



**Product Data Sheet &
General Processing Conditions**

**ZOVGOV® ESD M20CFR
Nylon 6/6 (PA)
Carbon Fiber
Flame Retardant
ESD Protection
Static Dissipative**

PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS

PERMANENCE	English	SI Metric	ASTM TEST
Specific Gravity	1.45	1.45	D 792
Molding Shrinkage 1/8 in (3.2 mm) section	0.0020 - 0.0040 in/in	0.20 - 0.40 %	D 955

MECHANICAL

Impact Strength, Izod notched 1/8 in (3.2 mm) section	1.2 ft-lbs/in	64 J/m	D 256
unnotched 1/8 in (3.2 mm) section	8.0 ft-lbs/in	427 J/m	D 4812
Tensile Strength	19000 psi	131 MPa	D 638
Tensile Elongation	2.0 - 4.0 %	2.0 - 4.0 %	D 638
Tensile Modulus	1.50 x 10 ⁶ psi	10342 MPa	D 638
Flexural Strength	29000 psi	200 MPa	D 790
Flexural Modulus	1.20 x 10 ⁶ psi	8274 MPa	D 790

ELECTRICAL

Volume Resistivity	1000 - 9.9E+09 ohm.cm	1000 - 9.9E+09 ohm.cm	D 257
Surface Resistivity	1.0E+5 - 9.9E+11 ohm/sq	1.0E+5 - 9.9E+11 ohm/sq	D 257
Surface Resistance	1.0E+4 - 9.9E+10 ohm	1.0E+4 - 9.9E+10 ohm	ESD STM11.11
Static Decay			ESD STM11.11
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
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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 MOLAN Company testing.

GENERAL PROCESSING FOR INJECTION MOLDING

	English	SI Metric
Injection Pressure	10000 - 18000 psi	69 - 124 MPa
Melt Temperature	530 - 570 °F	277 - 299 °C
Mold Temperature	150 - 225 °F	66 - 107 °C
Drying	4 hrs @ 175 °F	4 hrs @ 79 °C
Moisture Content	0.20 %	0.20 %
Dew Point	0 °F	-18 °C

PROCESSING NOTES

Desiccant Type Dryer Required.

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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