



Product Data Sheet & General Processing Conditions

RTP 1099 X 115081 E Polybutylene Terephthalate (PBT) Carbon Nanotube ESD Protection

PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS

PERMANENCE	English	SI Metric	ASTM TEST
Specific Gravity	1.34	1.34	D 792
Molding Shrinkage 1/8 in (3.2 mm) section	0.0020 - 0.0030 in/in	0.20 - 0.30 %	D 955
MECHANICAL			
Tensile Strength	8800 psi	61 MPa	D 638
Tensile Elongation	5.0 %	5.0 %	D 638
Tensile Modulus	0.50 x 10 ⁶ psi	3448 MPa	D 638
Flexural Strength	15500 psi	107 MPa	D 790
Flexural Modulus	0.45 x 10 ⁶ psi	3103 MPa	D 790
ELECTRICAL			
Volume Resistivity	1E1 - 1E2 ohm.cm	1E1 - 1E2 ohm.cm	D 257
Surface Resistivity	1E4 - 1E6 ohm/sq	1E4 - 1E6 ohm/sq	D 257
Surface Resistance	1E3 - 1E5 ohm	1E3 - 1E5 ohm	ESD STM11.11
Static Decay	< 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	460 - 520 °F	238 - 271 °C
Mold Temperature	175 - 225 °F	79 - 107 °C
Drying	4 hrs @ 250 °F	4 hrs @ 121 °C
Moisture Content	0.03 %	0.03 %
Dew Point	-20 °F	-29 °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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