



**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 ⁶ psi | 1724 MPa | D 638 |
| Flexural Strength | 5000 psi | 34 MPa | D 790 |
| Flexural Modulus | 0.19 x 10 ⁶ 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 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 |