



**Product Data Sheet &  
General Processing Conditions**

**ESD C 100 MF  
Polypropylene (PP)  
ESD Protection  
Electrically Conductive  
Medium MFR**

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

| PERMANENCE              | English               | SI Metric            | ASTM TEST |
|-------------------------|-----------------------|----------------------|-----------|
| Specific Gravity        | 1.00                  | 1.00                 | D 792     |
| Melt Flow Rate          |                       |                      |           |
| @ 230 °C, / 2.16 kg     | 1.00 - 4.00 g/10 min  | 1.00 - 4.00 g/10 min | D 1238    |
| Molding Shrinkage       |                       |                      |           |
| 1/8 in (3.2 mm) section | 0.0120 - 0.0170 in/in | 1.20 - 1.70 %        | D 955     |

**MECHANICAL**

|                                   |                            |          |        |
|-----------------------------------|----------------------------|----------|--------|
| Impact Strength, Izod             |                            |          |        |
| notched 1/8 in (3.2 mm) section   | 9.0 ft-lbs/in              | 481 J/m  | D 256  |
| unnotched 1/8 in (3.2 mm) section | No Break                   | No Break | D 4812 |
| Tensile Strength                  | 3400 psi                   | 23 MPa   | D 638  |
| Tensile Elongation                | > 10.0 %                   | > 10.0 % | D 638  |
| Tensile Modulus                   | 0.25 x 10 <sup>6</sup> psi | 1724 MPa | D 638  |
| Flexural Strength                 | 5000 psi                   | 34 MPa   | D 790  |
| Flexural Modulus                  | 0.19 x 10 <sup>6</sup> psi | 1310 MPa | D 790  |

**ELECTRICAL**

|                                     |              |              |                    |
|-------------------------------------|--------------|--------------|--------------------|
| Volume Resistivity                  | < 1E3 ohm.cm | < 1E3 ohm.cm | D 257              |
| Surface Resistivity                 | < 1E6 ohm/sq | < 1E6 ohm/sq | D 257              |
| Surface Resistance                  | < 1E5 ohm    | < 1E5 ohm    | ESD STM11.11       |
| Static Decay                        |              |              |                    |
| 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   | 375 - 450 °F      | 191 - 232 °C  |
| Mold Temperature   | 90 - 150 °F       | 32 - 66 °C    |
| Drying             | 2 hrs @ 175 °F    | 2 hrs @ 79 °C |