



**Product Data Sheet &
General Processing Conditions**

**PermaStat® 302 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
Specific Gravity	1.38	1.38	D 792
Molding Shrinkage 1/8 in (3.2 mm) section	0.0025 - 0.0045 in/in	0.25 - 0.45 %	D 955

MECHANICAL

Impact Strength, Izod			
notched 1/8 in (3.2 mm) section	1.1 ft-lbs/in	59 J/m	D 256
unnotched 1/8 in (3.2 mm) section	10.0 ft-lbs/in	534 J/m	D 4812
Tensile Strength	8500 psi	59 MPa	D 638
Tensile Elongation	4.0 - 6.0 %	4.0 - 6.0 %	D 638
Tensile Modulus	0.50 x 10 ⁶ psi	3448 MPa	D 638
Flexural Strength	14000 psi	97 MPa	D 790
Flexural Modulus	0.50 x 10 ⁶ psi	3448 MPa	D 790

ELECTRICAL

Volume Resistivity	1E+09 - 9.99E+10 ohm.cm	1E+09 - 9.99E+10 ohm.cm	D 257
Surface Resistivity	1E+10 - 9.99E+11 ohm/sq	1E+10 - 9.99E+11 ohm/sq	D 257
Surface Resistance	1E+09 - 9.99E+10 ohm	1E+09 - 9.99E+10 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

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	6000 - 10000 psi	41 - 69 MPa
Melt Temperature	430 - 470 °F	221 - 243 °C
Mold Temperature	150 - 250 °F	66 - 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.