



**Product Data Sheet &
General Processing Conditions**

**RTP 2299 X 115092 A
Polyetheretherketone (PEEK)
Carbon Nanotube
Electrically Conductive
ESD Protection
High Purity**

PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS

PERMANENCE	English	SI Metric	ASTM TEST
Specific Gravity	1.32	1.32	D 792
Molding Shrinkage 1/8 in (3.2 mm) section	0.0120 - 0.0180 in/in	1.20 - 1.80 %	D 955

MECHANICAL

Impact Strength, Izod notched 1/8 in (3.2 mm) section	0.7 ft-lbs/in	37 J/m	D 256
unnotched 1/8 in (3.2 mm) section	7.0 ft-lbs/in	374 J/m	D 4812
Tensile Strength	13800 psi	95 MPa	D 638
Tensile Elongation	2.0 %	2.0 %	D 638
Tensile Modulus	0.70 x 10 ⁶ psi	4826 MPa	D 638
Flexural Strength	26000 psi	179 MPa	D 790
Flexural Modulus	0.60 x 10 ⁶ psi	4137 MPa	D 790

ELECTRICAL

Volume Resistivity	1E1 - 1E3 ohm.cm	1E1 - 1E3 ohm.cm	D 257
Surface Resistivity	1E4 - 1E5 ohm/sq	1E4 - 1E5 ohm/sq	D 257
Surface Resistance	1E3 - 1E4 ohm	1E3 - 1E4 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	12000 - 18000 psi	83 - 124 MPa
Melt Temperature	660 - 750 °F	349 - 399 °C
Mold Temperature	325 - 425 °F	163 - 218 °C
Drying	3 hrs @ 300 °F	3 hrs @ 149 °C
Moisture Content	0.10 %	0.10 %
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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