



**Product Data Sheet &
General Processing Conditions**

**RTP 1400 R-5100
Polyphenylsulfone (PPSU)**

PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS

PERMANENCE	English	SI Metric	ASTM TEST
Specific Gravity	1.29	1.29	D 792
Melt Flow Rate @ 365 °C, / 5 kg	14.00 - 22.00 g/10 min	14.00 - 22.00 g/10 min	D 1238
Molding Shrinkage 1/8 in (3.2 mm) section	0.0060 in/in	0.60 %	D 955
Water Absorption, 24 hrs @ 23°C	0.370 %	0.370 %	D 570

MECHANICAL

Impact Strength, Izod notched 1/8 in (3.2 mm) section	13.0 ft-lbs/in	694 J/m	D 256
Tensile Strength	10100 psi	70 MPa	D 638
Tensile Elongation	90.0 %	90.0 %	D 638
Tensile Modulus	0.34 x 10 ⁶ psi	2344 MPa	D 638
Flexural Strength	13200 psi	91 MPa	D 790
Flexural Modulus	0.35 x 10 ⁶ psi	2413 MPa	D 790

ELECTRICAL

Volume Resistivity	> 1E12 ohm.cm	> 1E12 ohm.cm	D 257
--------------------	---------------	---------------	-------

THERMAL

Deflection Temperature @ 264 psi (1820 kPa)	408 °F	209 °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	10000 - 20000 psi	69 - 138 MPa
Melt Temperature	650 - 730 °F	343 - 388 °C
Mold Temperature	280 - 325 °F	138 - 163 °C
Drying	6 hrs @ 300 °F	6 hrs @ 149 °C
Moisture Content	0.04 %	0.04 %
Dew Point	-25 °F	-32 °C

PROCESSING NOTES

Desiccant Type Dryer Required.