielding Effectiveness @ 3 mm thickness	55 dB @ 500 MHz	55 dB @ 500 MHz	D 4935
Shielding Effectiveness @ 3 mm thickness	55 dB @ 700 MHz	55 dB @ 700 MHz	D 4935
Shielding Effectiveness @ 3 mm thickness	57 dB @ 1000 MHz	57 dB @ 1000 MHz	D 4935
Shielding Effectiveness @ 3 mm thickness	60 dB @ 1300 MHz	60 dB @ 1300 MHz	D 4935
Shielding Effectiveness @ 3 mm thickness	63 dB @ 1500 MHz	63 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	10000 - 15000 psi	69 - 103 MPa
Melt Temperature	365 - 425 °F	185 - 218 °C
Mold Temperature	100 - 140 °F	38 - 60 °C
Drying	6 hrs @ 225 °F	6 hrs @ 107 °C
Moisture Content	0.01 %	0.01 %
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.

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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