



**Product Data Sheet &
General Processing Conditions**

**PermaStat PLUS® 400
Polystyrene (PS)
ESD Protection
Permanently Static Dissipative
Preliminary Datasheet**

PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS

PERMANENCE	English	SI Metric	ASTM TEST
Specific Gravity	1.05	1.05	D 792
Molding Shrinkage 1/8 in (3.2 mm) section	0.0060 - 0.0080 in/in	0.60 - 0.80 %	D 955

MECHANICAL

Impact Strength, Izod notched 1/8 in (3.2 mm) section	1.0 ft-lbs/in	53 J/m	D 256
unnotched 1/8 in (3.2 mm) section	8.0 ft-lbs/in	427 J/m	D 4812
Tensile Strength	3000 psi	21 MPa	D 638
Tensile Elongation	> 10.0 %	> 10.0 %	D 638
Tensile Modulus	0.22 x 10 ⁶ psi	1517 MPa	D 638
Flexural Strength	5500 psi	38 MPa	D 790
Flexural Modulus	0.22 x 10 ⁶ psi	1517 MPa	D 790

ELECTRICAL

Volume Resistivity	1E7 - 9.9E8 ohm.cm	1E7 - 9.9E8 ohm.cm	D 257
Surface Resistivity	1E8 - 9.9E9 ohm/sq	1E8 - 9.9E9 ohm/sq	D 257
Static Decay MIL-PRF-81705D, 5kV to 50 V, 12% RH	< 0.50 s	< 0.50 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	380 - 450 °F	193 - 232 °C
Mold Temperature	100 - 150 °F	38 - 66 °C
Drying	2 hrs @ 180 °F	2 hrs @ 82 °C

PROCESSING NOTES

Do not exceed 520 °F (270 °C) melt temperature.
Desiccant Type Dryer Required.

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This information is intended to be used only as a guideline for designers and processors of modified thermoplastics. Because design and processing is complex, a set solution will not solve all problems. Observation on a "trial and error" basis may be required to achieve desired results.

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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