



**Product Data Sheet &
General Processing Conditions**

**PermaStat® 700
High Density Polyethylene (HDPE)
ESD Protection
Permanently Anti-static**

PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS

PERMANENCE	English	SI Metric	ASTM TEST
Specific Gravity	0.97	0.97	D 792
Molding Shrinkage 1/8 in (3.2 mm) section	0.0100 - 0.0300 in/in	1.00 - 3.00 %	D 955
MECHANICAL			
Impact Strength, Izod notched 1/8 in (3.2 mm) section	No Break	No Break	D 256
unnotched 1/8 in (3.2 mm) section	No Break	No Break	D 4812
Tensile Strength	2500 psi	17 MPa	D 638
Tensile Elongation	> 10.0 %	> 10.0 %	D 638
Tensile Modulus	0.10 x 10 ⁶ psi	690 MPa	D 638
Flexural Strength	2600 psi	18 MPa	D 790
Flexural Modulus	0.10 x 10 ⁶ psi	690 MPa	D 790

ELECTRICAL

Volume Resistivity	1E+09 - 9.9E+10 ohm.cm	1E+09 - 9.9E+10 ohm.cm	D 257
Surface Resistivity	1E+10 - 9.9E+11 ohm/sq	1E+10 - 9.9E+11 ohm/sq	D 257
Surface Resistance	1E+09 - 9.9E+10 ohm	1E+09 - 9.9E+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

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	350 - 400 °F	177 - 204 °C
Mold Temperature	70 - 125 °F	21 - 52 °C
Drying	2 hrs @ 175 °F	2 hrs @ 79 °C

PROCESSING NOTES

Do not exceed 520 °F (270 °C) melt temperature.