



**Product Data Sheet &  
General Processing Conditions**

**ESD 301 EM  
Polycarbonate (PC)  
Glass Fiber  
ESD Protection  
Static Dissipative  
Easy Molding**

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

<b>PERMANENCE</b>	<b>English</b>	<b>SI Metric</b>	<b>ASTM TEST</b>
Primary Additive	10 %	10 %	
Specific Gravity	1.27	1.27	D 792
Molding Shrinkage 1/8 in (3.2 mm) section	0.0030 - 0.0050 in/in	0.30 - 0.50 %	D 955

**MECHANICAL**

Impact Strength, Izod notched 1/8 in (3.2 mm) section	1.5 ft-lbs/in	80 J/m	D 256
unnotched 1/8 in (3.2 mm) section	20.0 ft-lbs/in	1068 J/m	D 4812
Tensile Strength	8000 psi	55 MPa	D 638
Tensile Elongation	6.0 - 10.0 %	6.0 - 10.0 %	D 638
Tensile Modulus	0.60 x 10 <sup>6</sup> psi	4137 MPa	D 638
Flexural Strength	14500 psi	100 MPa	D 790
Flexural Modulus	0.50 x 10 <sup>6</sup> psi	3448 MPa	D 790

**ELECTRICAL**

Volume Resistivity	< 1E5 ohm.cm	< 1E5 ohm.cm	D 257
Surface Resistivity	< 1E10 ohm/sq	< 1E10 ohm/sq	D 257
Surface Resistance	< 1E9 ohm	< 1E9 ohm	ESD STM11.11
Static Decay MIL-PRF-81705D, 5kV to 50 V, 12% RH	< 2.00 s	< 2.00 s	FTMS101C 4046.1

**THERMAL**

Deflection Temperature @ 264 psi (1820 kPa)	270 °F	132 °C	D 648
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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.

**GENERAL PROCESSING FOR INJECTION MOLDING**

	<b>English</b>	<b>SI Metric</b>
Injection Pressure	10000 - 15000 psi	69 - 103 MPa
Melt Temperature	550 - 600 °F	288 - 316 °C
Mold Temperature	180 - 250 °F	82 - 121 °C
Drying	4 hrs @ 250 °F	4 hrs @ 121 °C
Moisture Content	0.02 %	0.02 %
Dew Point	-20 °F	-29 °C

**PROCESSING NOTES**

Desiccant Type Dryer Required.