



**Product Data Sheet &
General Processing Conditions**

**RTP 2299 X 81382
Polyetheretherketone (PEEK)
Carbon Fiber
PTFE Lubricated
Graphite Lubricated**

PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS

PERMANENCE	English	SI Metric	ASTM TEST
Specific Gravity	1.44	1.44	D 792
Molding Shrinkage 1/8 in (3.2 mm) section	0.0010 - 0.0030 in/in	0.10 - 0.30 %	D 955
Water Absorption, 24 hrs @ 23°C	0.200 %	0.200 %	D 570

MECHANICAL

Impact Strength, Izod notched 1/8 in (3.2 mm) section	1.3 ft-lbs/in	69 J/m	D 256
unnotched 1/8 in (3.2 mm) section	11.2 ft-lbs/in	598 J/m	D 4812
Tensile Strength	23000 psi	159 MPa	D 638
Tensile Elongation	2.0 - 3.0 %	2.0 - 3.0 %	D 638
Tensile Modulus	1.85 x 10 ⁶ psi	12756 MPa	D 638
Flexural Strength	34500 psi	238 MPa	D 790
Flexural Modulus	1.65 x 10 ⁶ psi	11377 MPa	D 790
Compressive Strength	22000 psi	152 MPa	D 695

ELECTRICAL

Volume Resistivity	1E5 - 1E8 ohm.cm	1E5 - 1E8 ohm.cm	D 257
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THERMAL

Deflection Temperature @ 264 psi (1820 kPa)	> 525 °F	> 274 °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	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.