



**Product Data Sheet &  
General Processing Conditions**

**PermaStat® 200 A  
Nylon 6 (PA)  
ESD Protection  
Permanently Anti-static**

**PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS**

| PERMANENCE                                   | English               | SI Metric     | ASTM TEST |
|----------------------------------------------|-----------------------|---------------|-----------|
| Specific Gravity                             | 1.13                  | 1.13          | D 792     |
| Molding Shrinkage<br>1/8 in (3.2 mm) section | 0.0100 - 0.0150 in/in | 1.00 - 1.50 % | D 955     |

**MECHANICAL**

|                                                          |                            |          |        |
|----------------------------------------------------------|----------------------------|----------|--------|
| Impact Strength, Izod<br>notched 1/8 in (3.2 mm) section | 3.0 ft-lbs/in              | 160 J/m  | D 256  |
| unnotched 1/8 in (3.2 mm) section                        | No Break                   | No Break | D 4812 |
| Tensile Strength                                         | 8400 psi                   | 58 MPa   | D 638  |
| Tensile Elongation                                       | > 10.0 %                   | > 10.0 % | D 638  |
| Tensile Modulus                                          | 0.35 x 10 <sup>6</sup> psi | 2413 MPa | D 638  |
| Flexural Strength                                        | 11000 psi                  | 76 MPa   | D 790  |
| Flexural Modulus                                         | 0.31 x 10 <sup>6</sup> psi | 2137 MPa | D 790  |

**ELECTRICAL**

|                                                     |                      |                      |                    |
|-----------------------------------------------------|----------------------|----------------------|--------------------|
| Volume Resistivity                                  | 1E9 - 9.9E10 ohm.cm  | 1E9 - 9.9E10 ohm.cm  | D 257              |
| Surface Resistivity                                 | 1E10 - 9.9E11 ohm/sq | 1E10 - 9.9E11 ohm/sq | D 257              |
| Surface Resistance                                  | 1E9 - 9.9E10 ohm     | 1E9 - 9.9E10 ohm     | ESD STM11.11       |
| Static Decay<br>MIL-PRF-81705D, 5kV to 50 V, 12% RH | < 2.00 s             | < 2.00 s             | FTMS101C<br>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 - 460 °F      | 193 - 238 °C  |
| Mold Temperature   | 150 - 200 °F      | 66 - 93 °C    |
| Drying             | 4 hrs @ 175 °F    | 4 hrs @ 79 °C |
| Moisture Content   | 0.20 %            | 0.20 %        |
| Dew Point          | 0 °F              | -18 °C        |

**PROCESSING NOTES**

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