Product Data Sheet &
General Processing Conditions

RTP 2199 X 115079 B
Polyetherimide (PEI)
Carbon Nanotube
Electrically Conductive
ESD Protection
High Purity

PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS

PERMANENCE	English	SI Metric	ASTM TEST
Specific Gravity	1.29	1.29	D 792
Molding Shrinkage			
1/8 in (3.2 mm) section	0.0045 - 0.0075 in/in	0.45 - 0.75 %	D 955
MECHANICAL			
Impact Strength, Izod			
notched 1/8 in (3.2 mm) section	0.5 ft-lbs/in	27 J/m	D 256
unnotched 1/8 in (3.2 mm) section	10.5 ft-lbs/in	561 J/m	D 4812
Tensile Strength	14000 psi	97 MPa	D 638
Tensile Elongation	2.0 - 5.0 %	2.0 - 5.0 %	D 638
Tensile Modulus	0.48 x 10^6 psi	3310 MPa	D 638
Flexural Strength	23500 psi	162 MPa	D 790
Flexural Modulus	0.56 x 10^6 psi	3861 MPa	D 790
ELECTRICAL			
Volume Resistivity	< 1E2 ohm.cm	< 1E2 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	< 0.50 s	< 0.50 s	FTMS101C 4046.1
THERMAL			
Deflection Temperature			
@ 264 psi (1820 kPa)	390 °F	199 °C	D 648
Ignition Resistance*			
Flammability**	V-0 @ 1/16 in	V-0 @ 1.5 mm	D 3801

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.
* This rating is not intended to reflect hazards of this or any other material under actual fire conditions.
** Values per RTP Company testing.

GENERAL PROCESSING FOR INJECTION MOLDING

	English	SI Metric
Injection Pressure	12000 - 18000 psi	83 - 124 MPa
Melt Temperature	670 - 750 °F	354 - 399 °C
Mold Temperature	275 - 350 °F	135 - 177 °C
Drying	4 hrs @ 300 °F	4 hrs @ 149 °C
Moisture Content	0.04 %	0.04 %
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.