



**Product Data Sheet &  
General Processing Conditions**

**ESD C 1200 T-85A  
Ether-based Thermoplastic Polyurethane  
Elastomer (TPUR/TPU)  
ESD Protection  
Electrically Conductive**

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

| PERMANENCE                                                                  | English               | SI Metric     | ASTM TEST          |
|-----------------------------------------------------------------------------|-----------------------|---------------|--------------------|
| Specific Gravity                                                            | 1.23                  | 1.23          | D 792              |
| Molding Shrinkage<br>1/8 in (3.2 mm) section                                | 0.0100 - 0.0150 in/in | 1.00 - 1.50 % | D 955              |
| <b>MECHANICAL</b>                                                           |                       |               |                    |
| Impact Strength, Izod<br>notched 1/8 in (3.2 mm) section                    | No Break              | No Break      | D 256              |
| unnotched 1/8 in (3.2 mm) section                                           | No Break              | No Break      | D 4812             |
| Tensile Strength<br>Break, Die C, 0.125 in, 20 in/min (3.2mm, 500 mm/min)   | 2200 psi              | 15 MPa        | D 412              |
| Tensile Elongation<br>Break, Die C, 0.125 in, 20 in/min (3.2mm, 500 mm/min) | > 300.0 %             | > 300.0 %     | D 412              |
| Tensile Stress<br>Die C 0.125 in, 20 in/min (3.2 mm, 500 mm/min)<br>@ 100 % | 1800.0 psi            | 12.4 MPa      | D 412              |
| Tear Strength, Die C                                                        | 550.0 pli             | 96.4 N/mm     | D 624              |
| Hardness                                                                    |                       |               |                    |
| Shore A, 10 s delay                                                         | 90                    | 90            | D 2240             |
| Shore D, instantaneous                                                      | 45                    | 45            | D 2240             |
| <b>ELECTRICAL</b>                                                           |                       |               |                    |
| 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<br>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   | 365 - 425 °F      | 185 - 218 °C   |
| Mold Temperature   | 100 - 140 °F      | 38 - 60 °C     |
| Drying             | 6 hrs @ 225 °F    | 6 hrs @ 107 °C |
| Moisture Content   | 0.01 %            | 0.01 %         |
| Dew Point          | 0 °F              | -18 °C         |

**PROCESSING NOTES**

Desiccant Type Dryer Required.