



**Product Data Sheet &
General Processing Conditions**

**RTP 900 P-1700
Polysulfone (PSU)**



PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS

PERMANENCE	English	SI Metric	ASTM TEST
Specific Gravity	1.24	1.24	D 792
Molding Shrinkage 1/8 in (3.2 mm) section	0.0050 - 0.0090 in/in	0.50 - 0.90 %	D 955
Water Absorption, 24 hrs @ 23°C	0.300 %	0.300 %	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	40.0 ft-lbs/in	2136 J/m	D 4812
Tensile Strength	10000 psi	69 MPa	D 638
Tensile Elongation	> 75.0 %	> 75.0 %	D 638
Tensile Modulus	0.36 x 10 ⁶ psi	2482 MPa	D 638
Flexural Strength	15000 psi	103 MPa	D 790
Flexural Modulus	0.39 x 10 ⁶ psi	2689 MPa	D 790
Hardness Rockwell, R	120	120	D 785

ELECTRICAL

Dielectric Strength, S/T, in oil	425 VPM	16.7 kV/mm	D 149
Dielectric Constant, 1 MHz, Dry	3.0	3.0	D 150
Dissipation Factor, 1 MHz, Dry	0.0030	0.0030	D 150
Arc Resistance	122 s	122 s	D 495
Volume Resistivity	> 1E16 ohm.cm	> 1E16 ohm.cm	D 257

THERMAL

Deflection Temperature @ 264 psi (1820 kPa)	345 °F	174 °C	D 648
@ 66 psi (455 kPa)	358 °F	181 °C	D 648
Ignition Resistance*			
Flammability	HB @ 1/16 in	HB @ 1.5 mm	UL94
Flammability	V-0 @ 0.175 in	V-0 @ 4.4 mm	UL94

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.

GENERAL PROCESSING FOR INJECTION MOLDING

	English	SI Metric
Injection Pressure	10000 - 18000 psi	69 - 124 MPa
Melt Temperature	630 - 700 °F	332 - 371 °C
Mold Temperature	200 - 300 °F	93 - 149 °C
Drying	4 hrs @ 275 °F	4 hrs @ 135 °C
Moisture Content	0.15 %	0.15 %
Dew Point	-25 °F	-32 °C