



**Product Data Sheet &
General Processing Conditions**

**RTP 1399 X 97649 D
Polyphenylene Sulfide (PPS)
Thermally Conductive
Electrically Conductive
ESD Protection**

PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS

PERMANENCE	English	SI Metric	ASTM TEST
Specific Gravity	1.78	1.78	D 792
Molding Shrinkage 1/8 in (3.2 mm) section	0.0020 - 0.0050 in/in	0.20 - 0.50 %	D 955

MECHANICAL

Impact Strength, Izod notched 1/8 in (3.2 mm) section	0.4 ft-lbs/in	21 J/m	D 256
unnotched 1/8 in (3.2 mm) section	1.4 ft-lbs/in	75 J/m	D 4812
Tensile Strength	9000 psi	62 MPa	D 638
Tensile Elongation	0.5 %	0.5 %	D 638
Tensile Modulus	2.80×10^6 psi	19306 MPa	D 638
Flexural Strength	13900 psi	96 MPa	D 790
Flexural Modulus	2.60×10^6 psi	17927 MPa	D 790

ELECTRICAL

Volume Resistivity	< 1E1 ohm.cm	< 1E1 ohm.cm	D 257
Surface Resistivity	< 1E5 ohm/sq	< 1E5 ohm/sq	D 257
Surface Resistance	< 1E4 ohm	< 1E4 ohm	ESD STM11.11
Static Decay	< 2.00 s	< 2.00 s	FTMS101C 4046.1

THERMAL

Deflection Temperature @ 264 psi (1820 kPa)	500 °F	260 °C	D 648
Coefficient of Linear Thermal Expansion			
Flow Direction	$0.8 \times 10^{-5}/^{\circ}\text{F}$	$1.4 \times 10^{-5}/^{\circ}\text{C}$	E 831
Transverse Direction	$1.8 \times 10^{-5}/^{\circ}\text{F}$	$3.2 \times 10^{-5}/^{\circ}\text{C}$	E 831
Thermal Conductivity Through-plane	15.40 (BTU.in)/(hr.ft ² .°F)	2.22 W/(m.K)	E 1530

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	585 - 625 °F	307 - 329 °C
Mold Temperature	275 - 350 °F	135 - 177 °C
Drying	6 hrs @ 300 °F	6 hrs @ 149 °C
Moisture Content	0.04 %	0.04 %