



**Product Data Sheet &
General Processing Conditions**

**ESD C 280 H
Impact-Modified Nylon 6/6 (PA)
Carbon Fiber
ESD Protection
Electrically Conductive**

PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS

| PERMANENCE | English | SI Metric | ASTM TEST |
|--|-----------------------|------------------|------------------|
| Specific Gravity | 1.14 | 1.14 | 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 | 2.5 ft-lbs/in | 133 J/m | D 256 |
| unnotched 1/8 in (3.2 mm) section | 12.0 ft-lbs/in | 641 J/m | D 4812 |
| Tensile Strength | 16000 psi | 110 MPa | D 638 |
| Tensile Elongation | 3.0 - 5.0 % | 3.0 - 5.0 % | D 638 |
| Tensile Modulus | 1.20 x 10 ⁶ psi | 8274 MPa | D 638 |
| Flexural Strength | 24000 psi | 165 MPa | D 790 |
| Flexural Modulus | 0.90 x 10 ⁶ psi | 6206 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 - 18000 psi | 69 - 124 MPa |
| Melt Temperature | 530 - 570 °F | 277 - 299 °C |
| Mold Temperature | 150 - 225 °F | 66 - 107 °C |
| Drying | 4 hrs @ 175 °F | 4 hrs @ 79 °C |
| Moisture Content | 0.20 % | 0.20 % |
| Dew Point | 0 °F | -18 °C |

PROCESSING NOTES

Desiccant Type Dryer Required.