



**Product Data Sheet &  
General Processing Conditions**

**ESD 800 TFE 10  
Acetal (POM)  
PTFE Lubricated  
ESD Protection  
Static Dissipative**

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

| <b>PERMANENCE</b>                            | <b>English</b>        | <b>SI Metric</b> | <b>ASTM TEST</b> |
|----------------------------------------------|-----------------------|------------------|------------------|
| Specific Gravity                             | 1.42                  | 1.42             | D 792            |
| Molding Shrinkage<br>1/8 in (3.2 mm) section | 0.0180 - 0.0250 in/in | 1.80 - 2.50 %    | D 955            |

**MECHANICAL**

|                                   |                            |              |        |
|-----------------------------------|----------------------------|--------------|--------|
| Impact Strength, Izod             |                            |              |        |
| notched 1/8 in (3.2 mm) section   | 1.0 ft-lbs/in              | 53 J/m       | D 256  |
| unnotched 1/8 in (3.2 mm) section | 15.0 ft-lbs/in             | 801 J/m      | D 4812 |
| Tensile Strength                  | 5500 psi                   | 38 MPa       | D 638  |
| Tensile Elongation                | 9.0 - 12.0 %               | 9.0 - 12.0 % | D 638  |
| Tensile Modulus                   | 0.28 x 10 <sup>6</sup> psi | 1931 MPa     | D 638  |
| Flexural Strength                 | 8000 psi                   | 55 MPa       | D 790  |
| Flexural Modulus                  | 0.26 x 10 <sup>6</sup> psi | 1793 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                  | < 1E6 ohm    | < 1E6 ohm    | ESD STM11.11       |
| Static Decay                        |              |              | ESD STM11.11       |
| 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**

|                    | <b>English</b>    | <b>SI Metric</b> |
|--------------------|-------------------|------------------|
| Injection Pressure | 10000 - 15000 psi | 69 - 103 MPa     |
| Melt Temperature   | 360 - 425 °F      | 182 - 218 °C     |
| Mold Temperature   | 175 - 225 °F      | 79 - 107 °C      |
| Drying             | 2 hrs @ 250 °F    | 2 hrs @ 121 °C   |
| Moisture Content   | 0.15 %            | 0.15 %           |
| Dew Point          | -25 °F            | -32 °C           |

**PROCESSING NOTES**

Desiccant Type Dryer Required.