



**Product Data Sheet &
General Processing Conditions**

**ESD C 102
Polypropylene (PP)
Glass Fiber
ESD Protection
Electrically Conductive**

PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS

| PERMANENCE | English | SI Metric | ASTM TEST |
|--|-----------------------|------------------|------------------|
| Primary Additive | 15 % | 15 % | |
| Specific Gravity | 1.10 | 1.10 | D 792 |
| Molding Shrinkage 1/8 in (3.2 mm) section | 0.0020 - 0.0040 in/in | 0.20 - 0.40 % | D 955 |

MECHANICAL

| | | | |
|--|----------------------------|-------------|--------|
| Impact Strength, Izod notched 1/8 in (3.2 mm) section | 1.7 ft-lbs/in | 91 J/m | D 256 |
| unnotched 1/8 in (3.2 mm) section | 4.0 ft-lbs/in | 214 J/m | D 4812 |
| Tensile Strength | 4700 psi | 32 MPa | D 638 |
| Tensile Elongation | 2.0 - 4.0 % | 2.0 - 4.0 % | D 638 |
| Tensile Modulus | 0.50 x 10 ⁶ psi | 3448 MPa | D 638 |
| Flexural Strength | 7000 psi | 48 MPa | D 790 |
| Flexural Modulus | 0.38 x 10 ⁶ psi | 2620 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 |

THERMAL

| | | | |
|--|--------|-------|-------|
| Deflection Temperature @ 264 psi (1820 kPa) | 205 °F | 96 °C | D 648 |
|--|--------|-------|-------|

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 |