



**Product Data Sheet &
General Processing Conditions**

**PermaStat® 301 FR
Polycarbonate (PC)
ESD Protection
Permanently Anti-static
Glass Fiber
Flame Retardant**

PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS

PERMANENCE	English	SI Metric	ASTM TEST
Primary Additive	10 %	10 %	
Specific Gravity	1.34	1.34	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	2.0 ft-lbs/in	107 J/m	D 256
unnotched 1/8 in (3.2 mm) section	10.0 ft-lbs/in	534 J/m	D 4812
Tensile Strength	7000 psi	48 MPa	D 638
Tensile Elongation	3.0 - 5.0 %	3.0 - 5.0 %	D 638
Tensile Modulus	0.50 x 10 ⁶ psi	3448 MPa	D 638
Flexural Strength	11000 psi	76 MPa	D 790
Flexural Modulus	0.45 x 10 ⁶ psi	3103 MPa	D 790

ELECTRICAL

Volume Resistivity	1.0e8 - 9.9E9 ohm.cm	1.0e8 - 9.9E9 ohm.cm	D 257
Surface Resistivity	1.0E10 - 9.9E11 ohm/sq	1.0E10 - 9.9E11 ohm/sq	D 257
Surface Resistance	1.0E9 - 9.9E10 ohm	1.0E9 - 9.9E10 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
Ignition Resistance*			
Flammability**	V-0 @ 1/16 in	V-0 @ 1.5 mm	D 3801

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 RTP Company testing.

GENERAL PROCESSING FOR INJECTION MOLDING

	English	SI Metric
Injection Pressure	10000 - 15000 psi	69 - 103 MPa
Melt Temperature	430 - 475 °F	221 - 246 °C
Mold Temperature	150 - 250 °F	66 - 121 °C
Drying	2 - 4 hrs @ 230 °F	2 - 4 hrs @ 110 °C