



Product Data Sheet & General Processing Conditions

EMI 262 Nylon 6/6 (PA) Stainless Steel Fiber Electrically Conductive EMI/RFI/ESD Protection

PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS

PERMANENCE	English	SI Metric	ASTM TEST
Primary Additive	15 %	15 %	
Specific Gravity	1.26	1.26	D 792
Molding Shrinkage 1/8 in (3.2 mm) section	0.0120 - 0.0180 in/in	1.20 - 1.80 %	D 955

MECHANICAL

Impact Strength, Izod notched 1/8 in (3.2 mm) section	0.8 ft-lbs/in	43 J/m	D 256
unnotched 1/8 in (3.2 mm) section	15.0 ft-lbs/in	801 J/m	D 4812
Tensile Strength	12000 psi	83 MPa	D 638
Tensile Elongation	8.0 - 12.0 %	8.0 - 12.0 %	D 638
Tensile Modulus	0.52 x 10 ⁶ psi	3585 MPa	D 638
Flexural Strength	16000 psi	110 MPa	D 790
Flexural Modulus	0.45 x 10 ⁶ psi	3103 MPa	D 790

ELECTRICAL

Volume Resistivity	< 1 ohm.cm	< 1 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 MIL-PRF-81705D, 5kV to 50 V, 12% RH	< 2.00 s	< 2.00 s	FTMS101C 4046.1

EMI

Shielding Effectiveness @ 2 mm thickness	59 dB @ 300 MHz	59 dB @ 300 MHz	D 4935
Shielding Effectiveness @ 2 mm thickness	60 dB @ 500 MHz	60 dB @ 500 MHz	D 4935
Shielding Effectiveness @ 2 mm thickness	60 dB @ 700 MHz	60 dB @ 700 MHz	D 4935
Shielding Effectiveness @ 2 mm thickness	62 dB @ 1000 MHz	62 dB @ 1000 MHz	D 4935
Shielding Effectiveness @ 2 mm thickness	64 dB @ 1300 MHz	64 dB @ 1300 MHz	D 4935
Shielding Effectiveness @ 2 mm thickness	68 dB @ 1500 MHz	68 dB @ 1500 MHz	D 4935
Shielding Effectiveness @ 3 mm thickness	65 dB @ 300 MHz	65 dB @ 300 MHz	D 4935
Shielding Effectiveness @ 3 mm thickness	68 dB @ 500 MHz	68 dB @ 500 MHz	D 4935
Shielding Effectiveness @ 3 mm thickness	72 dB @ 700 MHz	72 dB @ 700 MHz	D 4935
Shielding Effectiveness @ 3 mm thickness	77 dB @ 1000 MHz	77 dB @ 1000 MHz	D 4935
Shielding Effectiveness @ 3 mm thickness	82 dB @ 1300 MHz	82 dB @ 1300 MHz	D 4935
Shielding Effectiveness @ 3 mm thickness	85 dB @ 1500 MHz	85 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	485 - 560 °F	252 - 293 °C
Mold Temperature	175 - 210 °F	79 - 99 °C

Drying
Moisture Content

4 hrs @ 175 °F
0.20 %

4 hrs @ 79 °C
0.20 %

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.

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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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