



**Product Data Sheet &
General Processing Conditions**

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

PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS

| PERMANENCE | English | SI Metric | ASTM TEST |
|--|-----------------------|------------------|------------------|
| Specific Gravity | 0.96 | 0.96 | D 792 |
| Melt Flow Rate @ 190 °C, / 2.16 kg | 9.00 g/10 min | 9.00 g/10 min | D 1238 |
| Molding Shrinkage 1/8 in (3.2 mm) section | 0.0200 - 0.0400 in/in | 2.00 - 4.00 % | 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 | 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 | < 1E8 ohm.cm | < 1E8 ohm.cm | D 257 |
| Surface Resistivity | < 1E10 ohm/sq | < 1E10 ohm/sq | D 257 |
| Static Decay | < 0.50 s | < 0.50 s | FTMS101C 4046.1 |

THERMAL

| | | | |
|--|--------------|-------------|-------|
| Ignition Resistance* Flammability** | HB @ 1/16 in | HB @ 1.5 mm | D 635 |
|--|--------------|-------------|-------|

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 | 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.