



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 1/8 in (3.2 mm) section	0.0100 - 0.0150 in/in	1.00 - 1.50 %	D 955
MECHANICAL			
Impact Strength, Izod 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 Break, Die C, 0.125 in, 20 in/min (3.2mm, 500 mm/min)	2200 psi	15 MPa	D 412
Tensile Elongation Break, Die C, 0.125 in, 20 in/min (3.2mm, 500 mm/min)	> 300.0 %	> 300.0 %	D 412
Tensile Stress Die C 0.125 in, 20 in/min (3.2 mm, 500 mm/min) @ 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
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 - 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.

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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