



## Product Data Sheet & General Processing Conditions

### ESD C 1200 T-70D Ether-based Thermoplastic Polyurethane Elastomer (TPUR/TPU) Electrically Conductive ESD Protection

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

PERMANENCE	English	SI Metric	ASTM TEST
Specific Gravity	1.33	1.33	D 792
Molding Shrinkage 1/8 in (3.2 mm) section	0.0070 - 0.0150 in/in	0.70 - 1.50 %	D 955
<b>MECHANICAL</b>			
Tensile Strength Die C, 0.125 in, 20 in/min (3.2mm, 500 mm/min)	4000 psi	28 MPa	D 412
Tensile Elongation Break, Die C, 0.125 in, 20 in/min (3.2mm, 500 mm/min)	100.0 %	100.0 %	D 412
Tear Strength, Die C	800.0 pli	140.2 N/mm	D 624
Hardness Shore D, instantaneous	75	75	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 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 - 20000 psi	69 - 138 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.

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This information is intended to be used only as a guideline for designers and processors of modified thermoplastics. Because design and processing is complex, a set solution will not solve all problems. Observation on a "trial and error" basis may be required to achieve desired results.

Data are obtained from specimens molded under carefully controlled conditions from representative samples of the compound described herein. Properties may be materially affected by molding techniques applied and by the size and shape of the item molded. No assurance can be implied that all molded articles will have the same properties as those listed.

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